

Opportunity



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In 2020 we saw the advent of unique challenges unlike any our nation has experienced in recent memory. From a global pandemic to the tragic deaths of George Floyd and other Black men and women, we have grappled with issues that have fundamentally changed the way we live, work and view societal progress. We acknowledge the gravity of these issues. But at Southern Company, we don't just see challenges, we see opportunity. We see opportunities for a safer workplace and a more equitable society. Opportunities to advance new technologies for cleaner energy. We are fixed on the idea of "yes, and." Yes, we acknowledge the challenge, *and* we are committed to finding a solution. Explore this report to learn more about how we are embracing opportunity.

(On the cover) Garland Solar Facility in Kern County, California
(Shown here) Skookumchuck Wind Facility, located in Lewis and Thurston Counties, Washington

Thomas A. Fanning
Chairman, President & CEO,
Southern Company

Dear fellow shareholders,

By almost any measure, 2020 was a remarkable and challenging year none of us will soon forget. Our nation, our communities and our company were tested in ways we could not have imagined just a few months earlier. Despite the advent of a global pandemic and an exceedingly busy storm season, our business model demonstrated substantial resilience as we delivered outstanding service to customers, provided excellent operational reliability and achieved strong financial performance.

At Southern Company, we are bullish on the future. We acknowledge the challenges before us, but we prefer to see them as opportunities. Our answer to these would-be obstacles must always be “yes, and.” Yes, we acknowledge the challenge, *and* we are committed to finding a solution. Saying “no” is not an option. Together with Our Values, this philosophy informs our optimism for the future.

Safety First confirms that the safety of our employees and customers is paramount, even as we contend with the coronavirus. *Unquestionable Trust* speaks to our standard of honesty, respect, fairness and integrity in all we do. *Superior Performance* informs our resolve to sustain operational excellence. *Total Commitment* demands that we fully embrace, respect and value our differences and diversity as we work for social justice. These values have served us well for many years, and they will continue to guide us through these challenging times.

In 2020, we announced an ambitious new goal to achieve net zero greenhouse gas (GHG) emissions by 2050. We were also pleased to announce a \$50 million, multi-year commitment to historically Black colleges and universities (HBCUs), including a partnership with Apple to launch the Propel Center, a digital learning hub, business incubator and global innovation headquarters for HBCU students, with each company contributing \$25 million to the effort.

In these first days of 2021, Fortune Magazine named Southern Company one of the “World’s Most Admired Companies” based on a survey of nearly 3,800 executives, directors and analysts,

ranking our company among the top four electric and gas utilities in the world.

We are honored by this kind of recognition. More importantly, however, we are most proud to continue to deliver clean, safe, reliable and affordable energy to the customers and communities we are genuinely privileged to serve.

Our accomplishments in 2020 are perhaps best appreciated through a brief overview of the progress we achieved with respect to each of our five strategic priorities:

Excel at the Fundamentals

Our state-regulated electric and gas subsidiaries constantly strive to provide a world-class customer experience. Nicor Gas and Virginia Natural Gas were named Most Trusted Business Partners in a national survey. All three electric operating companies were ranked in the top quartile nationally in three different customer satisfaction surveys, the Managed Accounts Net Promoter Score, the J.D. Power Electric Utility Residential Customer Satisfaction Study and the General Business Customer Value Benchmark.

Despite the numerous challenges presented by a global pandemic, these honors reflect our agility and ability to adapt the way we do business under fast-changing circumstances.

Of course, nothing is more fundamental in our business than keeping the lights on and fueling our communities. The record-breaking 2020 hurricane season produced 30 named storms, including 13 hurricanes in a 6-month season. Following these storms, our teams quickly and safely restored electricity and gas service to millions in our system’s service territory and across the eastern half of the U.S. while adhering to COVID-19 safety protocols.

Achieve Success with Major Construction Projects

Construction of the two new nuclear units at Georgia Power’s Plant Vogtle, near Waynesboro, Georgia, continued to see steady progress. New health and safety protocols were instituted at

the work site, which allowed work to continue with enhanced safety precautions.

A number of major milestones were accomplished in 2020, including cold hydro testing for Unit 3, the certification of more than 60 plant operators and receipt of the first nuclear fuel shipment for Unit 3. When completed, the two units will feature new state-of-the-art AP1000 reactors, the first nuclear units to be built in the U.S. in more than three decades. Once operating, these units are expected to provide carbon-free power for more than 500,000 homes and businesses.

Support the Building of a National Energy Policy

We believe good public policy can be a driving force to create jobs and generate personal income that will help improve the lives of individuals and families throughout the nation. To that end, we are proactively engaged in public policy dialogue and ongoing interaction with legislators and regulators to support a national energy policy that places a premium on innovation, advocating for policies that benefit both our evolving business as well as the customers we serve.

Promote Energy Innovation

Southern Company continued to pioneer industry innovations to counter climate change and support our goal of achieving net zero GHG emissions by 2050. The Edison Electric Institute (EEI) awarded Southern Company the industry's most prestigious honor, the EEI Edison Award, for our leadership in developing key energy storage system initiatives.

Under the terms of a new 5-year agreement, we will continue to manage and operate the National Carbon Capture Center in Wilsonville, Alabama, on behalf of the U.S. Department of Energy. The center's future scope of work is expected to include testing of CO₂ utilization, direct air capture and negative emission technologies.

Southern Company and Mississippi Power announced plans to build the first smart neighborhood in the world featuring the Tesla Solar Roof.

Southern Company also joined with other energy companies in the Southeast to propose the creation of a centralized, automated, intra-hour energy exchange called the Southeast Energy Exchange Market, or SEEM. We are supporting this platform as a founding member with the aim to lower costs to customers and better optimize renewable energy resources.

Value and Develop Our People

We have been consistently recognized as one of the top companies in the nation for cultivating a diverse, equitable and inclusive workplace. In 2020, we were again recognized as one of the Top 50 Companies for Diversity by DiversityInc and a leading employer of military veterans by Military Times EDGE and G.I. Jobs magazines. Southern Company earned a top score of 100 on the Human Rights Campaign's 2021 Corporate Equality Index. The Disability Equality Index again named Southern Company one of the Best Places to Work for Disability Inclusion.

Lastly, I would be remiss not to mention the tragic deaths of George Floyd and other Black men and women during 2020. We are working diligently to prevent racial inequities in our companies, helping ensure a fair and just culture, from the boardroom to the front lines.

In closing, we continue to believe Southern Company is well-positioned to deliver on its value proposition as our customer- and community-focused business model continues to serve us well across the enterprise. Can we continue to realize the opportunity in today's challenging environment? The answer is an unequivocal yes, and we look forward to serving customers with excellence for years to come.

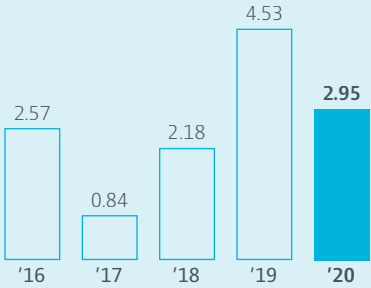
Thank you for your continued support and confidence.

Sincerely,

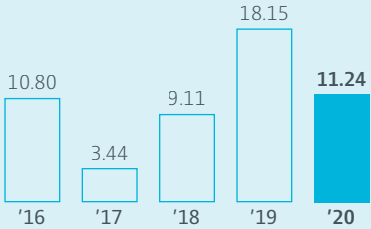
Thomas A. Fanning

Thomas A. Fanning
March 22, 2021

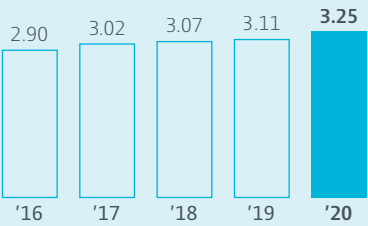
Financial Highlights



Basic Earnings Per Share
(in dollars)

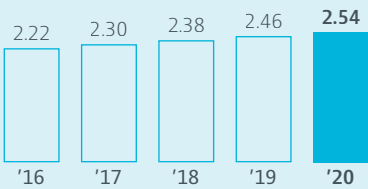


Return On Average Common Equity
(percent)



Basic Earnings Per Share - Excluding Items*
(in dollars)

* Not a financial measure under generally accepted accounting principles. See Reconciliation of Non-GAAP Financial Metric on page 21 for additional information and specific adjustments made to this measure by year.



Dividends Per Share
(in dollars)

	2020	2019	Change
Operating Revenues (in millions)	\$20,375	\$21,419	(4.9)%
Earnings (in millions)	\$3,119	\$4,739	(34.2)%
Basic Earnings Per Share	\$2.95	\$4.53	(34.9)%
Diluted Earnings Per Share	\$2.93	\$4.50	(34.9)%
Dividends Per Share (amount paid)	\$2.54	\$2.46	3.3 %
Dividend Yield (year-end, percent)	4.1	3.9	5.1 %
Average Shares Outstanding (in millions)	1,058	1,046	1.1 %
Return On Average Common Equity (percent)	11.24	18.15	(38.1)%
Book Value Per Share	\$26.48	\$26.11	1.4 %
Market Price Per Share (year-end, closing)	\$61.43	\$63.70	(3.6)%
Total Market Value Of Common Stock (year-end, in millions)	\$64,899	\$67,092	(3.3)%
Total Assets (in millions)	\$122,935	\$118,700	3.6 %
Total Kilowatt-Hour Sales (in millions)	186,225	196,488	(5.2)%
Retail	140,546	148,461	(5.3)%
Wholesale	45,679	48,027	(4.9)%
Total Utility Customers (year-end, in thousands)	8,630	8,543	1.0 %



Can America achieve global leadership in carbon-free *nuclear energy*?

Yes, and we are leading the way.

Last year saw the completion of several major milestones as the construction of new nuclear units 3 and 4 at Georgia Power's Plant Vogtle continued.

Milestones achieved at Vogtle Unit 3, the first unit scheduled to come online, included the successful completion of cold hydro testing in October. These tests confirmed that the reactor's coolant system functions as designed, and verified that the welds, joints, pipes and other components of the coolant system and associated high-pressure systems do not leak when under pressure.

More than 60 individuals completed years of rigorous training and became certified to oversee plant operations once the units are in service. The Vogtle 3 and 4 project team successfully completed the pre-startup review conducted by the World Association of Nuclear Operators, which assessed the project's readiness to operate the new AP1000 reactors. In December, Georgia Power received the first nuclear fuel shipment for Unit 3—the first such delivery for the state-of-the-art AP1000 reactor in the United States.

Hot functional testing is the next major milestone for Unit 3. Successful completion is a prerequisite for initial fuel load.

Several precautionary safety measures were instituted at the work site during 2020, with a view to preserve the health of the workforce. These protocols enabled work to continue, even under pandemic conditions. With more than 7,000 workers on site, and more than 800 permanent jobs available once the units are operational, Vogtle units 3 and 4 represent the largest job-producing construction project in the state of Georgia.

Once operating, the two new units are expected to generate carbon-free energy for more than 500,000 Georgia homes and businesses for decades to come. An important part of a diverse fuel mix, nuclear energy is also essential to maintaining a reliable and affordable energy infrastructure that helps attract new investment, supports economic growth and creates jobs.

(Top) Vogtle Unit 3 nears completion; (Center) Santoine Lee, project manager for Southern Nuclear, inspecting work at the construction site; (Bottom) The turbine building at Vogtle Unit 3



Holly Van Sicklen of Southern Nuclear, a shift supervisor for Vogtle 3 and 4 Operations, in the Unit 3 containment building.

Can we *sustain our people* during a global pandemic?

Yes, and we have performed remarkably while keeping our customers, communities and employees safe.

In the face of unprecedented challenges presented by the COVID-19 pandemic during 2020, Southern Company subsidiaries worked hard to keep the energy flowing while maintaining the highest standards of health and safety.

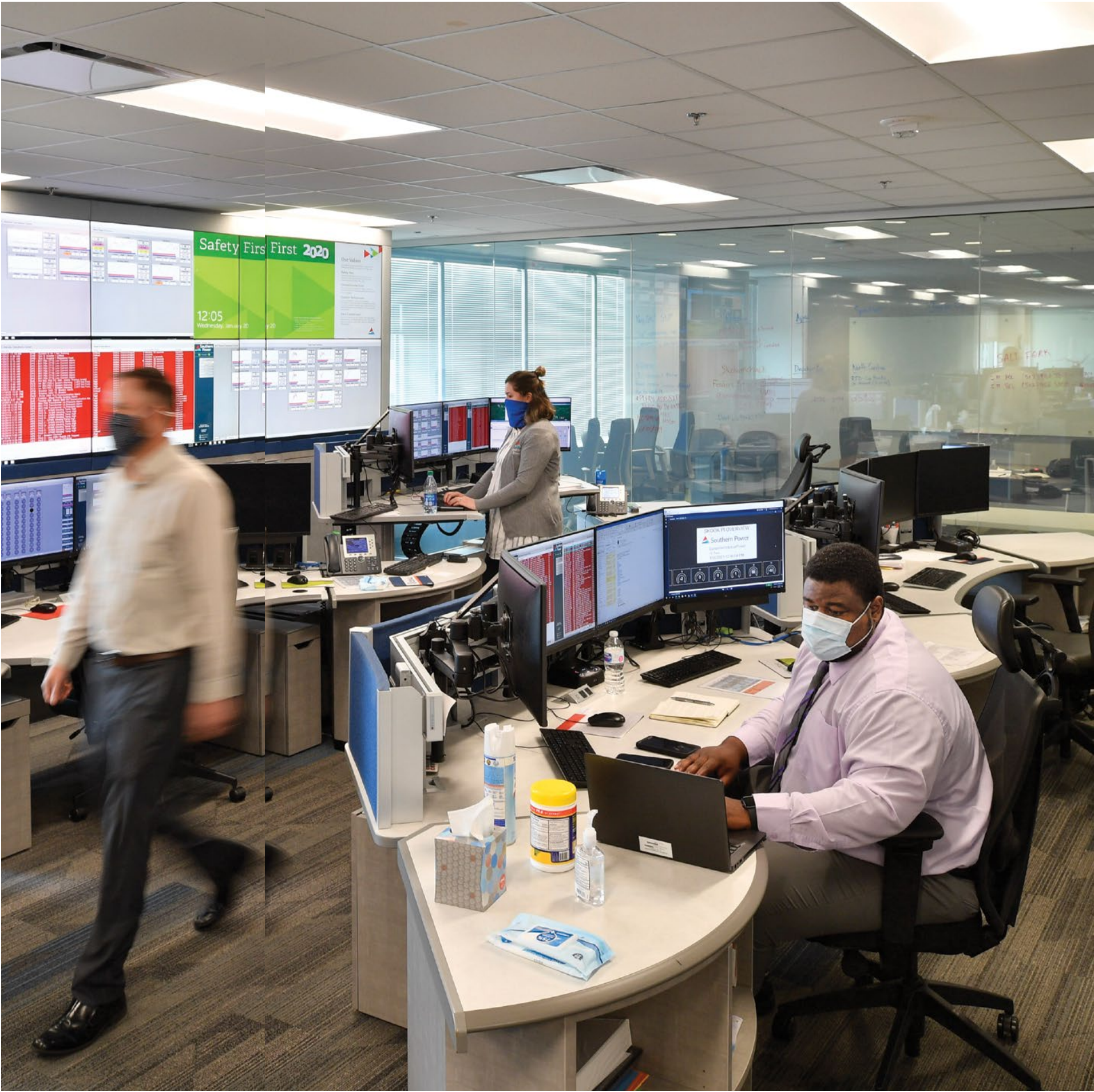
Across the entire Southern Company system, our companies took decisive action to employ new work practices to help safeguard our employees and communities. Employees never stopped working as we sustained essential business operations and continued to serve 9 million customers each day. More than 15,000 employees worked remotely in 2020, and they will continue to do so well into 2021. Rigorous safety protocols have been implemented to protect employees who continue to work onsite at essential company facilities, including social distancing, face coverings, deep cleanings and measures related to personal hygiene.

Our natural gas business has been faced with an especially unique challenge during the pandemic. Unlike other utilities, natural gas field service representatives (FSRs) are often required to enter customers' homes and businesses. Southern Company Gas' four local distribution companies applied new and stringent health protocols, including the implementation of a screening process with customers, to ensure that FSRs are adequately prepared before performing indoor work on their behalf.

The health and safety of our customers, our neighbors and our employees remains our top priority as we continue to provide clean, safe, reliable and affordable energy through our state-regulated gas and electric businesses, a national wholesale competitive generation company, a leading distributed infrastructure company, a fiber optics network and telecommunications services.

Southern Company and its subsidiaries also recognized the extraordinary burden shouldered by many customers due to impacts from the pandemic. Working with their respective state commissions, our utilities suspended service disconnections during the early stages of the pandemic in order to help customers through that challenging time. Our utilities also worked diligently to enroll customers in special payment plans, explore alternative billing options and seek financial assistance to avoid disconnection.

(Right) The Remote Operations Center in Inverness, Alabama, where staff observe rigorous safety and health protocols.



With the implementation of new and rigorous health and safety protocols in response to the ongoing global pandemic, transmission and distribution teams and other system employees were able to continue providing best-in-class customer service in 2020, while our generation fleet continued to deliver exceptional reliability.



Do we expect to achieve *net zero* greenhouse gas emissions by 2050?

Yes, and we have made great progress through innovation and an enduring commitment to customers.



One of the first U.S. utilities to establish a bold goal for the long-term reduction of greenhouse gas (GHG) emissions in 2018, Southern Company updated its enterprise-wide goal in 2020 to target net zero emissions by 2050.

Net zero is a scenario where net carbon emissions equal zero. Any emissions from operations are balanced by an equivalent amount of carbon removal.

As part of the plan to achieve net zero, Southern Company subsidiaries will pursue a diverse portfolio of energy resources that include new low-carbon and carbon-free resources, as well as energy storage, energy efficiency resources and negative carbon solutions such as direct air capture and sequestration.

We will continue our industry-leading research and development, focusing on technologies that lower GHG emissions. We are also committed to support broader adoption of electric vehicles through the creation of charging infrastructure, and we have committed to convert 50% of our electric utilities' fleet vehicles in several vehicle categories to electric by 2030.

In addition to our long-term goal, we also set an intermediate goal to achieve a 50% reduction in GHG emissions from 2007 levels by 2030. Through 2020, GHG emissions have actually been reduced by 52% compared to that 2007 benchmark. However, some portion of this reduction was temporarily accelerated by a combination of mild weather and the pandemic economy, so it is likely that we have not yet achieved 50% on a sustainable basis. Still, we expect to achieve this intermediate goal well in advance of 2030. In 2020, almost one-third of our system's energy supply was generated from zero carbon resources, including nuclear, solar, wind and hydroelectric power.

Over the past two decades, our gas business reduced annual methane emissions from its distribution companies by 50%, even as its distribution systems grew by 20%. Through modernized infrastructure and collaboration with state regulators and other stakeholders, we now deliver natural gas at almost 99.9% efficiency, and we are committed to further reduce emissions going forward.

Southern Company will continue to leverage thoughtful scenario planning, long-term integrated resource plans and a constructive regulatory environment, engaging with policymakers, customers and communities to support outcomes that lead to a net zero future.



Jeff Burleson, senior vice president environmental and system planning, at the Garland Solar Facility in Kern County, California.

Can we achieve a more *just and equitable* society?

Yes, and we are committed to leading the change in our company and communities.

Southern Company is proactively confronting issues surrounding racial equity and social justice, working to ensure that all employees are well-represented and treated fairly within our organization, regardless of race or other identity attributes.

This is a critical time in the history of our nation and our company. The events of 2020, including the tragic deaths of George Floyd, Breonna Taylor, Ahmaud Arbery and other Black men and women, have served to shine a light on the cumulative and compounded effects of systemic racial bias across institutions and society. While justice and equality are embedded in our company's values, we realize there is much work yet to be done.

Racism has no place in our company. We are committed to work for change within our circles of influence, and compelled to advocate for colleagues who have been traditionally underrepresented and marginalized. Dr. Martin Luther King, Jr. said, "The ultimate measure of a man is not where he stands in moments of comfort and convenience, but where he stands at times of challenge and controversy." Applying this standard to our collective corporate conscience, Southern Company is resolved to be a model for companies who would seek to lead change in today's environment.

Maintaining racial equity is an ongoing journey. In an initial step, we created a new framework to guide all our businesses in areas such as talent acquisition, supplier diversity, political engagement and charitable giving, to help ensure a continued and coordinated focus on this work.

To help grow Black entrepreneurship and provide needed technology resources, we were pleased to announce a \$25 million investment in partnership with Apple to launch the Propel Center, a new digital learning hub, business incubator and global innovation headquarters. The Center, located in Atlanta, will be available to students of historically Black colleges and universities throughout the nation.

Representing the diversity of the Southern Company system, L to R: Jeff Fontenot, Georgia Power; Tuan Lam, Southern Company Gas; Dale Jacoby, Southern Company Services; Briana McClendon, Southern Company Gas; Pierre Canidate, Southern Company Services; Luis Cruz, Georgia Power.




Board of Directors



Thomas A. Fanning



Janaki Akella



Juanita Powell Baranco



Jon A. Boscia



Henry A. Clark III



Anthony F. Earley, Jr.



David J. Grain



Colette D. Honorable




Donald M. James




John D. Johns



Dale E. Klein



Ernest J. Moniz



William G. Smith, Jr.




Steven R. Specker



E. Jenner Wood III


Management Council




Thomas A. Fanning




Bryan Anderson




W. Paul Bowers




Stanley W. Connally, Jr.




Mark A. Crosswhite



Christopher Cummiskey




Martin Davis




Andrew W. Evans



Kimberly S. Greene




James Y. Kerr II




Stephen E. Kuczynski



Mark S. Lantrip



Anthony L. Wilson



Christopher C. Womack

Board of Directors

Thomas A. Fanning
Chairman, President and CEO, Southern Company
Atlanta, GA | Age 64 | elected 2010

Janaki Akella
Digital Transformation Leader
Google LLC (technology)
Palo Alto, CA | Age 60 | elected 2019

Juanita Powell Baranco
Executive Vice President and Chief Operating Officer
Baranco Automotive Group (automobile sales)
Atlanta, GA | Age 72 | elected 2006

Jon A. Boscia
Retired Founder and President
Boardroom Advisors, LLC (board governance consulting firm)
Sarasota, FL | Age 68 | elected 2007

Henry A. Clark III
Retired Senior Advisor, Evercore Inc.
(global independent investment advisory firm)
Hobe Sound, FL | Age 71 | elected 2009

Anthony F. Earley, Jr.
Retired Chairman, President and CEO
PG&E Corporation (utility)
Bloomfield Hills, MI | Age 71 | elected 2019

David J. Grain
CEO and Managing Director
Grain Management, LLC (private equity firm)
Sarasota, FL | Age 58 | elected 2012

Colette D. Honorable
Partner, Reed Smith LLP (legal)
Washington, DC | Age 51 | elected 2020

Donald M. James
Retired Chairman and CEO, Vulcan Materials Company (construction materials)
Pensacola, FL | Age 72 | elected 1999

John D. Johns
Retired Chairman of DLI North America Inc., the oversight company for
Protective Life Insurance Corporation (insurance)
Birmingham, AL | Age 69 | elected 2015

Dale E. Klein
Associate Vice Chancellor of Research, University of Texas System
Retired Chairman, U.S. Nuclear Regulatory Commission (energy)
Austin, TX | Age 73 | elected 2010

Ernest J. Moniz
Cecil and Ida Green Professor of Physics and Engineering Systems emeritus,
Massachusetts Institute of Technology
CEO and Co-Chair, Nuclear Threat Initiative (energy)
Former U.S. Secretary of Energy
Brookline, MA | Age 76 | elected 2018

William G. Smith, Jr.
Chairman, President and CEO, Capital City Bank Group, Inc. (banking)
Tallahassee, FL | Age 67 | elected 2006

Steven R. Specker
Lead Independent Director, Southern Company Board
Retired CEO, TAE Technologies, Inc. (energy technology)
Scottsdale, AZ | Age 75 | elected 2010

E. Jenner Wood III
Corporate Executive Vice President – Wholesale Banking,
SunTrust Banks, Inc. (banking)
Atlanta, GA | Age 69 | elected 2012

Management Council

Thomas A. Fanning
Chairman, President and CEO
Fanning, 64, joined the company in 1980

Bryan D. Anderson
Executive Vice President and President, External Affairs
Anderson, 54, joined the company in 2010

W. Paul Bowers
Chairman and CEO, Georgia Power
Bowers, 64, joined the company in 1979

Stanley W. Connally, Jr.
Executive Vice President, Operations, Southern Company Services, Inc.
Connally, 51, joined the company in 1989

Mark A. Crosswhite
Chairman, President and CEO, Alabama Power
Crosswhite, 58, joined the company in 2004

Christopher Cummiskey
Executive Vice President, Chief Commercial and Customer Solutions Officer
Cummiskey, 46, joined the company in 2013

Martin B. Davis
Executive Vice President and Chief Information Officer
Davis, 58, joined the company in 2015

Andrew W. Evans
Executive Vice President and Chief Financial Officer
Evans, 54, has held his current role since June 2018

Kimberly S. Greene
Chairman, President and CEO, Southern Company Gas
Greene, 54, has held her current role since June 2018

James Y. Kerr II
Executive Vice President, Chief Legal Officer and Chief Compliance Officer
Kerr, 57, joined the company in March 2014

Stephen E. Kuczynski
Chairman, President and CEO, Southern Nuclear
Kuczynski, 58, joined the company in July 2011

Mark S. Lantrip
Executive Vice President
Chairman, President and CEO, Southern Company Services, Inc.
Lantrip, 66, joined the company in 1981

Anthony L. Wilson
Chairman, President and CEO, Mississippi Power
Wilson, 57, joined the company in 1984

Christopher C. Womack
President, Georgia Power
Womack, 63, joined the company in 1988

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2013 ARP
Alternate Rate Plan approved by the Georgia PSC in 2013 for Georgia Power for the years 2014 through 2016 and subsequently extended through 2019
2019 ARP
Alternate Rate Plan approved by the Georgia PSC in 2019 for Georgia Power for the years 2020 through 2022
AFUDC
Allowance for funds used during construction
Alabama Power
Alabama Power Company
Amended and Restated Loan Guarantee Agreement
Loan guarantee agreement entered into by Georgia Power with the DOE in 2014, as amended and restated in March 2019, under which the proceeds of borrowings may be used to reimburse Georgia Power for Eligible Project Costs incurred in connection with its construction of Plant Vogtle Units 3 and 4
AOCI
Accumulated other comprehensive income
ARO
Asset retirement obligation
ASC
Accounting Standards Codification
ASU
Accounting Standards Update
Atlanta Gas Light
Atlanta Gas Light Company, a wholly-owned subsidiary of Southern Company Gas
Atlantic Coast Pipeline
Atlantic Coast Pipeline, LLC, a joint venture to construct and operate a natural gas pipeline in which Southern Company Gas held a 5% interest through March 24, 2020
Bcf
Billion cubic feet
Bechtel
Bechtel Power Corporation, the primary contractor for the remaining construction activities for Plant Vogtle Units 3 and 4
Bechtel Agreement
The 2017 construction completion agreement between the Vogtle Owners and Bechtel
CCN
Certificate of convenience and necessity
CCR
Coal combustion residuals
CCR Rule
Disposal of Coal Combustion Residuals from Electric Utilities final rule published by the EPA in 2015
Chattanooga Gas
Chattanooga Gas Company, a wholly-owned subsidiary of Southern Company Gas

Clean Air Act
Clean Air Act Amendments of 1990
CO₂
Carbon dioxide
COD
Commercial operation date
Contractor Settlement Agreement
The December 31, 2015 agreement between Westinghouse and the Vogtle Owners resolving disputes between the Vogtle Owners and the EPC Contractor under the Vogtle 3 and 4 Agreement
Cooperative Energy
Electric generation and transmission cooperative in Mississippi
COVID-19
The novel coronavirus disease declared a pandemic by the World Health Organization and the Centers for Disease Control and Prevention in March 2020
CPCN
Certificate of public convenience and necessity
CPP
Clean Power Plan, the final action published by the EPA in 2015 that established guidelines for states to develop plans to meet EPA-mandated CO ₂ emission rates or emission reduction goals for existing electric generating units
CWIP
Construction work in progress
Dalton
City of Dalton, Georgia, an incorporated municipality in the State of Georgia, acting by and through its Board of Water, Light, and Sinking Fund Commissioners
Dalton Pipeline
A pipeline facility in Georgia in which Southern Company Gas has a 50% undivided ownership interest
DOE
U.S. Department of Energy
DSGP
Diamond State Generation Partners
ECO Plan
Mississippi Power’s environmental compliance overview plan
Eligible Project Costs
Certain costs of construction relating to Plant Vogtle Units 3 and 4 that are eligible for financing under the loan guarantee program established under Title XVII of the Energy Policy Act of 2005
EMC
Electric membership corporation
EPA
U.S. Environmental Protection Agency
EPC Contractor
Westinghouse and its affiliate, WECTEC Global Project Services Inc.; the former engineering, procurement, and construction contractor for Plant Vogtle Units 3 and 4

Definitions

FASB
Financial Accounting Standards Board
FERC
Federal Energy Regulatory Commission
FFB
Federal Financing Bank
FFB Credit Facilities
Note purchase agreements among the DOE, Georgia Power, and the FFB and related promissory notes which provide for two multi-advance term loan facilities
Fitch
Fitch Ratings, Inc.
GAAP
U.S. generally accepted accounting principles
Georgia Power
Georgia Power Company
Georgia Power Tax Reform Settlement Agreement
A settlement agreement between Georgia Power and the staff of the Georgia PSC regarding the retail rate impact of the Tax Reform Legislation, as approved by the Georgia PSC in April 2018
GHG
Greenhouse gas
GRAM
Atlanta Gas Light's Georgia Rate Adjustment Mechanism
Guarantee Settlement Agreement
The June 9, 2017 settlement agreement between the Vogtle Owners and Toshiba related to certain payment obligations of the EPC Contractor guaranteed by Toshiba
Gulf Power
Gulf Power Company, until January 1, 2019 a wholly-owned subsidiary of Southern Company; effective January 1, 2021, Gulf Power Company merged with and into Florida Power and Light Company, with Florida Power and Light Company remaining as the surviving company
Heating Degree Days
A measure of weather, calculated when the average daily temperatures are less than 65 degrees Fahrenheit
Heating Season
The period from November through March when Southern Company Gas' natural gas usage and operating revenues are generally higher
HLBV
Hypothetical liquidation at book value
IGCC
Integrated coal gasification combined cycle, the technology originally approved for Mississippi Power's Kemper County energy facility
Illinois Commission
Illinois Commerce Commission
Internal Revenue Code
Internal Revenue Code of 1986, as amended
IPP
Independent power producer

IRP
Integrated resource plan
IRS
Internal Revenue Service
ITAAC
Inspections, Tests, Analyses, and Acceptance Criteria, standards established by the NRC
ITC
Investment tax credit
JEA
Jacksonville Electric Authority
Jefferson Island
Jefferson Island Storage and Hub, L.L.C, which owns a natural gas storage facility in Louisiana consisting of two salt dome caverns; a subsidiary of Southern Company Gas through December 1, 2020
KWH
Kilowatt-hour
LIBOR
London Interbank Offered Rate
LIFO
Last-in, first-out
LNG
Liquefied natural gas
LOCOM
Lower of weighted average cost or current market price
LTSA
Long-term service agreement
Marketers
Marketers selling retail natural gas in Georgia and certificated by the Georgia PSC
MEAG Power
Municipal Electric Authority of Georgia
MGP
Manufactured gas plant
Mississippi Power
Mississippi Power Company
mmBtu
Million British thermal units
Moody's
Moody's Investors Service, Inc.
MPUS
Mississippi Public Utilities Staff
MRA
Municipal and Rural Associations
MW
Megawatt
MWH
Megawatt hour

Definitions

natural gas distribution utilities
Southern Company Gas' natural gas distribution utilities (Nicor Gas, Atlanta Gas Light, Virginia Natural Gas, Elizabethtown Gas, Florida City Gas, Chattanooga Gas, and Elkton Gas through June 30, 2018) (Nicor Gas, Atlanta Gas Light, Virginia Natural Gas, and Chattanooga Gas after July 29, 2018)
NCCR
Georgia Power's Nuclear Construction Cost Recovery
NDR
Alabama Power's Natural Disaster Reserve
NextEra Energy
NextEra Energy, Inc.
Nicor Gas
Northern Illinois Gas Company, a wholly-owned subsidiary of Southern Company Gas
NO_x
Nitrogen oxide
NRC
U.S. Nuclear Regulatory Commission
NYMEX
New York Mercantile Exchange, Inc.
NYSE
New York Stock Exchange
OCI
Other comprehensive income
OPC
Oglethorpe Power Corporation (an EMC)
OTC
Over-the-counter
PennEast Pipeline
PennEast Pipeline Company, LLC, a joint venture to construct and operate a natural gas pipeline in which Southern Company Gas has a 20% ownership interest
PEP
Mississippi Power's Performance Evaluation Plan
Pivotal Home Solutions
Nicor Energy Services Company, until June 4, 2018 a wholly-owned subsidiary of Southern Company Gas, doing business as Pivotal Home Solutions
Pivotal LNG
Pivotal LNG, Inc., through March 24, 2020, a wholly-owned subsidiary of Southern Company Gas
Pivotal Utility Holdings
Pivotal Utility Holdings, Inc., until July 29, 2018 a wholly-owned subsidiary of Southern Company Gas, doing business as Elizabethtown Gas (until July 1, 2018), Elkton Gas (until July 1, 2018), and Florida City Gas (until July 29, 2018)
PowerSecure
PowerSecure, Inc., a wholly-owned subsidiary of Southern Company

PowerSouth
PowerSouth Energy Cooperative
PPA
Power purchase agreements, as well as, for Southern Power, contracts for differences that provide the owner of a renewable facility a certain fixed price for the electricity sold to the grid
PRP
Pipeline Replacement Program, an Atlanta Gas Light infrastructure program through 2013
PSC
Public Service Commission
PTC
Production tax credit
Rate CNP
Alabama Power's Rate Certificated New Plant, consisting of Rate CNP New Plant, Rate CNP Compliance, and Rate CNP PPA
Rate ECR
Alabama Power's Rate Energy Cost Recovery
Rate NDR
Alabama Power's Rate Natural Disaster Reserve
Rate RSE
Alabama Power's Rate Stabilization and Equalization
Registrants
Southern Company, Alabama Power, Georgia Power, Mississippi Power, Southern Power Company, and Southern Company Gas
RMP
Mississippi Power's Reserve Margin Plan
ROE
Return on equity
S&P
S&P Global Ratings, a division of S&P Global Inc.
SCS
Southern Company Services, Inc., the Southern Company system service company and a wholly-owned subsidiary of Southern Company
SEC
U.S. Securities and Exchange Commission
SEGC
Southern Electric Generating Company, 50% owned by each of Alabama Power and Georgia Power
Sequent
Sequent Energy Management, L.P., a wholly-owned subsidiary of Southern Company Gas
SNG
Southern Natural Gas Company, L.L.C., a pipeline system in which Southern Company Gas has a 50% ownership interest
SO₂
Sulfur dioxide
Southern Company
The Southern Company

Definitions

Southern Company Gas Southern Company Gas and its subsidiaries
Southern Company Gas Capital Southern Company Gas Capital Corporation, a 100%-owned subsidiary of Southern Company Gas
Southern Company power pool The operating arrangement whereby the integrated generating resources of the traditional electric operating companies and Southern Power (excluding subsidiaries) are subject to joint commitment and dispatch in order to serve their combined load obligations
Southern Company system Southern Company, the traditional electric operating companies, Southern Power, Southern Company Gas, SEGCO, Southern Nuclear, SCS, Southern Linc, PowerSecure, and other subsidiaries
Southern Holdings Southern Company Holdings, Inc., a wholly-owned subsidiary of Southern Company
Southern Linc Southern Communications Services, Inc., a wholly-owned subsidiary of Southern Company, doing business as Southern Linc
Southern Nuclear Southern Nuclear Operating Company, Inc., a wholly-owned subsidiary of Southern Company
Southern Power Southern Power Company and its subsidiaries
SouthStar SouthStar Energy Services, LLC (a Marketer), a wholly-owned subsidiary of Southern Company Gas
SP Solar SP Solar Holdings I, LP, a limited partnership indirectly owning substantially all of Southern Power's solar facilities, in which Southern Power has a 67% ownership interest
SP Wind SP Wind Holdings II, LLC, a holding company owning a portfolio of eight operating wind facilities, in which Southern Power is the controlling partner in a tax equity arrangement
SRR Mississippi Power's System Restoration Rider, a tariff for retail property damage cost recovery and reserve
Subsidiary Registrants Alabama Power, Georgia Power, Mississippi Power, Southern Power, and Southern Company Gas
Tax Reform Legislation The Tax Cuts and Jobs Act, which became effective on January 1, 2018
Toshiba Toshiba Corporation, the parent company of Westinghouse
traditional electric operating companies Alabama Power, Georgia Power, Gulf Power, and Mississippi Power through December 31, 2018; Alabama Power, Georgia Power, and Mississippi Power as of January 1, 2019

Triton Triton Container Investments, LLC, an investment of Southern Company Gas through May 29, 2019
VCM Vogtle Construction Monitoring
VIE Variable interest entity
Virginia Commission Virginia State Corporation Commission
Virginia Natural Gas Virginia Natural Gas, Inc., a wholly-owned subsidiary of Southern Company Gas
Vogtle 3 and 4 Agreement Agreement entered into with the EPC Contractor in 2008 by Georgia Power, acting for itself and as agent for the Vogtle Owners, and rejected in bankruptcy in July 2017, pursuant to which the EPC Contractor agreed to design, engineer, procure, construct, and test Plant Vogtle Units 3 and 4
Vogtle Owners Georgia Power, Oglethorpe Power Corporation, MEAG Power, and Dalton

Vogtle Services Agreement The June 2017 services agreement between the Vogtle Owners and the EPC Contractor, as amended and restated in July 2017, for the EPC Contractor to transition construction management of Plant Vogtle Units 3 and 4 to Southern Nuclear and to provide ongoing design, engineering, and procurement services to Southern Nuclear
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WACOG Weighted average cost of gas
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Westinghouse Westinghouse Electric Company LLC
--

Xcel Xcel Energy Inc.

Reconciliation of Non-GAAP Financial Metric

	Year Ended December 31,				
<i>(In millions, except earnings per share)</i>	2020	2019	2018	2017	2016
Net Income – GAAP	\$3,119	\$ 4,739	\$ 2,226	\$ 842	\$2,448
Average Shares Outstanding	1,058	1,046	1,020	1,000	951
Basic Earnings Per Share	\$ 2.95	\$ 4.53	\$ 2.18	\$ 0.84	\$ 2.57
Net Income – GAAP	\$3,119	\$ 4,739	\$ 2,226	\$ 842	\$2,448
Less Non-GAAP Excluding Items:					
Acquisition, Disposition, and Integration Impacts ⁽¹⁾	60	2,516	35	(35)	(120)
Tax Impact	(22)	(1,081)	(294)	(12)	38
Estimated Loss on Plants Under Construction ⁽²⁾	(328)	(27)	(1,102)	(3,366)	(428)
Tax Impact	84	—	376	975	164
Loss on Plant Scherer Unit 3 ⁽³⁾	—	—	—	(33)	—
Tax Impact	—	—	—	13	—
Wholesale Gas Services ⁽⁴⁾	17	215	42	(57)	(4)
Tax Impact	(3)	(52)	(4)	—	4
Asset Impairments ⁽⁵⁾	(206)	(108)	—	—	—
Tax Impact	101	26	—	—	—
Litigation Settlement Proceeds ⁽⁶⁾	—	—	24	—	—
Tax Impact	—	—	(6)	—	—
Loss on Extinguishment of Debt ⁽⁷⁾	(29)	—	—	—	—
Tax Impact	7	—	—	—	—
Earnings Guidance Comparability Items⁽⁸⁾:					
Equity Return Related to Kemper IGCC Schedule Extension	—	—	—	47	29
Tax Impact	—	—	—	9	5
Adoption of Tax Reform	—	—	27	284	—
Net Income – Excluding Items	\$3,438	\$ 3,250	\$ 3,128	\$ 3,017	\$2,760
Basic Earnings Per Share – Excluding Items	\$ 3.25	\$ 3.11	\$ 3.07	\$ 3.02	\$ 2.90

- (1) Net income for the year ended December 31, 2020 includes: (i) \$39 million pre-tax (\$23 million after-tax) gain on the sale of Plant Mankato and (ii) a \$22 million pre-tax (\$16 million after-tax) gain on the sale of a natural gas storage facility. Net income for the year ended December 31, 2019 includes: (i) a \$2.6 billion pre-tax (\$1.4 billion after-tax) gain on the sale of Gulf Power; (ii) a \$23 million pre-tax (\$88 million after-tax) gain on the sale of Plant Nacagdoches; and (iii) \$18 million pre tax (\$11 million after tax) of other acquisition, disposition, and integration impacts, partially offset by: (i) a \$58 million pre-tax (\$52 million after-tax) net loss, including impairment charges, associated with the sales of PowerSecure’s utility infrastructure services and lighting businesses and (ii) a \$24 million pre-tax (\$17 million after-tax) impairment charge in contemplation of the sale of Pivotal LNG and Atlantic Coast Pipeline. Net income for the year ended December 31, 2018 includes: (i) a net combined \$249 million pre-tax gain (\$93 million after-tax loss) on the sales of Elizabethtown Gas, Elkton Gas, Florida City Gas, and Pivotal Home Solutions, including a related impairment charge; (ii) a \$119 million pre-tax (\$89 million after tax) impairment charge associated with the sales of Plants Stanton and Oleander; and (iii) \$95 million pre tax (\$77 million after tax) of other acquisition, disposition, and integration costs. Net income for the years ended December 31, 2017 and 2016 includes costs related to the acquisition and integration of Southern Company Gas and net income for the year ended December 31, 2017 also includes costs related to the dispositions of Elizabethtown Gas and Elkton Gas. Additionally, net income for the year ended December 31, 2016 includes costs related to the acquisitions of PowerSecure International, Inc. and the 50% interest in SNG.
- (2) Net income for the years ended December 31, 2020 and 2018 includes aggregate charges of \$325 million pre tax (\$242 million after tax) and \$1.1 billion pre tax (\$0.8 billion after tax), respectively, for estimated probable losses on Georgia Power’s construction of Plant Vogtle Units 3 and 4. Net income for all periods presented includes charges (net of salvage proceeds), associated legal expenses (net of insurance recoveries), and tax impacts related to Mississippi Power’s construction and abandonment of the Kemper IGCC.. Mississippi Power expects to incur additional pre-tax period costs to complete dismantlement of the abandoned gasifier-related assets and site restoration activities, including related costs for compliance and safety, asset retirement obligation accretion, and property taxes, totaling \$10 million to \$20 million annually through 2025. Further charges related to Plant Vogtle Units 3 and 4 may occur; however, the amount and timing of any such charges are uncertain.
- (3) Net income for the year ended December 31, 2017 includes a \$32.5 million write-down (\$20 million after tax) of Gulf Power’s ownership of Plant Scherer Unit 3 as the result of a retail rate case settlement.
- (4) Net income for all periods presented includes the Wholesale Gas Services business. Presenting net income and earnings per share excluding Wholesale Gas Services provides an additional measure of operating performance that excludes the volatility resulting from mark-to-market and lower of weighted average cost or current market price accounting adjustments.
- (5) Net income for the years ended December 31, 2020 and 2019 includes impairment charges associated with two leveraged leases. Net income for the year ended December 31, 2019 also includes impairment charges associated with a natural gas storage facility. Further charges associated with this natural gas storage facility and these leveraged leases are not expected.
- (6) Net income for the year ended December 31, 2018 includes the settlement proceeds of Mississippi Power’s claim for lost revenue resulting from the 2010 Deepwater Horizon oil spill. No further proceeds are expected.
- (7) Net income for the year ended December 31, 2020 includes costs associated with the extinguishment of debt at Southern Company. Similar transactions may occur in the future; however, the amount and timing of any related costs are uncertain.
- (8) Net income for the years ended December 31, 2017 and 2016 includes AFUDC equity as a result of extending the schedule for the Kemper IGCC construction project beyond the dates assumed when Southern Company’s 2016 and 2017 earnings guidance was initially presented. AFUDC equity ceased in connection with the project’s suspension in June 2017. Net income for the years ended December 31, 2018 and 2017 includes net tax benefits as a result of implementing the Tax Reform Legislation. During 2018, Southern Company obtained and analyzed additional information that was not initially available or reported as provisional amounts at December 31, 2017. Southern Company believes presentation of earnings per share excluding these adjustments provided investors with information comparable to guidance and uses such measure to evaluate performance.

Cautionary Statement Regarding Forward-Looking Statements

Southern Company’s Annual Report contains forward-looking statements. Forward-looking statements include, among other things, statements concerning the potential and expected effects of the COVID-19 pandemic, regulated rates, the strategic goals for the business, customer and sales growth, economic conditions, cost recovery and other rate actions, projected equity ratios, current and proposed environmental regulations and related compliance plans and estimated expenditures, GHG emissions reduction goals, pending or potential litigation matters, access to sources of capital, projections for the qualified pension plans, postretirement benefit plans, and nuclear decommissioning trust fund contributions, financing activities, completion dates and costs of construction projects, matters related to the abandonment of the Kemper IGCC, completion of announced acquisitions and dispositions, filings with state and federal regulatory authorities, federal and state income tax benefits, estimated sales and purchases under power sale and purchase agreements, and estimated construction plans and expenditures. In some cases, forward-looking statements can be identified by terminology such as “may,” “will,” “could,” “would,” “should,” “expects,” “plans,” “anticipates,” “believes,” “estimates,” “projects,” “predicts,” “potential,” or “continue” or the negative of these terms or other similar terminology. There are various factors that could cause actual results to differ materially from those suggested by the forward-looking statements; accordingly, there can be no assurance that such indicated results will be realized. These factors include:

- the impact of recent and future federal and state regulatory changes, including tax, environmental, and other laws and regulations to which Southern Company and its subsidiaries are subject, as well as changes in application of existing laws and regulations;
- the potential effects of the continued COVID-19 pandemic;
- the extent and timing of costs and legal requirements related to CCR;
- current and future litigation or regulatory investigations, proceedings, or inquiries, including litigation and other disputes related to the Kemper County energy facility;
- the effects, extent, and timing of the entry of additional competition in the markets in which Southern Company’s subsidiaries operate, including from the development and deployment of alternative energy sources;
- variations in demand for electricity and natural gas;
- available sources and costs of natural gas and other fuels;
- the ability to complete necessary or desirable pipeline expansion or infrastructure projects, limits on pipeline capacity, and operational interruptions to natural gas distribution and transmission activities;
- transmission constraints;
- effects of inflation;
- the ability to control costs and avoid cost and schedule overruns during the development, construction, and operation of facilities or other projects, including Plant Vogtle Units 3 and 4 (which includes components based on new technology that only within the last few years began initial operation in the global nuclear industry at this scale) and Plant Barry Unit 8, due to current and future challenges which include, but are not limited to, changes in labor costs, availability, and productivity; challenges with management of contractors or vendors; subcontractor performance; adverse weather conditions; shortages, delays, increased costs, or inconsistent quality of equipment, materials, and labor; contractor or supplier delay; delays due to judicial or regulatory action; nonperformance under construction, operating, or other agreements; operational readiness, including specialized operator training and required site safety programs; engineering or design problems; design and other licensing-based compliance matters, including, for nuclear units, inspections and the timely submittal by Southern Nuclear of the ITAAC documentation for each unit and the related reviews and approvals by the NRC necessary to support NRC authorization to load fuel; challenges with start-up activities, including major equipment failure, or system integration; and/or operational performance; and challenges related to the COVID-19 pandemic;
- the ability to overcome or mitigate the current challenges at Plant Vogtle Units 3 and 4, as described in Note 2 to the financial statements under “Georgia Power – Nuclear Construction,” that could further impact the cost and schedule for the project;
- legal proceedings and regulatory approvals and actions related to construction projects, such as Plant Vogtle Units 3 and 4, Plant Barry Unit 8, and pipeline projects, including PSC approvals and FERC and NRC actions;
- under certain specified circumstances, a decision by holders of more than 10% of the ownership interests of Plant Vogtle Units 3 and 4 not to proceed with construction and the ability of other Vogtle Owners to tender a portion of their ownership interests to Georgia Power following certain construction cost increases;
- in the event Georgia Power becomes obligated to provide funding to MEAG Power with respect to the portion of MEAG Power’s ownership interest in Plant Vogtle Units 3 and 4 involving JEA, any inability of Georgia Power to receive repayment of such funding;
- the ability to construct facilities in accordance with the requirements of permits and licenses (including satisfaction of NRC requirements), to satisfy any environmental performance standards and the requirements of tax credits and other incentives, and to integrate facilities into the Southern Company system upon completion of construction;
- investment performance of the employee and retiree benefit plans and nuclear decommissioning trust funds;
- advances in technology, including the pace and extent of development of low- to no-carbon energy technologies and negative carbon concepts;
- performance of counterparties under ongoing renewable energy partnerships and development agreements;

Cautionary Statement Regarding Forward-Looking Statements (continued)

- state and federal rate regulations and the impact of pending and future rate cases and negotiations, including rate actions relating to ROE, equity ratios, additional generating capacity, and fuel and other cost recovery mechanisms;
- the ability to successfully operate the electric utilities’ generating, transmission, and distribution facilities and Southern Company Gas’ natural gas distribution and storage facilities and the successful performance of necessary corporate functions;
- the inherent risks involved in operating and constructing nuclear generating facilities;
- the inherent risks involved in transporting and storing natural gas;
- the performance of projects undertaken by the non-utility businesses and the success of efforts to invest in and develop new opportunities;
- internal restructuring or other restructuring options that may be pursued;
- potential business strategies, including acquisitions or dispositions of assets or businesses, which cannot be assured to be completed or beneficial to Southern Company or its subsidiaries;
- the ability of counterparties of Southern Company and its subsidiaries to make payments as and when due and to perform as required;
- the ability to obtain new short- and long-term contracts with wholesale customers;
- the direct or indirect effect on the Southern Company system’s business resulting from cyber intrusion or physical attack and the threat of physical attacks;
- interest rate fluctuations and financial market conditions and the results of financing efforts;
- access to capital markets and other financing sources;
- changes in Southern Company’s and any of its subsidiaries’ credit ratings;
- changes in the method of determining LIBOR or the replacement of LIBOR with an alternative reference rate;
- the ability of Southern Company’s electric utilities to obtain additional generating capacity (or sell excess generating capacity) at competitive prices;
- catastrophic events such as fires, earthquakes, explosions, floods, tornadoes, hurricanes and other storms, droughts, pandemic health events, political unrest, or other similar occurrences;
- the direct or indirect effects on the Southern Company system’s business resulting from incidents affecting the U.S. electric grid, natural gas pipeline infrastructure, or operation of generating or storage resources;
- impairments of goodwill or long-lived assets;
- the effect of accounting pronouncements issued periodically by standard-setting bodies; and
- other factors discussed elsewhere herein and in other reports filed by the Registrants from time to time with the SEC.

Southern Company expressly disclaims any obligation to update any forward-looking statements.

Available Information

Southern Company’s Annual Report on Form 10-K for the year ended December 31, 2020 (Form 10-K), as well as other documents filed by Southern Company pursuant to the Securities Exchange Act of 1934, as amended, are available electronically at <http://www.sec.gov>.

A copy of the Form 10-K as filed with the Securities and Exchange Commission will be provided without charge upon written request to the office of the Corporate Secretary. Requests for copies should be directed to the Corporate Secretary, 30 Ivan Allen Jr. Blvd., N.W., Atlanta, GA 30308.

The “Management’s Discussion and Analysis of Financial Condition and Results of Operations” herein generally discusses 2020 and 2019 items and year-to-year comparisons between 2020 and 2019. Discussions of 2018 items and year-to-year comparisons between 2019 and 2018 that are not included in this Annual Report can be found in Item 7 of Southern Company’s Annual Report on Form 10-K for the year ended December 31, 2019, which was filed with the SEC on February 19, 2020.

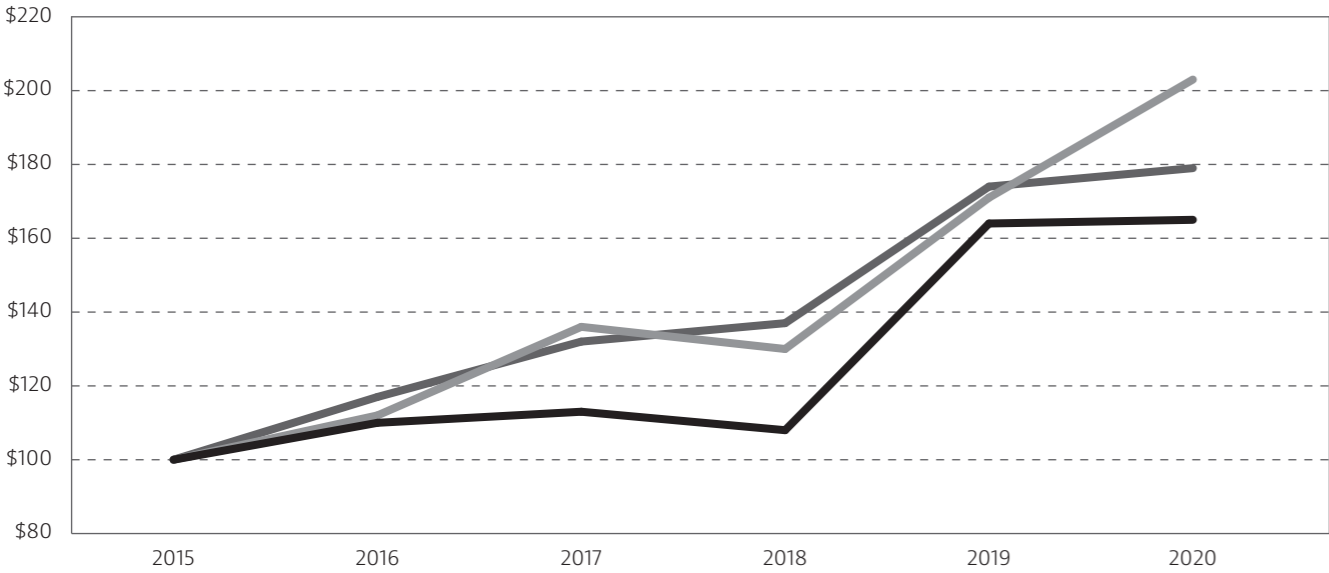
Southern Company Business

Southern Company is a holding company that owns all of the outstanding common stock of three traditional electric operating companies, Southern Power Company, and Southern Company Gas. The traditional electric operating companies – Alabama Power, Georgia Power, and Mississippi Power – are each operating public utility companies providing electric service to retail customers in three Southeastern states in addition to wholesale customers in the Southeast. Southern Power Company is also an operating public utility company. Southern Power develops, constructs, acquires, owns, and manages power generation assets, including renewable energy and battery energy storage projects, and sells electricity at market-based rates in the wholesale market. Southern Company Gas is an energy services holding company whose primary business is the distribution of natural gas in four states – Illinois, Georgia, Virginia, and Tennessee – through the natural gas distribution utilities. Southern Company Gas is also involved in several other businesses that are complementary to the distribution of natural gas.

Southern Company also owns all of the outstanding common stock or membership interests of SCS, Southern Linc, Southern Holdings, Southern Nuclear, PowerSecure, and other direct and indirect subsidiaries. SCS, the system service company, has contracted with Southern Company, each traditional electric operating company, Southern Power, Southern Company Gas, Southern Nuclear, SEGCO, and other subsidiaries to furnish, at direct or allocated cost and upon request, the following services: general executive and advisory, general and design engineering, operations, purchasing, accounting, finance, treasury, legal, tax, information technology, marketing, auditing, insurance and pension administration, human resources, systems and procedures, digital wireless communications, cellular tower space, and other services with respect to business and operations, construction management, and Southern Company power pool transactions. Southern Linc provides digital wireless communications for use by Southern Company and its subsidiary companies and also markets these services to the public and provides fiber optics services through its subsidiary, Southern Telecom, Inc. Southern Linc’s system covers approximately 127,000 square miles in the Southeast. Southern Holdings is an intermediate holding company subsidiary, primarily for Southern Company’s leveraged lease and other investments. Southern Nuclear operates and provides services to the Southern Company system’s nuclear power plants and is currently managing construction of and developing Plant Vogtle Units 3 and 4, which are co-owned by Georgia Power. PowerSecure provides energy solutions to electric utilities and their customers in the areas of distributed generation, energy storage and renewables, and energy efficiency.

Five-Year Cumulative Performance Graph

This performance graph compares the cumulative total shareholder return on Southern Company’s common stock with the Standard & Poor’s 500 index and the Philadelphia Utility Index for the past five years. The graph assumes that \$100 was invested on December 31, 2015 in Southern Company’s common stock and each of the indices and that all dividends were reinvested. The stockholder return shown for the five-year historical period may not be indicative of future performance.



Management’s Report on Internal Control Over Financial Reporting

The management of Southern Company is responsible for establishing and maintaining an adequate system of internal control over financial reporting as required by the Sarbanes-Oxley Act of 2002 and as defined in Exchange Act Rule 13a-15(f). A control system can provide only reasonable, not absolute, assurance that the objectives of the control system are met.

Under management’s supervision, an evaluation of the design and effectiveness of Southern Company’s internal control over financial reporting was conducted based on the framework in *Internal Control—Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on this evaluation, management concluded that Southern Company’s internal control over financial reporting was effective as of December 31, 2020.

Deloitte & Touche LLP, as auditors of Southern Company’s financial statements, has issued an attestation report on the effectiveness of Southern Company’s internal control over financial reporting as of December 31, 2020, which is included herein.

Thomas A. Fanning

Thomas A. Fanning
Chairman, President, and Chief Executive Officer

Andrew W. Evans

Andrew W. Evans
Executive Vice President and Chief Financial Officer

February 17, 2021

To the stockholders and the Board of Directors of The Southern Company and Subsidiary Companies

Opinions on the Financial Statements and Internal Control over Financial Reporting

We have audited the accompanying consolidated balance sheets of The Southern Company and subsidiary companies (Southern Company) as of December 31, 2020 and 2019, the related consolidated statements of income, comprehensive income, stockholders’ equity, and cash flows for each of the three years in the period ended December 31, 2020, and the related notes (collectively referred to as the “financial statements”). We also have audited Southern Company’s internal control over financial reporting as of December 31, 2020, based on criteria established in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of Southern Company as of December 31, 2020 and 2019, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2020, in conformity with accounting principles generally accepted in the United States of America. Also, in our opinion, Southern Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2020, based on criteria established in *Internal Control – Integrated Framework (2013)* issued by COSO.

Basis for Opinions

Southern Company’s management is responsible for these financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management’s Report on Internal Control Over Financial Reporting. Our responsibility is to express an opinion on these financial statements and an opinion on Southern Company’s internal control over financial reporting based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to Southern Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud, and whether effective internal control over financial reporting was maintained in all material respects.

Our audits of the consolidated financial statements included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures to respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

Definition and Limitations of Internal Control over Financial Reporting

A company’s internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company’s internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company’s assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Critical Audit Matters

The critical audit matters communicated below are matters arising from the current-period audit of the financial statements that were communicated or required to be communicated to the Audit Committee of Southern Company’s Board of Directors and that (1) relate to accounts or disclosures that are material to the financial statements and (2) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the financial statements, taken as a whole, and we are not, by communicating the critical audit matters below, providing separate opinions on the critical audit matters or on the accounts or disclosures to which they relate.

Impact of Rate Regulation on the Financial Statements – Refer to Note 1 (Summary of Significant Accounting Policies – Regulatory Assets and Liabilities) and Note 2 (Regulatory Matters) to the financial statements

Critical Audit Matter Description

Southern Company’s traditional electric operating companies and natural gas distribution utilities (the “regulated utility subsidiaries”), which represent approximately 89% of Southern Company’s consolidated operating revenues for the year ended December 31, 2020 and 85% of its consolidated total assets at December 31, 2020, are subject to rate regulation by their respective state Public Service Commissions or other applicable state regulatory agencies and wholesale regulation by the Federal Energy Regulatory Commission (collectively, the “Commissions”). Management has determined that the regulated utility subsidiaries meet the requirements under accounting principles generally accepted in the United States of America to utilize specialized rules to account for the effects of rate regulation in the preparation of its financial statements. Accounting for the economics of rate regulation impacts multiple financial statement line items and disclosures, including, but not limited to, property, plant, and equipment; other regulatory assets; other regulatory liabilities; other cost of removal obligations; deferred charges and credits related to income taxes; under and over recovered regulatory clause revenues; operating revenues; operations and maintenance expenses; and depreciation and amortization.

The Commissions set the rates the regulated utility subsidiaries are permitted to charge customers. Rates are determined and approved in regulatory proceedings based on an analysis of the applicable regulated utility subsidiary’s costs to provide utility service and a return on, and recovery of, its investment in the utility business. Current and future regulatory decisions can have an impact on the recovery of costs, the rate of return earned on investments, and the timing and amount of assets to be recovered by rates. The Commissions’ regulation of rates is premised on the full recovery of prudently incurred costs and a reasonable rate of return on invested capital. While Southern Company’s regulated utility subsidiaries expect to recover costs from customers through regulated rates, there is a risk that the Commissions will not approve: (1) full recovery of the costs of providing utility service, or (2) full recovery of all amounts invested in the utility business and a reasonable return on that investment.

We identified the impact of rate regulation as a critical audit matter due to the significant judgments made by management to support its assertions about impacted account balances and disclosures (e.g., asset retirement costs, property damage reserves, and net book value of retired assets) and the high degree of subjectivity involved in assessing the potential impact of future regulatory orders on the financial statements. Management judgments include assessing the likelihood of (1) recovery in future rates of incurred costs, (2) a disallowance of part of the cost of recently completed plant or plant under construction, and/or (3) a refund to customers. Given that management’s accounting judgments are based on assumptions about the outcome of future decisions by the Commissions, auditing these judgments required specialized knowledge of accounting for rate regulation and the rate setting process due to its inherent complexities and significant auditor judgment to evaluate management estimates and the subjectivity of audit evidence.

How the Critical Audit Matter Was Addressed in the Audit

Our audit procedures related to the uncertainty of future decisions by the Commissions included the following, among others:

- We tested the effectiveness of management’s controls over the evaluation of the likelihood of (1) the recovery in future rates of costs incurred as property, plant, and equipment and deferred as regulatory assets, and (2) a refund or a future reduction in rates that should be reported as regulatory liabilities. We also tested the effectiveness of management’s controls over the initial recognition of amounts as property, plant, and equipment; regulatory assets or liabilities; and the monitoring and evaluation of regulatory developments that may affect the likelihood of recovering costs in future rates or of a future reduction in rates.
- We read relevant regulatory orders issued by the Commissions for the regulated utility subsidiaries, regulatory statutes, interpretations, procedural memorandums, filings made by intervenors, and other publicly available information to assess the likelihood of recovery in future rates or of a future reduction in rates based on precedents of the Commissions’ treatment of similar costs under similar circumstances. We evaluated the external information and compared it to management’s recorded regulatory asset and liability balances for completeness.

Report of Independent Registered Public Accounting Firm

- For regulatory matters in process, we inspected filings with the Commissions by Southern Company’s regulated utility subsidiaries and other interested parties that may impact the regulated utility subsidiaries’ future rates for any evidence that might contradict management’s assertions.
- We evaluated regulatory filings for any evidence that intervenors are challenging full recovery of the cost of any capital projects. We tested selected costs included in the capitalized project costs for completeness and accuracy.
- We obtained representation from management regarding probability of recovery for regulatory assets or refund or future reduction in rates for regulatory liabilities to assess management’s assertion that amounts are probable of recovery, refund, or a future reduction in rates.
- We evaluated Southern Company’s disclosures related to the impacts of rate regulation, including the balances recorded and regulatory developments.

Disclosure of Uncertainties – Plant Vogtle Units 3 and 4 Construction – Refer to Note 2 (Regulatory Matters – Georgia Power – Nuclear Construction) to the financial statements

Critical Audit Matter Description

As discussed in Note 2 to the financial statements, the ultimate recovery of Georgia Power Company's (Georgia Power) investment in the construction of Plant Vogtle Units 3 and 4 is subject to multiple uncertainties. Such uncertainties include the potential impact of future decisions by Georgia Power’s regulators (particularly the Georgia Public Service Commission), actions by the co-owners of the Vogtle project, and litigation or other legal proceedings involving the project. In addition, Georgia Power’s ability to meet its cost and schedule forecasts could impact its capacity to fully recover its investment in the project. While the project is not subject to a cost cap, Georgia Power’s cost and schedule forecasts are subject to numerous uncertainties which could impact cost recovery, including challenges with management of contractors and vendors; subcontractor performance; supervision of craft labor and related craft labor productivity, particularly in the installation of electrical, mechanical, and instrumentation and controls commodities, ability to attract and retain craft labor, and/or related cost escalation; procurement, fabrication, delivery, assembly, installation, system turnover, and the initial testing and start-up, including any required engineering changes or any remediation related thereto, of plant systems, structures, or components (some of which are based on new technology that only within the last few years began initial operation in the global nuclear industry at this scale), any of which may require additional labor and/or materials; or other issues that could arise and change the projected schedule and estimated cost. In addition, the continuing effects of the COVID-19 pandemic could further disrupt or delay construction, testing, supervisory, and support activities at Plant Vogtle Units 3 and 4. The ultimate recovery of Georgia Power’s investment in Plant Vogtle Units 3 and 4 is subject to the outcome of future assessments by management as well as Georgia Public Service Commission decisions in future regulatory proceedings.

Management has recorded charges to income, including a total of \$325 million in 2020, when it has determined that it is likely to incur costs for which it will not seek recovery or which it has concluded are probable of disallowance for ratemaking purposes. In addition, management has disclosed the status, risks, and uncertainties associated with Plant Vogtle Units 3 and 4, including (1) the status of construction; (2) the status of regulatory proceedings; (3) the status of legal actions or issues involving the co-owners of the project; and (4) other matters which could impact the ultimate recoverability of Georgia Power’s investment in the project. We identified as a critical audit matter the evaluation of Georgia Power’s identification and disclosure of events and uncertainties that could impact the ultimate cost recovery of its investment in the construction of Plant Vogtle Units 3 and 4. This critical audit matter involved significant audit effort requiring specialized industry and construction expertise, extensive knowledge of rate regulation, and difficult and subjective judgments.

How the Critical Audit Matter Was Addressed in the Audit

Our audit procedures related to Georgia Power’s identification and disclosure of events and uncertainties that could impact the ultimate cost recovery of its investment in the construction of Plant Vogtle Units 3 and 4 included the following, among others:

- We tested the effectiveness of internal controls over the on-going evaluation, monitoring, and disclosure of matters related to the construction and ultimate cost recovery of Plant Vogtle Units 3 and 4.
- We involved construction specialists to assist in our evaluation of Georgia Power’s processes for on-going evaluation and monitoring of the construction schedule and to assess the disclosures of the uncertainties impacting the ultimate cost recovery of its investment in the construction of Plant Vogtle Units 3 and 4.
- We attended meetings with Georgia Power and Southern Company officials, project managers (including contractors), independent regulatory monitors, and co-owners of the project to evaluate and monitor construction status and identify cost and schedule challenges.
- We read reports of external independent monitors employed by the Georgia Public Service Commission to monitor the status of construction at Plant Vogtle Units 3 and 4 to evaluate the completeness of Georgia Power’s disclosure of the uncertainties impacting the ultimate cost recovery of its investment in the construction of Plant Vogtle Units 3 and 4.
- We inquired of Georgia Power and Southern Company officials and project managers regarding the status of construction, the construction schedule, and cost forecasts to assess the financial statement disclosures with respect to project status and potential risks and uncertainties to the achievement of such forecasts.

Report of Independent Registered Public Accounting Firm

- We inspected regulatory filings and transcripts of Georgia Public Service Commission hearings regarding the construction of Plant Vogtle Units 3 and 4 to identify potential challenges to the recovery of Georgia Power's construction costs and to evaluate the disclosures with respect to such uncertainties.
- We inquired of Georgia Power and Southern Company management and internal and external legal counsel regarding any potential legal actions or issues arising from project construction or issues involving the co-owners of the project.
- We monitored the status of reviews by the Nuclear Regulatory Commission to identify potential impediments to the licensing and commercial operation of the project.
- We compared the financial statement disclosures relating to this matter to the information gathered through the conduct of all our procedures to evaluate whether there were omissions relating to significant facts or uncertainties regarding the status of construction or other factors which could impact the ultimate cost recovery of Plant Vogtle Units 3 and 4.
- We obtained representation from management regarding disclosure of all matters related to the cost and/or status of the construction of Plant Vogtle Units 3 and 4, including matters related to a co-owner or regulatory development, that could impact the recovery of the related costs.

Deloitte & Touche LLP

Atlanta, Georgia

February 17, 2021

We have served as Southern Company’s auditor since 2002.

OVERVIEW

Business Activities

Southern Company is a holding company that owns all of the common stock of three traditional electric operating companies, as well as Southern Power and Southern Company Gas, and owns other direct and indirect subsidiaries. The primary businesses of the Southern Company system are electricity sales by the traditional electric operating companies and Southern Power and the distribution of natural gas by Southern Company Gas. Southern Company's reportable segments are the sale of electricity by the traditional electric operating companies, the sale of electricity in the competitive wholesale market by Southern Power, and the sale of natural gas and other complementary products and services by Southern Company Gas. See Note 16 to the financial statements for additional information.

- The traditional electric operating companies – Alabama Power, Georgia Power, and Mississippi Power – are vertically integrated utilities providing electric service to retail customers in three Southeastern states in addition to wholesale customers in the Southeast.
- Southern Power develops, constructs, acquires, owns, and manages power generation assets, including renewable energy and battery energy storage projects, and sells electricity at market-based rates in the wholesale market. Southern Power continually seeks opportunities to execute its strategy to create value through various transactions including acquisitions, dispositions, and sales of partnership interests, development and construction of new generating facilities, and entry into PPAs primarily with investor-owned utilities, IPPs, municipalities, electric cooperatives, and other load-serving entities, as well as commercial and industrial customers. In general, Southern Power commits to the construction or acquisition of new generating capacity only after entering into or assuming long-term PPAs for the new facilities.
- Southern Company Gas is an energy services holding company whose primary business is the distribution of natural gas. Southern Company Gas owns natural gas distribution utilities in four states – Illinois, Georgia, Virginia, and Tennessee – and is also involved in several other complementary businesses. Southern Company Gas manages its business through four reportable segments – gas distribution operations, gas pipeline investments, wholesale gas services, which includes Sequent, a natural gas asset optimization company, and gas marketing services, which includes SouthStar, a Marketer and provider of energy-related products and services to natural gas markets – and one non-reportable segment, all other. See Notes 7 and 16 to the financial statements for additional information.

Many factors affect the opportunities, challenges, and risks of the Southern Company system's electric service and natural gas businesses. These factors include the ability to maintain constructive regulatory environments, to maintain and grow sales and customers, and to effectively manage and secure timely recovery of prudently-incurred costs. These costs include those related to projected long-term demand growth; stringent environmental standards, including CCR rules; safety; system reliability and resilience; fuel; natural gas; restoration following major storms; and capital expenditures, including constructing new electric generating plants and expanding and improving the electric transmission and electric and natural gas distribution systems.

The traditional electric operating companies and the natural gas distribution utilities have various regulatory mechanisms that address cost recovery. Effectively operating pursuant to these regulatory mechanisms and appropriately balancing required costs and capital expenditures with customer prices will continue to challenge the Southern Company system for the foreseeable future. See Note 2 to the financial statements for additional information.

Southern Power's future earnings will depend upon the parameters of the wholesale market and the efficient operation of its wholesale generating assets, as well as Southern Power's ability to execute its growth strategy and to develop and construct generating facilities. In addition, Southern Power's future earnings will depend upon the availability of federal and state ITCs and PTCs on its renewable energy projects, which could be impacted by future tax legislation. See FUTURE EARNINGS POTENTIAL – "Income Tax Matters" herein and Notes 10 and 15 to the financial statements for additional information.

Southern Company's other business activities include providing energy solutions to electric utilities and their customers in the areas of distributed generation, energy storage and renewables, and energy efficiency. Other business activities also include investments in telecommunications, leveraged lease projects, and gas storage facilities. Management continues to evaluate the contribution of each of these activities to total shareholder return and may pursue acquisitions, dispositions, and other strategic ventures or investments accordingly.

Recent Developments

COVID-19

During March 2020, COVID-19 was declared a pandemic by the World Health Organization and the Centers for Disease Control and Prevention and has spread globally, including throughout the United States. The Southern Company system provides an essential service to its customers; therefore, it is critical that Southern Company system employees are able to continue to perform their essential duties safely and effectively. The Southern Company system has implemented applicable business continuity plans, including teleworking, canceling non-essential business travel, increasing cleaning frequency at business locations, implementing applicable safety and health guidelines issued by federal and state officials, and establishing protocols for required work on customer premises. To date, these procedures have

been effective in maintaining the Southern Company system's critical operations. As a result of the COVID-19 pandemic, there have been economic disruptions in the Registrants' operating territories. The traditional electric operating companies and the natural gas distribution utilities temporarily suspended disconnections for non-payment by customers and waived late fees for certain periods. See Note 2 to the financial statements for information regarding deferral of certain incremental COVID-19-related costs, including bad debt, to a regulatory asset by certain of the traditional electric operating companies and the natural gas distribution utilities. In addition, the COVID-19 pandemic has impacted productivity and the pace of activity completion at Plant Vogtle Units 3 and 4, as discussed further herein. Additional information regarding the COVID-19 pandemic and its past and potential future impacts on the Registrants is provided throughout Management's Discussion and Analysis of Financial Condition and Results of Operations.

Alabama Power

On August 14, 2020, the Alabama PSC issued an order granting Alabama Power a CCN to procure additional capacity, and, on August 31, 2020, Alabama Power completed its acquisition of the Central Alabama Generating Station.

In October 2020, Alabama Power reduced its over-collected fuel balance by \$94.3 million in accordance with an August 7, 2020 Alabama PSC order authorizing Alabama Power to reduce its over-collected fuel balance by \$100 million and return that amount to customers in the form of bill credits, with any undistributed amount remaining in the regulatory liability for the benefit of customers.

For the year ended December 31, 2020, Alabama Power's weighted common equity return exceeded 6.15%, resulting in Alabama Power establishing a current regulatory liability of \$50 million for Rate RSE refunds, which will be refunded to customers through bill credits in April 2021.

During 2020, Alabama Power recorded \$51 million and \$67 million against the NDR for damages incurred to its transmission and distribution facilities from Hurricane Sally and Hurricane Zeta, respectively. Alabama Power made an additional accrual of \$100 million to the NDR in December 2020.

Effective for the billing month of January 2021, Alabama Power's Rate RSE increased 4.09%, or approximately \$228 million annually, and Alabama Power's Rate ECR decreased 1.84%, or approximately \$103 million annually, as approved by the Alabama PSC.

See Notes 2 and 15 to the financial statements under "Alabama Power" for additional information.

Georgia Power

Rate Plans

On December 15, 2020, in accordance with the terms of the 2019 ARP, the Georgia PSC approved tariff adjustments effective January 1, 2021 as follows: (i) increased traditional base tariffs by approximately \$120 million; (ii) increased the Environmental Compliance Cost Recovery (ECCR) tariff by approximately \$2 million; (iii) decreased Demand-Side Management tariffs by approximately \$15 million; and (iv) increased Municipal Franchise Fee tariffs by approximately \$4 million, for a total net increase in annual base revenues of approximately \$111 million. Georgia Power expects to submit a compliance filing in the third quarter 2021 to request tariff adjustments approved pursuant to the 2019 ARP effective January 1, 2022. The amounts requested in the 2019 ARP were as follows: (i) increase traditional base tariffs by approximately \$192 million; (ii) increase the ECCR tariff by approximately \$184 million; (iii) increase Demand-Side Management tariffs by approximately \$1 million; and (iv) increase Municipal Franchise Fee tariffs by approximately \$9 million, for a total increase in annual base revenues of approximately \$386 million. The ultimate outcome of this matter cannot be determined at this time. See Note 2 to the financial statements under "Georgia Power – Rate Plans – 2019 ARP" for additional information.

Plant Vogtle Units 3 and 4 Status

Construction continues on Plant Vogtle Units 3 and 4 (with electric generating capacity of approximately 1,100 MWs each), in which Georgia Power holds a 45.7% ownership interest. Georgia Power's share of the total project capital cost forecast is \$8.7 billion, with expected in-service dates of November 2021 for Unit 3 and November 2022 for Unit 4.

As of June 30, 2020, assignments of contingency to the base capital cost forecast exceeded the remaining balance of the construction contingency originally established in the second quarter 2018 and Georgia Power established \$115 million of additional construction contingency. During the third and fourth quarters 2020, this construction contingency, plus an additional \$5 million, was fully assigned to the base capital cost forecast. Assignment of contingency during 2020 addressed cost risks related to construction productivity, including the April 2020 reduction in workforce designed to mitigate impacts of the COVID-19 pandemic described below; other COVID-19 impacts; craft labor incentives; additional resources for supervision, field support, project management, initial test program, start-up, engineering support, and operations and maintenance support; subcontracts; and procurement, among other factors. These factors continue to represent further potential cost risk to the project; therefore, Georgia Power established \$171 million of additional contingency as of December 31, 2020.

Management's Discussion and Analysis of Financial Condition and Results of Operations

After considering the significant level of uncertainty that exists regarding the future recoverability of these costs since the ultimate outcome of these matters is subject to the outcome of future assessments by management, as well as Georgia PSC decisions in future regulatory proceedings, Georgia Power recorded total pre-tax charges to income of \$149 million (\$111 million after tax) and \$176 million (\$131 million after tax) for the increases in the total project capital cost forecast as of June 30, 2020 and December 31, 2020, respectively. As and when these amounts are spent, Georgia Power may request the Georgia PSC to evaluate those expenditures for rate recovery.

In mid-March 2020, Southern Nuclear began implementing policies and procedures designed to mitigate the risk of transmission of COVID-19 at the construction site. In April 2020, Georgia Power, acting for itself and as agent for the other Vogtle Owners, announced a reduction in workforce at Plant Vogtle Units 3 and 4 and began reducing the then-existing site workforce by approximately 20%. This workforce reduction lowered absenteeism, providing an improvement in operational efficiency and allowing for increased social distancing. Since April 2020, the number of active cases at the site has fluctuated and has continued to impact productivity levels and pace of activity completion.

From November 2020 through January 2021, the number of active COVID-19 cases at the site increased significantly, consistent with a national rise in cases, and the project continued to face challenges. As a result, overall production levels were not achieved at the levels anticipated, contributing to the December 31, 2020 allocation of construction contingency and increase in total project capital cost forecast. Also, after considering these factors, Southern Nuclear has further extended certain milestone dates, including the start of hot functional testing and fuel load for Unit 3, from those established in October 2020. These updated milestone dates are expected to support the regulatory-approved in-service dates of November 2021 and November 2022 for Units 3 and 4, respectively. With minimal schedule margin remaining, the Unit 3 schedule is challenged, and any further extension of the hot functional testing or fuel load milestones, or other delays from the challenges described in Note 2 to the financial statements under “Georgia Power – Nuclear Construction,” could impact the ability to achieve the November 2021 in-service date.

The continuing effects of the COVID-19 pandemic could further disrupt or delay construction and testing activities at Plant Vogtle Units 3 and 4. Georgia Power’s proportionate share of the estimated incremental cost associated with COVID-19 mitigation actions and impacts on construction productivity is currently estimated to be between \$150 million and \$190 million and is included in the total project capital cost. The ultimate impact of the COVID-19 pandemic and other factors on the construction schedule and budget for Plant Vogtle Units 3 and 4 cannot be determined at this time.

See Note 2 to the financial statements under “Georgia Power – Nuclear Construction” for additional information.

Mississippi Power

On March 17, 2020, the Mississippi PSC approved a settlement agreement between Mississippi Power and the Mississippi Public Utilities Staff related to Mississippi Power’s base rate case filed in November 2019 (Mississippi Power Rate Case Settlement Agreement). Under the terms of the Mississippi Power Rate Case Settlement Agreement, annual retail rates decreased approximately \$16.7 million, or 1.85%, effective for the first billing cycle of April 2020.

During 2020, Mississippi Power substantially completed mine reclamation activities at the Kemper County energy facility. On September 3, 2020, Mississippi Power and Southern Company executed an agreement with the DOE completing Mississippi Power’s 2018 request for property closeout certification under the contract related to DOE grants received for the Kemper County energy facility, which enabled Mississippi Power to proceed with full dismantlement of the abandoned gasifier-related assets and site restoration activities. These activities are expected to be completed by 2026. See Note 3 to the financial statements under “Other Matters – Mississippi Power – Kemper County Energy Facility” for additional information.

On February 12, 2021, Mississippi Power submitted its 2021 ECO Plan filing to the Mississippi PSC, which requested an annual decrease in revenues of approximately \$9 million, as well as its ad valorem tax adjustment filing for 2021, which requested an annual increase in revenues of approximately \$28 million. Mississippi Power plans to submit its 2021 PEP filing in March 2021.

On December 17, 2020, the Mississippi PSC issued an order concluding the RMP docket and requiring Mississippi Power to incorporate into its 2021 IRP a schedule of early or anticipated retirement of 950 MWs of fossil-steam generation by year-end 2027 to reduce Mississippi Power’s excess reserve margin. Mississippi Power’s IRP is scheduled to be filed in April 2021.

See Note 2 to the financial statements under “Mississippi Power” for additional information. The ultimate outcome of these matters cannot be determined at this time.

Southern Power

During 2020, Southern Power completed construction of and placed in service the 200-MW Reading and 136-MW Skookumchuck wind facilities, commenced construction of the 88-MW Garland and 72-MW Tranquillity battery energy storage facilities, and acquired and commenced construction of the 118-MW Glass Sands wind facility.

Management's Discussion and Analysis of Financial Condition and Results of Operations

In January 2020, Southern Power completed the sale of its equity interests in Plant Mankato (including the 385-MW expansion unit completed in May 2019) to a subsidiary of Xcel for a purchase price of approximately \$663 million, including final working capital adjustments.

In March 2020, Southern Power entered into an agreement to acquire a controlling membership interest in an approximately 300-MW wind facility located in South Dakota. The acquisition is subject to certain customary conditions to closing, including commercial operation of the facility, which is expected to occur in the first quarter 2021. Subsequent to the acquisition, Southern Power expects to complete a tax equity transaction. The facility’s output is contracted under two long-term PPAs. The ultimate outcome of this matter cannot be determined at this time.

In May 2020, Southern Power purchased a controlling interest in the 56-MW Beech Ridge II wind facility located in West Virginia from Invenergy Renewables LLC. The facility’s output is contracted under a 12-year PPA.

Southern Power calculates an investment coverage ratio for its generating assets, including those owned with various partners, based on the ratio of investment under contract to total investment using the respective generation facilities’ net book value (or expected in-service value for facilities under construction) as the investment amount. With the inclusion of investments associated with the facilities currently under construction, as well as other capacity and energy contracts, Southern Power’s average investment coverage ratio at December 31, 2020 was 94% through 2025 and 91% through 2030, with an average remaining contract duration of approximately 14 years.

See Note 15 to the financial statements under “Southern Power” for additional information.

Southern Company Gas

On March 24, 2020, Southern Company Gas completed the sale of its interests in Pivotal LNG and Atlantic Coast Pipeline with aggregate proceeds of \$178 million, including final working capital adjustments. On December 1, 2020, Southern Company Gas completed the sale of Jefferson Island for a purchase price of \$33 million, including estimated working capital adjustments. See Note 15 to the financial statements under “Southern Company Gas” for additional information.

On June 1, 2020, Virginia Natural Gas filed a general rate case with the Virginia Commission seeking an increase in annual base revenues of \$49.6 million based on a ROE of 10.35% and an equity ratio of 54%. Interim rate adjustments became effective November 1, 2020, subject to refund. The Virginia Commission is expected to rule on the requested increase in the second quarter 2021. The ultimate outcome of this matter cannot be determined at this time.

On July 1, 2020, Atlanta Gas Light filed its 2020 GRAM filing with the Georgia PSC requesting an annual base rate increase of \$37.6 million. Rates became effective on January 1, 2021 in accordance with Atlanta Gas Light’s 2019 rate case order.

On January 14, 2021, Nicor Gas filed a general base rate case with the Illinois Commission, requesting a \$293 million increase in annual base rate revenues, including \$94 million related to the recovery of investments under the Investing in Illinois program. The requested increase is based on a projected test year ending December 31, 2022, a ROE of 10.35%, and an equity ratio of 54.5%. The Illinois Commission has an 11-month statutory time limit to rule on the requested increase, after which rate adjustments will be effective. The ultimate outcome of this matter cannot be determined at this time.

See Note 2 to the financial statements under “Southern Company Gas – Rate Proceedings” for additional information.

Key Performance Indicators

In striving to achieve attractive risk-adjusted returns while providing cost-effective energy to approximately 8.6 million electric and gas utility customers collectively, the traditional electric operating companies and Southern Company Gas continue to focus on several key performance indicators. These indicators include, but are not limited to, customer satisfaction, plant availability, electric and natural gas system reliability, and execution of major construction projects. In addition, Southern Company and the Subsidiary Registrants focus on earnings per share (EPS) and net income, respectively, as a key performance indicator. See RESULTS OF OPERATIONS herein for information on the Registrants’ financial performance. See RESULTS OF OPERATIONS – “Southern Company Gas – Operating Metrics” for additional information on Southern Company Gas’ operating metrics, including Heating Degree Days, customer count, and volumes of natural gas sold.

The financial success of the traditional electric operating companies and Southern Company Gas is directly tied to customer satisfaction. Key elements of ensuring customer satisfaction include outstanding service, high reliability, and competitive prices. The traditional electric operating companies use customer satisfaction surveys to evaluate their results and generally target the top quartile of these surveys in measuring performance. Reliability indicators are also used to evaluate results. See Note 2 to the financial statements under “Alabama Power – Rate RSE” and “ – Mississippi Power – Performance Evaluation Plan” for additional information on Alabama Power’s Rate RSE and Mississippi Power’s PEP rate plan, respectively, both of which contain mechanisms that directly tie customer service indicators to the allowed equity return.

Southern Power continues to focus on several key performance indicators, including, but not limited to, the equivalent forced outage rate and contract availability to evaluate operating results and help ensure its ability to meet its contractual commitments to customers.

RESULTS OF OPERATIONS

Southern Company

Consolidated net income attributable to Southern Company was \$3.1 billion in 2020, a decrease of \$1.6 billion, or 34.2%, from the prior year. The decrease was primarily due to the \$2.6 billion (\$1.4 billion after tax) gain on the sale of Gulf Power in 2019 and after-tax charges totaling \$242 million in 2020 related to Georgia Power’s construction of Plant Vogtle Units 3 and 4. See Notes 2 and 15 to the financial statements under “Georgia Power – Nuclear Construction” and “Southern Company,” respectively, for additional information.

Basic EPS was \$2.95 in 2020 and \$4.53 in 2019. Diluted EPS, which factors in additional shares related to stock-based compensation, was \$2.93 in 2020 and \$4.50 in 2019. EPS for 2020 and 2019 was negatively impacted by \$0.03 and \$0.11 per share, respectively, as a result of increases in the average shares outstanding. See Note 8 to the financial statements under “Outstanding Classes of Capital Stock – Southern Company” for additional information.

Dividends paid per share of common stock were \$2.54 in 2020 and \$2.46 in 2019. In January 2021, Southern Company declared a quarterly dividend of 64 cents per share. For 2020, the dividend payout ratio was 86% compared to 54% for 2019. The increase was due to the decrease in earnings in 2020.

Discussion of Southern Company’s results of operations is divided into three parts – the Southern Company system’s primary business of electricity sales, its gas business, and its other business activities.

	2020	2019
	<i>(in millions)</i>	
Electricity business	\$3,115	\$ 3,268
Gas business	590	585
Other business activities	(586)	886
Net Income	\$3,119	\$4,739

Electricity Business

Southern Company’s electric utilities generate and sell electricity to retail and wholesale customers. A condensed statement of income for the electricity business follows:

	2020	Increase (Decrease) from 2019
	<i>(in millions)</i>	
Electric operating revenues	\$16,497	\$(598)
Fuel	2,967	(655)
Purchased power	799	(17)
Cost of other sales	94	18
Other operations and maintenance	4,250	(253)
Depreciation and amortization	2,941	469
Taxes other than income taxes	1,024	13
Estimated loss on Plant Vogtle Units 3 and 4	325	325
Impairment charges	—	(3)
(Gain) loss on dispositions, net	(42)	(21)
Total electric operating expenses	12,358	(124)
Operating income	4,139	(474)
Allowance for equity funds used during construction	138	17
Interest expense, net of amounts capitalized	976	(11)
Other income (expense), net	315	81
Income taxes	517	(191)
Net income	3,099	(174)
Less:		
Dividends on preferred stock of subsidiaries	15	—
Net income (loss) attributable to noncontrolling interests	(31)	(21)
Net Income Attributable to Southern Company	\$ 3,115	\$(153)

Electric Operating Revenues

Electric operating revenues for 2020 were \$16.5 billion, reflecting a \$598 million decrease from 2019. Details of electric operating revenues were as follows:

	2020	2019
	<i>(in millions)</i>	
Retail electric — prior year	\$14,084	
Estimated change resulting from —		
Rates and pricing	484	
Sales decline	(132)	
Weather	(288)	
Fuel and other cost recovery	(505)	
Retail electric — current year	\$13,643	\$14,084
Wholesale electric revenues	1,945	2,152
Other electric revenues	672	636
Other revenues	237	223
Electric operating revenues	\$16,497	\$17,095
Percent change	(3.5)%	(7.9)%

Retail electric revenues decreased \$441 million, or 3.1%, in 2020 as compared to the prior year. The significant factors driving this change are shown in the preceding table. The increase in rates and pricing in 2020 was primarily due to Georgia Power’s recovery of environmental compliance costs and the impacts of accruals for customer refunds in 2019 related to the Tax Reform Legislation and earnings in excess of the allowed retail ROE range as well as the rate pricing effects of decreased customer usage throughout 2020. The increase was also due to customer bill credits at Alabama Power in 2019 related to the Tax Reform Legislation. These increases were partially offset by lower contributions from commercial and industrial customers with variable demand-driven pricing at Georgia Power.

Electric rates for the traditional electric operating companies include provisions to adjust billings for fluctuations in fuel costs, including the energy component of purchased power costs. Under these provisions, fuel revenues generally equal fuel expenses, including the energy component of PPA costs, and do not affect net income. The traditional electric operating companies each have one or more regulatory mechanisms to recover other costs such as environmental and other compliance costs, storm damage, new plants, and PPA capacity costs.

See Note 2 to the financial statements under “Alabama Power” and “Georgia Power” for additional information. Also see “Energy Sales” herein for a discussion of changes in the volume of energy sold, including changes related to sales growth (decline) and weather.

Wholesale electric revenues consist of PPAs and short-term opportunity sales. Wholesale electric revenues from PPAs (other than solar and wind PPAs) have both capacity and energy components. Capacity revenues generally represent the greatest contribution to net income and are designed to provide recovery of fixed costs plus a return on investment. Energy revenues will vary depending on fuel prices, the market prices of wholesale energy compared to the Southern Company system’s generation, demand for energy within the Southern Company system’s electric service territory, and the availability of the Southern Company system’s generation. Increases and decreases in energy revenues that are driven by fuel prices are accompanied by an increase or decrease in fuel costs and do not have a significant impact on net income. Energy sales from solar and wind PPAs do not have a capacity charge and customers either purchase the energy output of a dedicated renewable facility through an energy charge or through a fixed price related to the energy. As a result, the ability to recover fixed and variable operations and maintenance expenses is dependent upon the level of energy generated from these facilities, which can be impacted by weather conditions, equipment performance, transmission constraints, and other factors. Wholesale electric revenues at Mississippi Power include FERC-regulated MRA sales as well as market-based sales. Short-term opportunity sales are made at market-based rates that generally provide a margin above the Southern Company system’s variable cost to produce the energy.

Wholesale electric revenues from power sales were as follows:

	2020	2019
	<i>(in millions)</i>	
Capacity and other	\$ 476	\$ 529
Energy	1,469	1,623
Total	\$1,945	\$2,152

Management’s Discussion and Analysis of Financial Condition and Results of Operations

In 2020, wholesale electric revenues decreased \$207 million, or 9.6%, as compared to the prior year due to decreases of \$154 million in energy revenues and \$53 million in capacity revenues. Energy revenues decreased \$98 million at Southern Power and \$56 million at the traditional electric operating companies. The decrease at Southern Power primarily resulted from a net decrease in the volume of KWHs sold due to decreased demand and lower natural gas prices, partially offset by increases in sales from solar facilities, wind facilities, and fuel cell generation. The decrease at the traditional electric operating companies was primarily due to lower energy prices. The decrease in capacity revenues was primarily related to the sales of Southern Power’s Plant Mankato in the first quarter 2020 and Southern Power’s Plant Nacogdoches in the second quarter 2019. See Note 15 to the financial statements for additional information.

Other Electric Revenues

Other electric revenues increased \$36 million, or 5.7%, in 2020 as compared to the prior year. The increase was primarily due to an increase of \$23 million in transmission revenues, an increase of \$15 million from outdoor lighting at Georgia Power, and an increase of \$10 million in energy service revenues at Alabama Power, as well as an increase of \$6 million from pole attachment agreements at Alabama Power and Georgia Power. These increases were partially offset by a reduction of \$26 million largely resulting from the temporary suspension of customer disconnections and late fees related to the COVID-19 pandemic.

Energy Sales

Changes in revenues are influenced heavily by the change in the volume of energy sold from year to year. KWH sales for 2020 and the percent change from the prior year were as follows:

	2020		
	Total KWHs	Total KWH Percent Change	Weather-Adjusted Percent Change ^(*)
	<i>(in billions)</i>		
Residential	47.4	(2.2)%	3.1%
Commercial	45.4	(7.5)	(5.7)
Industrial	47.0	(6.2)	(6.2)
Other	0.7	(9.5)	(9.3)
Total retail	140.5	(5.3)	(3.0)%
Wholesale	45.7	(4.9)	
Total energy sales	186.2	(5.2)%	

(*) Weather-adjusted KWH sales are estimated by removing from KWH sales the effect of deviations from normal temperature conditions, based on statistical models of the historical relationship between temperatures and energy sales. Normal temperature conditions are defined as those experienced in the applicable service territory over a specified historical period. This metric is useful because it allows trends in historical operations to be evaluated apart from the influence of weather conditions. Management also considers this metric in developing long-term capital and financial plans.

Changes in retail energy sales are generally the result of changes in electricity usage by customers, weather, and the number of customers. Weather-adjusted retail energy sales decreased 4.4 billion KWHs in 2020 as compared to the prior year largely due to the COVID-19 pandemic. Weather-adjusted residential usage increases are primarily due to customer growth and an increase in average customer usage, primarily due to work-from-home policies. Weather-adjusted commercial usage decreases are primarily due to lower customer usage resulting from changes in consumer and business behavior in response to the COVID-19 pandemic. Industrial usage decreases are primarily a result of disruptions in supply chain and business operations related to the COVID-19 pandemic and the overall decrease in business activity due to the resulting recession.

See “Electric Operating Revenues” above for a discussion of significant changes in wholesale revenues related to changes in price and KWH sales.

Management’s Discussion and Analysis of Financial Condition and Results of Operations

Other Revenues

Other revenues increased \$14 million, or 6.3%, in 2020 as compared to the prior year. The increase was primarily due to increases in unregulated sales of products and services of \$9 million at Georgia Power and \$5 million at Alabama Power.

Fuel and Purchased Power Expenses

The mix of fuel sources for the generation of electricity is determined primarily by demand, the unit cost of fuel consumed, and the availability of generating units. Additionally, the electric utilities purchase a portion of their electricity needs from the wholesale market.

Details of the Southern Company system’s generation and purchased power were as follows:

	2020	2019
Total generation <i>(in billions of KWHs)</i>	176	187
Total purchased power <i>(in billions of KWHs)</i>	18	18
Sources of generation <i>(percent)</i> —		
Gas	53	52
Coal	18	22
Nuclear	17	16
Hydro	4	3
Wind, Solar, and Other	8	7
Cost of fuel, generated <i>(in cents per net KWH)</i> —		
Gas	2.00	2.36
Coal	2.91	2.87
Nuclear	0.78	0.79
Average cost of fuel, generated <i>(in cents per net KWH)</i>	1.95	2.20
Average cost of purchased power <i>(in cents per net KWH)^(*)</i>	4.65	4.66

(*) Average cost of purchased power includes fuel purchased by the Southern Company system for tolling agreements where power is generated by the provider.

In 2020, total fuel and purchased power expenses were \$3.8 billion, a decrease of \$672 million, or 15.1%, as compared to the prior year. The decrease was primarily the result of a \$363 million decrease in the volume of KWHs generated and purchased and a \$309 million decrease primarily in the average cost of fuel.

Fuel and purchased power energy transactions at the traditional electric operating companies are generally offset by fuel revenues and do not have a significant impact on net income. See Note 2 to the financial statements for additional information. Fuel expenses incurred under Southern Power’s PPAs are generally the responsibility of the counterparties and do not significantly impact net income.

Fuel

In 2020, fuel expense was \$3.0 billion, a decrease of \$655 million, or 18.1%, as compared to the prior year. The decrease was primarily due to a 23.9% decrease in the volume of KWHs generated by coal, a 15.3% decrease in the average cost of natural gas per KWH generated, and a 2.5% decrease in the volume of KWHs generated by natural gas, partially offset by a 1.4% increase in the average cost of coal per KWH generated.

Purchased Power

In 2020, purchased power expense was \$799 million, a decrease of \$17 million, or 2.1%, as compared to the prior year. The decrease was primarily due to a 2.7% decrease in the volume of KWHs purchased.

Energy purchases will vary depending on demand for energy within the Southern Company system’s electric service territory, the market prices of wholesale energy as compared to the cost of the Southern Company system’s generation, and the availability of the Southern Company system’s generation.

Other Operations and Maintenance Expenses

Other operations and maintenance expenses decreased \$253 million, or 5.6%, in 2020 as compared to the prior year. The decrease reflects the impacts of cost containment activities implemented in 2020 to help offset the effects of the recessionary economy resulting from the COVID-19 pandemic. The decrease primarily results from decreases of \$195 million in transmission and distribution expenses at the traditional electric operating companies, including \$37 million of increases in reliability NDR credits at Alabama Power, \$180 million in scheduled generation outage and maintenance expenses, and \$32 million in compliance and environmental expenses at the traditional

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electric operating companies, partially offset by a \$183 million increase in storm damage recovery at Georgia Power as authorized in the 2019 ARP and a \$45 million increase in employee compensation and benefit expenses. The decrease also reflects a \$32 million increase in nuclear property insurance refunds at Alabama Power and Georgia Power. See Note 2 to the financial statements under “Alabama Power – Rate NDR” and “Georgia Power – Storm Damage Recovery” for additional information.

Depreciation and Amortization

Depreciation and amortization increased \$469 million, or 19.0%, in 2020 as compared to the prior year. The increase was due to increased amortization of regulatory assets related to CCR AROs of \$203 million and higher depreciation of \$178 million as authorized in Georgia Power's 2019 ARP, as well as an increase of \$104 million in depreciation associated with additional plant in service. See Note 2 to the financial statements under “Georgia Power – Rate Plans” for additional information.

Estimated Loss on Plant Vogtle Units 3 and 4

In the second and fourth quarters 2020, estimated probable losses of \$149 million and \$176 million, respectively, were recorded to reflect Georgia Power's revised total project capital cost forecast to complete construction and start-up of Plant Vogtle Units 3 and 4. See Note 2 to the financial statements under “Georgia Power – Nuclear Construction” for additional information.

(Gain) Loss on Dispositions, Net

Gain on dispositions, net increased \$21 million in 2020 as compared to the prior year primarily related to the sale of Plant Mankato in the first quarter 2020 and the sale of Plant Nacogdoches in the second quarter 2019. See Note 15 to the financial statements under “Southern Power – Sales of Natural Gas and Biomass Plants” for additional information.

Allowance for Equity Funds Used During Construction

Allowance for equity funds used during construction increased \$17 million, or 14.0%, in 2020 as compared to the prior year primarily associated with the construction of Plant Vogtle Units 3 and 4 at Georgia Power. See Note 2 to the financial statements under “Georgia Power – Nuclear Construction – Regulatory Matters” for additional information.

Other Income (Expense), Net

Other income (expense), net increased \$81 million, or 34.6%, in 2020 as compared to the prior year primarily related to a \$131 million increase in non-service cost-related retirement benefits income, partially offset by a \$24 million net decrease associated with a 2019 litigation settlement at Southern Power and a \$21 million increase in charitable donations, primarily at Georgia Power. See Note 11 to the financial statements for additional information.

Income Taxes

Income taxes decreased \$191 million, or 27.0%, in 2020 as compared to the prior year. The decrease was primarily due to \$208 million of flowback of excess deferred income taxes in 2020 as authorized in Georgia Power's 2019 ARP and a \$90 million decrease associated with lower pre-tax earnings, primarily from charges associated with the construction of Plant Vogtle Units 3 and 4 at Georgia Power, partially offset by a \$75 million income tax benefit in 2019 resulting from ITCs recognized upon the sale of Plant Nacogdoches and a \$24 million net increase related to the application of an accounting order associated with the Tax Reform Legislation in the prior year at Alabama Power. See Note 2 to the financial statements under “Georgia Power – Rate Plans” and – “Nuclear Construction” for additional information.

Net Income (Loss) Attributable to Noncontrolling Interests

Substantially all noncontrolling interests relate to renewable projects at Southern Power. Net loss attributable to noncontrolling interests increased \$21 million in 2020 as compared to the prior year. The increased loss was primarily due to an allocation to the noncontrolling interest partner of approximately \$26 million of income related to a litigation settlement at Southern Power in 2019.

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Gas Business

Southern Company Gas distributes natural gas through utilities in four states and is involved in several other complementary businesses including gas pipeline investments, wholesale gas services, and gas marketing services.

A condensed statement of income for the gas business follows:

	2020	Increase (Decrease) from 2019
<i>(in millions)</i>		
Operating revenues	\$3,434	\$(358)
Cost of natural gas	972	(347)
Other operations and maintenance	966	78
Depreciation and amortization	500	13
Taxes other than income taxes	206	(7)
Impairment charges	—	(115)
(Gain) loss on dispositions, net	(22)	(22)
Total operating expenses	2,622	(400)
Operating income	812	42
Earnings from equity method investments	141	(16)
Interest expense, net of amounts capitalized	231	(1)
Other income (expense), net	41	21
Income taxes	173	43
Net income	\$ 590	\$ 5

Seasonality of Results

During the period from November through March when natural gas usage and operating revenues are generally higher (Heating Season), more customers are connected to Southern Company Gas’ distribution systems and natural gas usage is higher in periods of colder weather. Occasionally in the summer, operating revenues are impacted due to peak usage by power generators in response to summer energy demands. Southern Company Gas’ base operating expenses, excluding cost of natural gas, bad debt expense, and certain incentive compensation costs, are incurred relatively equally over any given year. Thus, operating results can vary significantly from quarter to quarter as a result of seasonality. For 2020, the percentage of operating revenues and net income generated during the Heating Season (January through March and November through December) were 67.6% and 85.6%, respectively. For 2019, the percentage of operating revenues and net income generated during the Heating Season were 68.7% and 86.8%, respectively.

Operating Revenues

Operating revenues in 2020 were \$3.4 billion, a \$358 million decrease compared to 2019. Details of operating revenues were as follows:

	2020
<i>(in millions)</i>	
Operating revenues – prior year	\$3,792
Estimated change resulting from –	
Infrastructure replacement programs and base rate changes	186
Gas costs and other cost recovery	(319)
Wholesale gas services	(220)
Other	(5)
Operating revenues – current year	\$3,434
Percent change	(9.4)%

Revenues at the natural gas distribution utilities increased in 2020 compared to the prior year due to base rate increases and continued investments recovered through infrastructure replacement programs, including increases of \$107 million at Nicor Gas and \$68 million at Atlanta Gas Light. See Note 2 to the financial statements under “Southern Company Gas” for additional information.

Revenues associated with gas costs and other cost recovery decreased in 2020 compared to the prior year primarily due to lower natural gas prices and lower sales volumes as a result of warmer weather. The natural gas distribution utilities have weather or revenue normalization mechanisms that mitigate revenue fluctuations from customer consumption changes. Natural gas distribution rates include provisions to adjust billings for fluctuations in natural gas costs. Therefore, gas costs recovered through natural gas revenues generally equal the amount expensed in cost of natural gas and do not affect net income from the natural gas distribution utilities. See “Cost of Natural Gas” herein for additional information.

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Revenues from wholesale gas services decreased in 2020 primarily due to lower derivative gains and decreased commercial activity as a result of warmer weather.

Southern Company Gas hedged its exposure to warmer-than-normal weather in Illinois for gas distribution operations and in Illinois and Georgia for gas marketing services. The remaining impacts of weather on earnings were immaterial.

Cost of Natural Gas

Excluding Atlanta Gas Light, which does not sell natural gas to end-use customers, the natural gas distribution utilities charge their utility customers for natural gas consumed using natural gas cost recovery mechanisms set by the applicable state regulatory agencies. Under these mechanisms, all prudently-incurred natural gas costs are passed through to customers without markup, subject to regulatory review. The natural gas distribution utilities defer or accrue the difference between the actual cost of natural gas and the amount of commodity revenue earned in a given period. The deferred or accrued amount is either billed or refunded to customers prospectively through adjustments to the commodity rate. Deferred natural gas costs are reflected as regulatory assets and accrued natural gas costs are reflected as regulatory liabilities. Therefore, gas costs recovered through natural gas revenues generally equal the amount expensed in cost of natural gas and do not affect net income from the natural gas distribution utilities. Cost of natural gas at the natural gas distribution utilities represented 88.3% of the total cost of natural gas for 2020.

Gas marketing services customers are charged for actual and estimated natural gas consumed. Cost of natural gas includes the cost of fuel and associated transportation costs, lost and unaccounted for gas, adjustments to reduce the value of inventories to market value, if applicable, and gains and losses associated with certain derivatives.

Cost of natural gas was \$1.0 billion, a decrease of \$347 million, or 26.3%, in 2020 compared to the prior year, which reflects a 23.6% decrease in natural gas prices compared to 2019 and decreased volumes primarily as a result of warmer weather.

Other Operations and Maintenance Expenses

Other operations and maintenance expenses increased \$78 million, or 8.8%, in 2020 compared to the prior year. The increase was primarily due to increases of \$40 million in compensation and benefit expenses, \$10 million in charitable donations, \$12 million in pipeline repair, compliance, and maintenance activities, and \$19 million in expenses passed through directly to customers primarily related to bad debt.

Depreciation and Amortization

Depreciation and amortization increased \$13 million, or 2.7%, in 2020 compared to the prior year. This increase was primarily due to continued infrastructure investments at the natural gas distribution utilities. See Note 2 to the financial statements under “Southern Company Gas – Infrastructure Replacement Programs and Capital Projects” for additional information.

Impairment Charges

In 2019, Southern Company Gas recorded impairment charges of \$91 million related to Jefferson Island and \$24 million in contemplation of the sale of its interests in Pivotal LNG and Atlantic Coast Pipeline. See Notes 3 and 15 to the financial statements under “Other Matters – Southern Company Gas” and “Southern Company Gas,” respectively, for additional information.

(Gain) Loss on Dispositions, Net

In 2020, gain on dispositions, net was \$22 million resulting from the sale of Jefferson Island. See Note 15 to the financial statements under “Southern Company Gas” for additional information.

Earnings from Equity Method Investments

Earnings from equity method investments decreased \$16 million, or 10.2%, in 2020 compared to the prior year. This decrease was primarily due to a \$12 million decrease in earnings from SNG as a result of lower demand and firm revenues and a \$9 million decrease in earnings as a result of the sale of Atlantic Coast Pipeline in the first quarter 2020, partially offset by a \$6 million pre-tax loss on the sale of Triton in May 2019. See Notes 7 and 15 to the financial statements under “Southern Company Gas” for additional information.

Other Income (Expense), Net

Other income (expense), net increased \$21 million in 2020 compared to the prior year. This increase primarily resulted from an increase in non-service cost-related retirement benefits income. See Note 11 to the financial statements for additional information.

Income Taxes

Income taxes increased \$43 million, or 33.1%, in 2020 compared to the prior year. This increase was primarily due to the reversal of a federal income tax valuation allowance in connection with the sale of Triton in 2019, a decrease in the flowback of excess deferred income taxes in 2020 at Atlanta Gas Light as previously authorized by the Georgia PSC, and higher pre-tax earnings. See Note 2 to the financial statements under “Southern Company Gas,” Note 10 to the financial statements, and Note 15 to the financial statements under “Southern Company Gas” for additional information.

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Other Business Activities

Southern Company’s other business activities primarily include the parent company (which does not allocate operating expenses to business units); PowerSecure, a provider of energy solutions to electric utilities and their customers in the areas of distributed generation, energy storage and renewables, and energy efficiency; Southern Holdings, which invests in various projects, including leveraged lease projects; and Southern Linc, which provides digital wireless communications for use by the Southern Company system and also markets these services to the public and provides fiber optics services within the Southeast.

A condensed statement of income for Southern Company's other business activities follows:

	2020	Increase (Decrease) from 2019
	(in millions)	
Operating revenues	\$ 444	\$ (88)
Cost of other sales	234	(125)
Other operations and maintenance	196	(35)
Depreciation and amortization	77	(3)
Taxes other than income taxes	4	(2)
Impairment charges	—	(50)
(Gain) loss on dispositions, net	(1)	2,547
Total operating expenses	510	2,332
Operating income (loss)	(66)	(2,420)
Interest expense	614	97
Impairment of leveraged leases	206	206
Other income (expense), net	3	(6)
Income taxes (benefit)	(297)	(1,257)
Net income (loss)	\$(586)	\$(1,472)

Operating Revenues

Southern Company’s operating revenues for these other business activities decreased \$88 million, or 16.5%, in 2020 as compared to the prior year primarily from the sales of PowerSecure’s utility infrastructure services business in July 2019 and its lighting business in December 2019, as well as the wind-down of a segment of PowerSecure’s distributed infrastructure business in the first quarter 2020. These decreases were partially offset by PowerSecure’s continued growth in the core distributed infrastructure business and an increase at Southern Linc related to a contract for the design and construction of a fiber optic system. See Note 15 to the financial statements under “Southern Company” for additional information.

Cost of Other Sales

Cost of other sales for these other business activities decreased \$125 million, or 34.8%, in 2020 as compared to the prior year primarily from the sales of PowerSecure’s utility infrastructure services business in July 2019 and its lighting business in December 2019, as well as the wind-down of a segment of PowerSecure’s distributed infrastructure business in the first quarter 2020. These decreases were partially offset by PowerSecure’s continued growth in the core distributed infrastructure business. See Note 15 to the financial statements under “Southern Company” for additional information.

Other Operations and Maintenance Expenses

Other operations and maintenance expenses for these other business activities decreased \$35 million, or 15.2%, in 2020 as compared to the prior year. The decrease was primarily due to the sales of PowerSecure’s utility infrastructure services business in July 2019 and its lighting business in December 2019, partially offset by an increase at Southern Linc related to the design and construction of a fiber optic system. See Note 15 to the financial statements under “Southern Company” for additional information.

Impairment Charges

In 2019, goodwill and asset impairment charges totaling \$50 million were recorded related to the sale of PowerSecure’s utility infrastructure services business and in contemplation of the sale of its lighting business. See Note 15 to the financial statements under “Southern Company” for additional information.

(Gain) Loss on Dispositions, Net

The 2019 gain on dispositions, net primarily relates to the gain of \$2.6 billion (\$1.4 billion after tax) on the sale of Gulf Power. See Note 15 to the financial statements under “Southern Company” for additional information.

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Interest Expense

Interest expense for these other business activities increased \$97 million, or 18.8%, in 2020 as compared to the prior year primarily due to an increase in average outstanding long-term borrowings and fees associated with the extinguishment of debt at the parent company. See Note 8 to the financial statements for additional information.

Impairment of Leveraged Leases

Impairment charges totaling \$206 million were recorded in 2020 related to leveraged lease investments at Southern Holdings. See Notes 1 and 3 to the financial statements under “Leveraged Leases” and “Other Matters – Southern Company,” respectively, for additional information.

Other Income (Expense), Net

Other income (expense), net for these other business activities decreased \$6 million, or 66.7%, in 2020 as compared to the prior year primarily due to a \$32 million increase in charitable donations at the parent company, partially offset by a \$15 million increase in leveraged lease income at Southern Holdings, primarily due to an impairment charge in 2019, and a \$9 million increase related to investment income at Southern Holdings.

Income Taxes (Benefit)

Income taxes for these other business activities decreased \$1.3 billion in 2020 as compared to the prior year primarily due to the tax impacts related to the sale of Gulf Power. See Note 10 to the financial statements and Note 15 to the financial statements under “Southern Company” for additional information.

FUTURE EARNINGS POTENTIAL

General

Prices for electric service provided by the traditional electric operating companies and natural gas distributed by the natural gas distribution utilities to retail customers are set by state PSCs or other applicable state regulatory agencies under cost-based regulatory principles. Retail rates and earnings are reviewed and may be adjusted periodically within certain limitations. Prices for wholesale electricity sales, interconnecting transmission lines, and the exchange of electric power are regulated by the FERC. Southern Power continues to focus on long-term PPAs. See ACCOUNTING POLICIES – “Application of Critical Accounting Policies and Estimates – Utility Regulation” herein and Note 2 to the financial statements for additional information about regulatory matters.

Each Registrant’s results of operations are not necessarily indicative of its future earnings potential. The disposition activities described in Note 15 to the financial statements have reduced earnings for the applicable Registrants. The level of the Registrants’ future earnings depends on numerous factors that affect the opportunities, challenges, and risks of the Registrants’ primary businesses of selling electricity and/or distributing natural gas, as described further herein.

For the traditional electric operating companies, these factors include the ability to maintain constructive regulatory environments that allow for the timely recovery of prudently-incurred costs during a time of increasing costs, continued customer growth, and the trend of reduced electricity usage per customer, especially in residential and commercial markets. For Georgia Power, completing construction of Plant Vogtle Units 3 and 4 and related cost recovery proceedings is another major factor.

Earnings in the electricity business will also depend upon maintaining and growing sales, considering, among other things, the adoption and/or penetration rates of increasingly energy-efficient technologies and increasing volumes of electronic commerce transactions, which could contribute to a net reduction in customer usage.

Global and U.S. economic conditions have been significantly affected by a series of demand and supply shocks that have caused a global and national economic recession. Most prominently, the COVID-19 pandemic has negatively impacted global supply chains and global demand for goods and services and public policy responses of social distancing and closing non-essential businesses have further restricted economic activity. The drivers, speed, and depth of this economic contraction are unprecedented and have reduced energy demand across the Southern Company system’s service territory, primarily in the commercial and industrial classes. The negative impacts, which started in late-March 2020, of the COVID-19 pandemic and related recession on the Southern Company system’s retail electric sales began to improve in the middle of May 2020; however, retail electric revenues declined slightly in 2020 compared to 2019. Recovery is expected to continue into the second half of 2021, but responses to the COVID-19 pandemic by both customers and governments could significantly affect the pace of recovery. The ultimate extent of the negative impact on revenues depends on the depth and duration of the economic contraction in the Southern Company system’s service territory and cannot be determined at this time. See RESULTS OF OPERATIONS herein for information on COVID-19-related impacts on energy demand in the Southern Company system’s service territory during 2020.

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The traditional electric operating companies have established installment payment plans to allow customers to repay over a period of time past due accounts resulting from the COVID-19 pandemic. See Note 2 to the financial statements for additional information on the status of disconnections and the deferral of costs resulting from the COVID-19 pandemic at Georgia Power, Mississippi Power, and the natural gas distribution utilities. The ultimate outcome of these matters cannot be determined at this time.

The level of future earnings for Southern Power’s competitive wholesale electric business depends on numerous factors including Southern Power’s ability to execute its growth strategy through the development or acquisition of renewable facilities and other energy projects while containing costs, as well as regulatory matters, creditworthiness of customers, total electric generating capacity available in Southern Power’s market areas, and Southern Power’s ability to successfully remarket capacity as current contracts expire. In addition, renewable portfolio standards, availability of tax credits, transmission constraints, cost of generation from units within the Southern Company power pool, and operational limitations could influence Southern Power’s future earnings.

The level of future earnings for Southern Company Gas’ primary business of distributing natural gas and its complementary businesses in the gas pipeline investments, wholesale gas services, and gas marketing services sectors depends on numerous factors. These factors include the natural gas distribution utilities’ ability to maintain constructive regulatory environments that allow for the timely recovery of prudently-incurred costs, the completion and subsequent operation of ongoing infrastructure and other construction projects, creditworthiness of customers, and Southern Company Gas’ ability to optimize its transportation and storage positions and to re-contract storage rates at favorable prices. The volatility of natural gas prices has an impact on Southern Company Gas’ customer rates, its long-term competitive position against other energy sources, and the ability of Southern Company Gas’ gas marketing services and wholesale gas services businesses to capture value from locational and seasonal spreads. Additionally, changes in commodity prices subject a portion of Southern Company Gas’ operations to earnings variability. Over the longer term, volatility is expected to be low to moderate and locational and/or transportation spreads are expected to decrease as new pipelines are built to reduce the existing supply constraints in the shale areas of the Northeast U.S. To the extent these pipelines are delayed or not built, volatility could increase. See Note 3 to the financial statements under “Other Matters – Southern Company Gas – PennEast Pipeline Project” for additional information on permitting challenges experienced by the PennEast Pipeline. Additional economic factors may contribute to this environment, including a significant drop in oil and natural gas prices, which could lead to consolidation of natural gas producers or reduced levels of natural gas production. In addition, if the COVID-19 pandemic results in continued economic uncertainty for a sustained period, demand for natural gas may decrease, resulting in further downward pressure on natural gas prices and lower volatility in the natural gas markets on a longer-term basis.

Earnings for both the electricity and natural gas businesses are subject to a variety of other factors. These factors include weather, competition, developing new and maintaining existing energy contracts and associated load requirements with wholesale customers, energy conservation practiced by customers, the use of alternative energy sources by customers, government incentives to reduce overall energy usage, the prices of electricity and natural gas, and the price elasticity of demand. Demand for electricity and natural gas in the Registrants’ service territories is primarily driven by the pace of economic growth or decline that may be affected by changes in regional and global economic conditions, which may impact future earnings.

Mississippi Power provides service under long-term contracts with rural electric cooperative associations and a municipality located in southeastern Mississippi under full requirements cost-based electric tariffs which are subject to regulation by the FERC. The contracts with these wholesale customers represented 15.3% of Mississippi Power’s total operating revenues in 2020 and are generally subject to 10-year rolling cancellation notices. Historically, these wholesale customers have acted as a group and any changes in contractual relationships for one customer are likely to be followed by the other wholesale customers.

As part of its ongoing effort to adapt to changing market conditions, Southern Company continues to evaluate and consider a wide array of potential business strategies. These strategies may include business combinations, partnerships, and acquisitions involving other utility or non-utility businesses or properties, disposition of certain assets or businesses, internal restructuring, or some combination thereof. Furthermore, Southern Company may engage in new business ventures that arise from competitive and regulatory changes in the utility industry. Pursuit of any of the above strategies, or any combination thereof, may significantly affect the business operations, risks, and financial condition of Southern Company. In addition, Southern Power and Southern Company Gas regularly consider and evaluate joint development arrangements as well as acquisitions and dispositions of businesses and assets as part of their business strategies. See Note 15 to the financial statements for additional information.

Environmental Matters

The Southern Company system’s operations are regulated by state and federal environmental agencies through a variety of laws and regulations governing air, water, land, and other natural resources. The Southern Company system maintains comprehensive environmental compliance and GHG strategies to assess both current and upcoming requirements and compliance costs associated with these environmental laws and regulations. The costs required to comply with environmental laws and regulations and to achieve stated

goals, including capital expenditures, operations and maintenance costs, and costs reflected in ARO liabilities, may impact future electric generating unit retirement and replacement decisions (which are subject to approval from the traditional electric operating companies' respective state PSCs), results of operations, cash flows, and/or financial condition. Related costs may result from the installation of additional environmental controls, closure and monitoring of CCR facilities, unit retirements, or changing fuel sources for certain existing units, as well as related upgrades to the Southern Company system's transmission and distribution (electric and natural gas) systems. A major portion of these costs is expected to be recovered through retail and wholesale rates, including existing ratemaking and billing provisions. The ultimate impact of environmental laws and regulations and the GHG goals discussed herein cannot be determined at this time and will depend on various factors, such as state adoption and implementation of requirements, the availability and cost of any deployed technology, fuel prices, and the outcome of pending and/or future legal challenges.

New or revised environmental laws and regulations could affect many areas of operations for the Subsidiary Registrants. The impact of any such changes cannot be determined at this time. Environmental compliance costs could affect earnings, cash flows, and/or financial condition if such costs cannot continue to be recovered on a timely basis in rates for the traditional electric operating companies and the natural gas distribution utilities or through long-term wholesale agreements for the traditional electric operating companies and Southern Power.

Alabama Power and Mississippi Power recover environmental compliance costs through separate mechanisms, Rate CNP Compliance and the ECO Plan, respectively. Georgia Power's base rates include an ECCR tariff that allows for the recovery of environmental compliance costs. The natural gas distribution utilities of Southern Company Gas generally recover environmental remediation expenditures through rate mechanisms approved by their applicable state regulatory agencies. See Notes 2 and 3 to the financial statements for additional information.

Southern Power's PPAs generally contain provisions that permit charging the counterparty with some of the new costs incurred as a result of changes in environmental laws and regulations. Since Southern Power's units are generally newer natural gas and renewable generating facilities, costs associated with environmental compliance for these facilities have been less significant than for similarly situated coal or older natural gas generating facilities. Environmental, natural resource, and land use concerns, including the applicability of air quality limitations, the potential presence of wetlands or threatened and endangered species, the availability of water withdrawal rights, uncertainties regarding impacts such as increased light or noise, and concerns about potential adverse health impacts can, however, increase the cost of siting and operating any type of future electric generating facility. The impact of such laws, regulations, and other considerations on Southern Power and subsequent recovery through PPA provisions cannot be determined at this time.

Further, increased costs that are recovered through regulated rates could contribute to reduced demand for electricity and natural gas, which could negatively affect results of operations, cash flows, and/or financial condition. Additionally, many commercial and industrial customers may also be affected by existing and future environmental requirements, which for some may have the potential to affect their demand for electricity and natural gas.

Although the timing, requirements, and estimated costs could change as environmental laws and regulations are adopted or modified, as compliance plans are revised or updated, and as legal challenges to rules are initiated or completed, estimated capital expenditures through 2025 based on the current environmental compliance strategy for the Southern Company system and the traditional electric operating companies are as follows:

	2021	2022	2023	2024	2025	Total
	<i>(in millions)</i>					
Southern Company	\$120	\$145	\$257	\$255	\$152	\$929
Alabama Power	67	78	78	99	70	392
Georgia Power	34	42	164	151	59	450
Mississippi Power	19	15	9	5	14	62

These estimates do not include any costs associated with potential regulation of GHG emissions. See "Global Climate Issues" herein for additional information. The Southern Company system also anticipates substantial expenditures associated with ash pond closure and ground water monitoring under the CCR Rule and related state rules, which are reflected in the applicable Registrants' ARO liabilities. See FINANCIAL CONDITION AND LIQUIDITY – "Cash Requirements" herein and Note 6 to the financial statements for additional information.

Environmental Laws and Regulations

Executive Orders

On January 20, 2021, President Biden issued a regulatory freeze that requires further reviews of certain regulatory actions authorized under the previous administration before they become effective. President Biden also signed executive orders related to federal regulations and subsequently signed additional orders to address climate change and other environmental issues.

Air Quality

The Southern Company system reduced SO₂ and NO_x air emissions by 99% and 91%, respectively, from 1990 to 2019. The Southern Company system reduced mercury air emissions by over 97% from 2005 to 2019.

The EPA finalized regional haze regulations in 2005 and 2017. These regulations require states, tribal governments, and various federal agencies to develop and implement plans to reduce pollutants that impair visibility and demonstrate reasonable progress toward the goal of restoring natural visibility conditions in certain areas, including national parks and wilderness areas. States are required to submit state implementation plans for the second 10-year planning period (2018 through 2028) by July 31, 2021. These plans could require further reductions in particulate matter, SO₂, and/or NO_x, which could result in increased compliance costs at affected electric generating units.

Water Quality

In 2014, the EPA finalized requirements under Section 316(b) of the Clean Water Act (CWA) to regulate cooling water intake structures (CWIS) to minimize their effects on fish and other aquatic life at existing power plants. The regulation requires plant-specific studies to determine applicable CWIS changes to protect organisms. The results of these plant-specific studies, which are ongoing within the Southern Company system, are being submitted with each plant's next National Pollutant Discharge Elimination System (NPDES) permit cycle. The Southern Company system anticipates applicable CWIS changes may include fish-friendly CWIS screens with fish return systems and minor additions of monitoring equipment at certain plants. The impact of this rule will depend on the outcome of these plant-specific studies, any additional protective measures required to be incorporated into each plant's NPDES permit based on site-specific factors, and the outcome of any legal challenges.

In 2015, the EPA finalized the steam electric effluent limitations guidelines (ELG) rule (2015 ELG Rule) that set national standards for wastewater discharges from new and existing steam electric generating units generating greater than 50 MWs, including substantially all of the coal-fired generating units in the Southern Company system. The 2015 ELG Rule prohibits effluent discharges of certain wastestreams and imposes stringent limits on flue gas desulfurization (FGD) wastewater discharges. On October 13, 2020, the EPA published the final ELG reconsideration rule, a reconsideration of the 2015 ELG Rule's limits on bottom ash transport water and FGD wastewater that extends the latest applicability date for both discharges to December 31, 2025. The ELG reconsideration rule also updates the voluntary incentive program and provides new subcategories for low utilization electric generating units and electric generating units that will permanently cease coal combustion by 2028. An initial notice of planned participation (NOPP) must be submitted to the applicable permitting authority no later than October 13, 2021 for units seeking to qualify for these subcategories. A subsequent NOPP must be submitted to transfer a unit to an alternative compliance option. The 2015 ELG Rule and the ELG reconsideration rule (ELG rules) are expected to require capital expenditures and increased operational costs for the traditional electric operating companies and SEGCO. For Georgia Power's Plant Wansley Units 1 and 2, which are currently challenged due to their operating profiles and positions within the economic dispatch, the anticipated cost of the controls necessary to comply with the ELG rules could accelerate a determination that continued operation is uneconomical. As a result, Georgia Power may request in its 2022 IRP filing to accelerate the retirement of these units, which had a net book value totaling approximately \$665 million at December 31, 2020. However, the ultimate impact of the ELG rules will depend on the Southern Company system's final assessment of compliance options, the incorporation of these assessments into each of the traditional electric operating company's IRP processes, the incorporation of these new requirements into each generating unit's NPDES permit, and the outcome of legal challenges. The ELG reconsideration rule has been challenged by several environmental organizations and the cases have been consolidated in the U.S. Court of Appeals for the Fourth Circuit.

Coal Combustion Residuals

In 2015, the EPA finalized non-hazardous solid waste regulations for the disposal of CCR, including coal ash and gypsum, in landfills and surface impoundments (ash ponds) at active electric generating power plants. The CCR Rule requires landfills and ash ponds to be evaluated against a set of performance criteria and potentially closed if certain criteria are not met. Closure of existing landfills and ash ponds requires installation of equipment and infrastructure to manage CCR in accordance with the CCR Rule. The EPA is in the process of amending portions of the CCR Rule.

In addition to the CCR Rule, the States of Alabama and Georgia finalized state regulations regarding the handling of CCR within their respective states. The State of Georgia received approval from the EPA on its partial permit program implementing the state CCR permit program in lieu of the federal self-implementing rule in accordance with the Water Infrastructure Improvements for the Nation Act. On February 15, 2021, revisions to align State of Alabama regulations with the federal CCR Rule became effective, as approved by the Alabama Environmental Management Commission. The State of Mississippi has not yet developed a state CCR permit program.

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Based on requirements for closure and monitoring of landfills and ash ponds pursuant to the CCR Rule and applicable state rules, the traditional electric operating companies have periodically updated, and expect to continue periodically updating, their related cost estimates and ARO liabilities for each CCR unit as additional information related to ash pond closure methodologies, schedules, and/or costs becomes available. Some of these updates have been, and future updates may be, material. Additionally, the closure designs and plans in the States of Alabama and Georgia are subject to approval by environmental regulatory agencies. Absent continued recovery of ARO costs through regulated rates, results of operations, cash flows, and financial condition for Southern Company and the traditional electric operating companies could be materially impacted. See FINANCIAL CONDITION AND LIQUIDITY – “Cash Requirements,” Note 2 to the financial statements under “Georgia Power – Rate Plans,” and Note 6 to the financial statements for additional information.

Environmental Remediation

The Southern Company system must comply with environmental laws and regulations governing the handling and disposal of waste and releases of hazardous substances. Under these various laws and regulations, the Southern Company system could incur substantial costs to clean up affected sites. The traditional electric operating companies and Southern Company Gas conduct studies to determine the extent of any required cleanup and have recognized the estimated costs to clean up known impacted sites in their financial statements. Amounts for cleanup and ongoing monitoring costs were not material for any year presented. The traditional electric operating companies and the natural gas distribution utilities in Illinois and Georgia (which represent substantially all of Southern Company Gas’ accrued remediation costs) have all received authority from their respective state PSCs or other applicable state regulatory agencies to recover approved environmental remediation costs through regulatory mechanisms. These regulatory mechanisms are adjusted annually or as necessary within limits approved by the state PSCs or other applicable state regulatory agencies. The traditional electric operating companies and Southern Company Gas may be liable for some or all required cleanup costs for additional sites that may require environmental remediation. See Note 3 to the financial statements under “Environmental Remediation” for additional information.

Global Climate Issues

In July 2019, the EPA published the final Affordable Clean Energy rule (ACE Rule) to repeal and replace the CPP. The ACE Rule requires states to develop unit-specific CO2 emission rate standards for existing coal-fired units based on heat-rate efficiency improvements. On January 19, 2021, the D.C. Circuit Court of Appeals vacated and remanded the ACE Rule back to the EPA. Once the decision becomes final, the ACE Rule will no longer be in effect.

On January 20, 2021, President Biden accepted the Paris Agreement on behalf of the United States, which will result in the United States officially becoming a party to the agreement on February 19, 2021. The Paris Agreement establishes a non-binding universal framework for addressing GHG emissions based on nationally determined emissions reduction contributions and sets in place a process for tracking progress towards the goals every five years.

Additional GHG policies, including legislation, may emerge in the future requiring the United States to transition to a lower GHG emitting economy; however, associated impacts are currently unknown. The Southern Company system has transitioned from an electric generating mix of 70% coal and 15% natural gas in 2007 to a mix of 18% coal and 53% natural gas in 2020, along with over 10,000 MWs of renewable resource capacity. This transition has been supported in part by the Southern Company system retiring over 5,600 MWs of coal- and oil-fired generating capacity since 2010 and converting over 3,400 MWs of generating capacity from coal to natural gas since 2015. In addition, Southern Company Gas has replaced over 6,000 miles of pipe material that was more prone to fugitive emissions (unprotected steel and cast-iron pipe), resulting in mitigation of more than 3.3 million metric tons of CO2 equivalents from its natural gas distribution system since 1998.

The following table provides the Registrants’ 2019 and preliminary 2020 GHG emissions based on equity share of facilities:

	2019	Preliminary 2020
	<i>(in million metric tons of CO₂ equivalent)</i>	
Southern Company ^(*)	88	75
Alabama Power	33	28
Georgia Power	28	21
Mississippi Power	9	8
Southern Power ^(*)	13	12
Southern Company Gas	1	1

(*) Includes GHG emissions attributable to disposed assets through the date of the applicable disposition and to acquired assets beginning with the date of the applicable acquisition. See Note 15 to the financial statements for additional information.

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With 2007 as a baseline, in 2018, Southern Company system management established an interim goal of a 50% reduction in carbon emissions by 2030 and a long-term goal of low- to no-carbon operations by 2050. In 2020, Southern Company system management updated the long-term GHG emissions reduction goal to net zero emissions by 2050. Based on the preliminary 2020 emissions, the Southern Company system achieved an estimated GHG emission reduction of 52% since 2007. In 2020, the combination of the COVID-19 pandemic and relatively mild weather significantly reduced demand. As these factors fluctuate, coal generation and GHG emissions may temporarily increase in future years. Southern Company system management expects to achieve sustained GHG emissions reductions of at least 50% as early as 2025. Southern Company system management, working with applicable regulators, plans to transition its generating fleet in a manner responsible to customers, communities, employees, and other stakeholders. Achievement of these goals is dependent on many factors, including natural gas prices and the pace and extent of development of low- to no-carbon energy technologies and negative carbon concepts. Southern Company system management will continue to pursue a diverse portfolio including low-carbon and carbon-free resources and energy efficiency resources; continue its research and development with a particular focus on technologies that lower GHG emissions, including methods of removing carbon from the atmosphere; and constructively engage with policymakers, regulators, investors, and customers to support outcomes leading to a net zero future.

Regulatory Matters

See OVERVIEW – “Recent Developments” herein and Note 2 to the financial statements for a discussion of regulatory matters related to Alabama Power, Georgia Power, Mississippi Power, and Southern Company Gas, including items that could impact the applicable registrants’ future earnings, cash flows, and/or financial condition.

Construction Programs

The Subsidiary Registrants are engaged in continuous construction programs to accommodate existing and estimated future loads on their respective systems. The Southern Company system intends to continue its strategy of developing and constructing new electric generating facilities, expanding and improving the electric transmission and electric and natural gas distribution systems, and undertaking projects to comply with environmental laws and regulations.

For the traditional electric operating companies, major generation construction projects are subject to state PSC approval in order to be included in retail rates. The largest construction project currently underway in the Southern Company system is Plant Vogtle Units 3 and 4. See Note 2 to the financial statements under “Georgia Power – Nuclear Construction” for additional information. Also see Note 2 to the financial statements under “Alabama Power – Petition for Certificate of Convenience and Necessity” for information regarding Alabama Power’s construction of Plant Barry Unit 8.

See Note 15 to the financial statements under “Southern Power” for information about costs relating to Southern Power’s acquisitions that involve construction of renewable energy facilities.

Southern Company Gas is engaged in various infrastructure improvement programs designed to update or expand the natural gas distribution systems of the natural gas distribution utilities to improve reliability and meet operational flexibility and growth. The natural gas distribution utilities recover their investment and a return associated with these infrastructure programs through their regulated rates. See Notes 2 and 3 to the financial statements under “Southern Company Gas – Infrastructure Replacement Programs and Capital Projects” and “Other Matters – Southern Company Gas – PennEast Pipeline Project,” respectively, for additional information on Southern Company Gas’ construction program.

See FINANCIAL CONDITION AND LIQUIDITY – “Cash Requirements” herein for additional information regarding the Registrants’ capital requirements for their construction programs, including estimated totals for each of the next five years.

Southern Power's Power Sales Agreements

General

Southern Power has PPAs with some of the traditional electric operating companies, other investor-owned utilities, IPPs, municipalities, and other load-serving entities, as well as commercial and industrial customers. The PPAs are expected to provide Southern Power with a stable source of revenue during their respective terms.

Many of Southern Power’s PPAs have provisions that require Southern Power or the counterparty to post collateral or an acceptable substitute guarantee if (i) S&P or Moody’s downgrades the credit ratings of the respective company to an unacceptable credit rating, (ii) the counterparty is not rated, or (iii) the counterparty fails to maintain a minimum coverage ratio.

Southern Power is working to maintain and expand its share of the wholesale markets. During 2020, Southern Power continued to be successful in remarketing 350 MWs to 1,130 MWs of annual natural gas generation capacity to load-serving entities through several PPAs extending over the next 17 years. Market demand is being driven by load-serving entities replacing expired purchase contracts and/or retired generation, as well as planning for future growth. However, generation capacity market forecasts indicate an oversupply, especially in the Southeast, and the highly competitive remarketing environment is expected to continue in the near term.

Natural Gas

Southern Power's electricity sales from natural gas facilities are primarily through long-term PPAs that consist of two types of agreements. The first type, referred to as a unit or block sale, is a customer purchase from a dedicated generating unit where all or a portion of the generation from that unit is reserved for that customer. Southern Power typically has the ability to serve the unit or block sale customer from an alternate resource. The second type, referred to as requirements service, provides that Southern Power serve the customer's capacity and energy requirements from a combination of the customer's own generating units and from Southern Power resources not dedicated to serve unit or block sales. Southern Power has rights to purchase power provided by the requirements customers' resources when economically viable.

As a general matter, substantially all of the PPAs provide that the purchasers are responsible for either procuring the fuel (tolling agreements) or reimbursing Southern Power for substantially all of the cost of fuel or purchased power relating to the energy delivered under such PPAs. To the extent a particular generating facility does not meet the operational requirements contemplated in the PPAs, Southern Power may be responsible for excess fuel costs. With respect to fuel transportation risk, most of Southern Power's PPAs provide that the counterparties are responsible for the availability of fuel transportation to the particular generating facility.

Capacity charges that form part of the PPA payments are designed to recover fixed and variable operation and maintenance costs based on dollars-per-kilowatt year. In general, to reduce Southern Power's exposure to certain operation and maintenance costs, Southern Power has LTSAs. See Note 1 to the financial statements under "Long-Term Service Agreements" for additional information.

Solar and Wind

Southern Power's electricity sales from solar and wind (renewable) generating facilities are also primarily through long-term PPAs; however, these solar and wind PPAs do not have a capacity charge and customers either purchase the energy output of a dedicated renewable facility through an energy charge or provide Southern Power a certain fixed price for the electricity sold to the grid. As a result, Southern Power's ability to recover fixed and variable operations and maintenance expenses is dependent upon the level of energy generated from these facilities, which can be impacted by weather conditions, equipment performance, transmission constraints, and other factors. Generally, under the renewable generation PPAs, the purchasing party retains the right to keep or resell the renewable energy credits.

Southern Company Gas' Affiliate Asset Management Agreements

With the exception of Nicor Gas, the natural gas distribution utilities use asset management agreements with an affiliate, Sequent, for the primary purpose of reducing utility customers' gas cost recovery rates through payments to the utilities by Sequent. For Atlanta Gas Light, these payments are set by the Georgia PSC and are utilized for infrastructure improvements and to fund heating assistance programs, rather than as a reduction to gas cost recovery rates. Under these asset management agreements, Sequent supplies natural gas to the utility and markets available pipeline and storage capacity to improve the overall cost of supplying gas to the utility customers. Currently, the natural gas distribution utilities primarily purchase their gas from Sequent. The purchase agreements require Sequent to provide firm gas to the natural gas distribution utilities, but the natural gas distribution utilities maintain the right and ability to make their own long-term supply arrangements if they believe it is in the best interest of their customers.

Each agreement provides for Sequent to make payments to the natural gas distribution utility through an annual minimum guarantee within a profit sharing structure, a profit sharing structure without an annual minimum guarantee, or a fixed fee.

Income Tax Matters

Consolidated Income Taxes

The impact of certain tax events at Southern Company and/or its other subsidiaries can, and does, affect each Registrant's ability to utilize certain tax credits. See "Tax Credits" and ACCOUNTING POLICIES – "Application of Critical Accounting Policies and Estimates – Accounting for Income Taxes" herein and Note 10 to the financial statements for additional information.

Tax Credits

The Tax Reform Legislation, as modified by the 2021 Consolidated Appropriations Act signed into law in December 2020, retained solar energy incentives of 30% ITC for projects that commenced construction by December 31, 2019; 26% ITC for projects that commence construction in 2020 through 2022; 22% ITC for projects that commence construction in 2023; and a permanent 10% ITC for projects that commence construction on or after January 1, 2024, or projects which are placed in service after December 31, 2025 regardless of when construction began. In addition, the Tax Reform Legislation retained wind energy incentives for projects that commenced construction in 2016, 2017, 2018, and 2019 of 100% PTC, 80% PTC, 60% PTC, and 40% PTC, respectively. As a result of a tax extenders bill passed in December 2019 and the 2021 Consolidated Appropriations Act, projects that begin construction in 2020 or 2021 are entitled to 60% PTC. Projects commencing construction after 2021 will not be entitled to any PTCs. Southern Company has received ITCs and PTCs in connection with investments in solar, wind, fuel cell, and biomass facilities primarily at Southern Power and Georgia Power.

Southern Power's ITCs relate to its investment in new solar facilities acquired or constructed and its PTCs relate to the first 10 years of energy production from its wind facilities, which have had, and may continue to have, a material impact on Southern Power's cash flows and net income. At December 31, 2020, Southern Company and Southern Power had approximately \$1.4 billion and \$1.1 billion, respectively, of unutilized ITCs and PTCs, which are currently expected to be fully utilized by 2024, but could be further delayed. Since 2018, Southern Power has been utilizing tax equity partnerships for wind and solar projects, where the tax partner takes significantly all of the respective federal tax benefits. These tax equity partnerships are consolidated in Southern Company's and Southern Power's financial statements using the HLBV methodology to allocate partnership gains and losses. See Note 1 to the financial statements under "General" for additional information on the HLBV methodology and Note 1 to the financial statements under "Income Taxes" and Note 10 to the financial statements under "Deferred Tax Assets and Liabilities – Tax Credit Carryforwards" and "Effective Tax Rate" for additional information regarding utilization and amortization of credits and the tax benefit related to associated basis differences.

Alabama State Tax Reform Legislation

On February 12, 2021, the State of Alabama enacted tax legislation that changes the apportionment methodology effective for the 2021 tax year. This legislation is expected to reduce the amount of Southern Power's future earnings apportioned to the State of Alabama and, thus, reduce Southern Power's existing state accumulated deferred tax liabilities, which would have a favorable impact on Southern Power's net income. The ultimate outcome of this matter cannot be determined at this time.

General Litigation and Other Matters

The Registrants are involved in various matters being litigated and/or regulatory and other matters that could affect future earnings, cash flows, and/or financial condition. The ultimate outcome of such pending or potential litigation against each Registrant and any subsidiaries or regulatory and other matters cannot be determined at this time; however, for current proceedings and/or matters not specifically reported herein or in Notes 2 and 3 to the financial statements, management does not anticipate that the ultimate liabilities, if any, arising from such current proceedings and/or matters would have a material effect on such Registrant's financial statements. See Notes 2 and 3 to the financial statements for a discussion of various contingencies, including matters being litigated, regulatory matters, and other matters which may affect future earnings potential.

ACCOUNTING POLICIES

Application of Critical Accounting Policies and Estimates

The Registrants prepare their financial statements in accordance with GAAP. Significant accounting policies are described in the notes to the financial statements. In the application of these policies, certain estimates are made that may have a material impact on the results of operations and related disclosures of the applicable Registrants (as indicated in the section descriptions herein). Different assumptions and measurements could produce estimates that are significantly different from those recorded in the financial statements. Senior management has reviewed and discussed the following critical accounting policies and estimates with the Audit Committee of Southern Company's Board of Directors. The following critical accounting policies and estimates include only those that are applicable to Southern Company.

Utility Regulation (Southern Company, Alabama Power, Georgia Power, Mississippi Power, and Southern Company Gas)

The traditional electric operating companies and the natural gas distribution utilities are subject to retail regulation by their respective state PSCs or other applicable state regulatory agencies and wholesale regulation by the FERC. These regulatory agencies set the rates the traditional electric operating companies and the natural gas distribution utilities are permitted to charge customers based on allowable costs, including a reasonable ROE. As a result, the traditional electric operating companies and the natural gas distribution utilities apply accounting standards which require the financial statements to reflect the effects of rate regulation. Through the ratemaking process, the regulators may require the inclusion of costs or revenues in periods different than when they would be recognized by a non-regulated company. This treatment may result in the deferral of expenses and the recording of related regulatory assets based on anticipated future recovery through rates or the deferral of gains or creation of liabilities and the recording of related regulatory liabilities. The application of the accounting standards for rate regulated entities also impacts their financial statements as a result of the estimates of allowable costs used in the ratemaking process. These estimates may differ from those actually incurred by the traditional electric operating companies and the natural gas distribution utilities; therefore, the accounting estimates inherent in specific costs such as depreciation, AROs, and pension and other postretirement benefits have less of a direct impact on the results of operations and financial condition of the applicable Registrants than they would on a non-regulated company.

Revenues related to regulated utility operations as a percentage of total operating revenues in 2020 for the applicable Registrants were as follows: 89% for Southern Company, 99% for Alabama Power, 96% for Georgia Power, 99% for Mississippi Power, and 86% for Southern Company Gas.

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As reflected in Note 2 to the financial statements, significant regulatory assets and liabilities have been recorded. Management reviews the ultimate recoverability of these regulatory assets and any requirement to refund these regulatory liabilities based on applicable regulatory guidelines and GAAP. However, adverse legislative, judicial, or regulatory actions could materially impact the amounts of such regulatory assets and liabilities and could adversely impact the financial statements of the applicable Registrants.

Estimated Cost, Schedule, and Rate Recovery for the Construction of Plant Vogtle Units 3 and 4 (Southern Company and Georgia Power)

In 2016, the Georgia PSC approved the Vogtle Cost Settlement Agreement, which resolved certain prudence matters in connection with Georgia Power's fifteenth VCM report. In 2017, the Georgia PSC approved Georgia Power's seventeenth VCM report, which included a recommendation to continue construction of Plant Vogtle Units 3 and 4, with Southern Nuclear serving as project manager and Bechtel serving as the primary construction contractor, as well as a modification of the Vogtle Cost Settlement Agreement. The Georgia PSC's related order stated that under the modified Vogtle Cost Settlement Agreement, (i) none of the \$3.3 billion of costs incurred through December 31, 2015 should be disallowed as imprudent; (ii) the Contractor Settlement Agreement was reasonable and prudent and none of the \$0.3 billion paid pursuant to the Contractor Settlement Agreement should be disallowed from rate base on the basis of imprudence; (iii) capital costs incurred up to \$5.68 billion would be presumed to be reasonable and prudent with the burden of proof on any party challenging such costs; (iv) Georgia Power would have the burden of proof to show that any capital costs above \$5.68 billion were prudent; (v) Georgia Power's total project capital cost forecast of \$7.3 billion (net of \$1.7 billion received under the Guarantee Settlement Agreement and approximately \$188 million in related customer refunds) was found reasonable and did not represent a cost cap; and (vi) prudence decisions would be made subsequent to achieving fuel load for Unit 4.

In its order, the Georgia PSC also stated if other conditions change and assumptions upon which Georgia Power's seventeenth VCM report are based do not materialize, the Georgia PSC reserved the right to reconsider the decision to continue construction.

As of December 31, 2020, Georgia Power revised its total project capital cost forecast to \$8.7 billion (net of \$1.7 billion received under the Guarantee Settlement Agreement and approximately \$188 million in related customer refunds). This forecast includes construction contingency of \$171 million and is based on the regulatory-approved in-service dates of November 2021 for Unit 3 and November 2022 for Unit 4. Since 2018, construction contingency totaling \$0.5 billion has been assigned to the base capital cost forecast. Although Georgia Power believes these incremental costs are reasonable and necessary to complete the project and the Georgia PSC's order in the seventeenth VCM proceeding specifically states that the construction of Plant Vogtle Units 3 and 4 is not subject to a cost cap, Georgia Power did not seek rate recovery for a \$0.7 billion increase in the base capital cost forecast in 2018 and has not sought rate recovery for the construction contingency costs. After considering the significant level of uncertainty that exists regarding the future recoverability of these costs since the ultimate outcome of these matters is subject to the outcome of future assessments by management, as well as Georgia PSC decisions in these future regulatory proceedings, Georgia Power recorded total pre-tax charges to income of \$1.1 billion (\$0.8 billion after tax) in the second quarter 2018 and \$149 million (\$111 million after tax) and \$176 million (\$131 million after tax) as of June 30, 2020 and December 31, 2020, respectively.

As part of its ongoing processes, Southern Nuclear continues to evaluate cost and schedule forecasts on a regular basis to incorporate current information available, particularly in the areas of engineering support, commodity installation, system turnovers and related test results, and workforce statistics. The project continues to face challenges including, but not limited to, higher than expected absenteeism; overall construction and subcontractor labor productivity; system turnover and testing activities; and electrical equipment and commodity installation. In addition, Georgia Power estimates the productivity impacts of the COVID-19 pandemic have consumed approximately three to four months of embedded schedule margin. With minimal schedule margin remaining, the Unit 3 schedule is challenged, and any further extension of the hot functional testing or fuel load milestones, or other delays from the challenges described below, could impact the ability to achieve the November 2021 in-service date.

As construction, including subcontract work, continues and testing and system turnover activities increase, challenges with management of contractors and vendors; subcontractor performance; supervision of craft labor and related productivity, particularly in the installation of electrical, mechanical, and instrumentation and controls commodities, ability to attract and retain craft labor, and/or related cost escalation; procurement, fabrication, delivery, assembly, installation, system turnover, and the initial testing and start-up, including any required engineering changes or any remediation related thereto, of plant systems, structures, or components (some of which are based on new technology that only within the last few years began initial operation in the global nuclear industry at this scale), any of which may require additional labor and/or materials; or other issues could arise and change the projected schedule and estimated cost. In addition, the continuing effects of the COVID-19 pandemic could further disrupt or delay construction and testing activities at Plant Vogtle Units 3 and 4.

There have been technical and procedural challenges to the construction and licensing of Plant Vogtle Units 3 and 4 at the federal and state level and additional challenges may arise. Processes are in place that are designed to assure compliance with the requirements specified in the Westinghouse Design Control Document and the combined construction and operating licenses, including inspections by Southern Nuclear and

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the NRC that occur throughout construction. Findings resulting from such inspections could require additional remediation and/or further NRC oversight. In addition, certain license amendment requests have been filed and approved or are pending before the NRC. Various design and other licensing-based compliance matters, including the timely submittal by Southern Nuclear of the ITAAC documentation for each unit and the related reviews and approvals by the NRC necessary to support NRC authorization to load fuel, may arise, which may result in additional license amendments or require other resolution. If any license amendment requests or other licensing-based compliance issues, including inspections and ITAACs, are not resolved in a timely manner, there may be delays in the project schedule that could result in increased costs.

The ultimate outcome of these matters cannot be determined at this time. However, any schedule extension beyond the regulatory-approved in-service dates is currently estimated to result in additional base capital costs for Georgia Power of approximately \$25 million per month for Unit 3 and approximately \$15 million per month for Unit 4, as well as the related AFUDC. While Georgia Power is not precluded from seeking recovery of any future capital cost forecast increase, management will ultimately determine whether or not to seek recovery. Any further changes to the capital cost forecast that are not expected to be recoverable through regulated rates will be required to be charged to income and such charges could be material.

Given the significant complexity involved in estimating the future costs to complete construction and start-up of Plant Vogtle Units 3 and 4 and the significant management judgment necessary to assess the related uncertainties surrounding future rate recovery of any projected cost increases, as well as the potential impact on results of operations and cash flows, Southern Company and Georgia Power consider these items to be critical accounting estimates. See Note 2 to the financial statements under "Georgia Power – Nuclear Construction" for additional information.

Accounting for Income Taxes (Southern Company, Mississippi Power, Southern Power, and Southern Company Gas)

The consolidated income tax provision and deferred income tax assets and liabilities, as well as any unrecognized tax benefits and valuation allowances, require significant judgment and estimates. These estimates are supported by historical tax return data, reasonable projections of taxable income, the ability and intent to implement tax planning strategies if necessary, and interpretations of applicable tax laws and regulations across multiple taxing jurisdictions. The effective tax rate reflects the statutory tax rates and calculated apportionments for the various states in which the Southern Company system operates.

Southern Company files a consolidated federal income tax return and the Registrants file various state income tax returns, some of which are combined or unitary. Under a joint consolidated income tax allocation agreement, each Southern Company subsidiary's current and deferred tax expense is computed on a stand-alone basis and each subsidiary is allocated an amount of tax similar to that which would be paid if it filed a separate income tax return. In accordance with IRS regulations, each company is jointly and severally liable for the federal tax liability. Certain deductions and credits can be limited or utilized at the consolidated or combined level resulting in tax credit and/or state NOL carryforwards that would not otherwise result on a stand-alone basis. Utilization of these carryforwards and the assessment of valuation allowances are based on significant judgment and extensive analysis of Southern Company's and its subsidiaries' current financial position and results of operations, including currently available information about future years, to estimate when future taxable income will be realized.

Current and deferred state income tax liabilities and assets are estimated based on laws of multiple states that determine the income to be apportioned to their jurisdictions. States have various filing methodologies and utilize specific formulas to calculate the apportionment of taxable income. The calculation of deferred state taxes considers apportionment factors and filing methodologies that are expected to apply in future years. The apportionments and methodologies which are ultimately finalized in a manner inconsistent with expectations could have a material effect on the financial statements of the applicable Registrants.

Given the significant judgment involved in estimating tax credit and/or state NOL carryforwards and multi-state apportionments for all subsidiaries, the applicable Registrants consider deferred income tax liabilities and assets to be critical accounting estimates.

Asset Retirement Obligations (Southern Company, Alabama Power, Georgia Power, Mississippi Power, and Southern Company Gas)

AROs are computed as the present value of the estimated costs for an asset's future retirement and are recorded in the period in which the liability is incurred. The estimated costs are capitalized as part of the related long-lived asset and depreciated over the asset's useful life. In the absence of quoted market prices, AROs are estimated using present value techniques in which estimates of future cash outlays associated with the asset retirements are discounted using a credit-adjusted risk-free rate. Estimates of the timing and amounts of future cash outlays are based on projections of when and how the assets will be retired and the cost of future removal activities.

The ARO liabilities for the traditional electric operating companies primarily relate to facilities that are subject to the CCR Rule and the related state rules, principally ash ponds. In addition, Alabama Power and Georgia Power have retirement obligations related to the decommissioning of nuclear facilities (Alabama Power's Plant Farley and Georgia Power's ownership interests in Plant Hatch and Plant Vogtle Units 1 and 2). Other significant AROs include various landfill sites and asbestos removal for Alabama Power, Georgia Power, and Mississippi Power and gypsum cells and mine reclamation for Mississippi Power.

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The traditional electric operating companies and Southern Company Gas also have identified other retirement obligations, such as obligations related to certain electric transmission and distribution facilities, certain asbestos-containing material within long-term assets not subject to ongoing repair and maintenance activities, certain wireless communication towers, the disposal of polychlorinated biphenyls in certain transformers, leasehold improvements, equipment on customer property, and property associated with the Southern Company system’s rail lines and natural gas pipelines. However, liabilities for the removal of these assets have not been recorded because the settlement timing for certain retirement obligations related to these assets is indeterminable and, therefore, the fair value of the retirement obligations cannot be reasonably estimated. A liability for these retirement obligations will be recognized when sufficient information becomes available to support a reasonable estimation of the ARO.

The cost estimates for AROs related to the disposal of CCR are based on information using various assumptions related to closure and post-closure costs, timing of future cash outlays, inflation and discount rates, and the potential methods for complying with the CCR Rule and the related state rules. The traditional electric operating companies have periodically updated, and expect to continue periodically updating, their related cost estimates and ARO liabilities for each CCR unit as additional information related to these assumptions becomes available. Some of these updates have been, and future updates may be, material. See Note 6 to the financial statements for additional information, including increases to AROs related to ash ponds recorded during 2020 by certain Registrants.

Given the significant judgment involved in estimating AROs, the applicable Registrants consider the liabilities for AROs to be critical accounting estimates.

Pension and Other Postretirement Benefits (Southern Company, Alabama Power, Georgia Power, Mississippi Power, and Southern Company Gas)

The applicable Registrants’ calculations of pension and other postretirement benefits expense are dependent on a number of assumptions. These assumptions include discount rates, healthcare cost trend rates, expected long-term rate of return (LRR) on plan assets, mortality rates, expected salary and wage increases, and other factors. Components of pension and other postretirement benefits expense include interest and service cost on the pension and other postretirement benefit plans, expected return on plan assets, and amortization of certain unrecognized costs and obligations. Actual results that differ from the assumptions utilized are accumulated and amortized over future periods and, therefore, generally affect recognized expense and the recorded obligation in future periods. While the applicable Registrants believe the assumptions used are appropriate, differences in actual experience or significant changes in assumptions would affect their pension and other postretirement benefit costs and obligations.

Key elements in determining the applicable Registrants’ pension and other postretirement benefit expense are the LRR and the discount rate used to measure the benefit plan obligations and the periodic benefit plan expense for future periods. For purposes of determining the applicable Registrants’ liabilities related to the pension and other postretirement benefit plans, Southern Company discounts the future related cash flows using a single-point discount rate for each plan developed from the weighted average of market-observed yields for high quality fixed income securities with maturities that correspond to expected benefit payments. The discount rate assumption impacts both the service cost and non-service costs components of net periodic benefit costs as well as the projected benefit obligations.

The LRR on pension and other postretirement benefit plan assets is based on Southern Company’s investment strategy, historical experience, and expectations that consider external actuarial advice, and represents the average rate of earnings expected over the long term on the assets invested to provide for anticipated future benefit payments. Southern Company determines the amount of the expected return on plan assets component of non-service costs by applying the LRR of various asset classes to Southern Company's target asset allocation. The LRR only impacts the non-service costs component of net periodic benefit costs for the following year and is set annually at the beginning of the year.

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The following table illustrates the sensitivity to changes in the applicable Registrants’ long-term assumptions with respect to the discount rate, salary increases, and the long-term rate of return on plan assets:

25 Basis Point Change in:	Increase/(Decrease) in		
	Total Benefit Expense for 2021	Projected Obligation for Pension Plan at December 31, 2020	Projected Obligation for Other Postretirement Benefit Plans at December 31, 2020
(in millions)			
Discount rate:			
Southern Company	\$42/\$(40)	\$628/\$(592)	\$57/\$(54)
Alabama Power	\$11/\$(10)	\$151/\$(142)	\$14/\$(14)
Georgia Power	\$12/\$(11)	\$187/\$(177)	\$20/\$(19)
Mississippi Power	\$2/\$(2)	\$28/\$(27)	\$2/\$(2)
Southern Company Gas	\$–/\$–	\$43/\$(40)	\$6/\$(6)
Salaries:			
Southern Company	\$25/\$(24)	\$136/\$(132)	\$–/\$–
Alabama Power	\$7/\$(7)	\$38/\$(37)	\$–/\$–
Georgia Power	\$7/\$(7)	\$39/\$(38)	\$–/\$–
Mississippi Power	\$1/\$(1)	\$6/\$(6)	\$–/\$–
Southern Company Gas	\$1/\$(1)	\$3/\$(3)	\$–/\$–
Long-term return on plan assets:			
Southern Company	\$38/\$(38)	N/A	N/A
Alabama Power	\$10/\$(10)	N/A	N/A
Georgia Power	\$12/\$(12)	N/A	N/A
Mississippi Power	\$2/\$(2)	N/A	N/A
Southern Company Gas	\$3/\$(3)	N/A	N/A

See Note 11 to the financial statements for additional information regarding pension and other postretirement benefits.

Asset Impairment (Southern Company, Southern Power, and Southern Company Gas)

Goodwill (Southern Company and Southern Company Gas)

The acquisition method of accounting requires the assets acquired and liabilities assumed to be recorded at the date of acquisition at their respective estimated fair values. The applicable Registrants have recognized goodwill as of the date of their acquisitions, as a residual over the fair values of the identifiable net assets acquired. Goodwill is tested for impairment at the reporting unit level on an annual basis in the fourth quarter of the year as well as on an interim basis as events and changes in circumstances occur, including, but not limited to, a significant change in operating performance, the business climate, legal or regulatory factors, or a planned sale or disposition of a significant portion of the business. A reporting unit is the operating segment, or a business one level below the operating segment (a component), if discrete financial information is prepared and regularly reviewed by management. Components are aggregated if they have similar economic characteristics.

As part of the impairment tests, the applicable Registrant may perform an initial qualitative assessment to determine whether it is more likely than not that the fair value of each reporting unit is less than its carrying amount before applying the quantitative goodwill impairment test. If the applicable Registrant elects to perform the qualitative assessment, it evaluates relevant events and circumstances, including but not limited to, macroeconomic conditions, industry and market conditions, cost factors, financial performance, entity specific events, and events specific to each reporting unit. If the applicable Registrant determines that it is more likely than not that the fair value of a reporting unit is less than its carrying amount, or it elects not to perform a qualitative assessment, it compares the fair value of the reporting unit to its carrying value to determine if the fair value is greater than its carrying value.

Goodwill for Southern Company and Southern Company Gas was \$5.3 billion and \$5.0 billion, respectively, at December 31, 2020. For its annual impairment tests, Southern Company Gas performed the qualitative assessment and determined that it was more likely than not that the fair value of all of its reporting units with goodwill exceeded their carrying amounts, and therefore no quantitative analysis was required. For its annual impairment tests for PowerSecure, Southern Company performed the quantitative assessment, which resulted in the fair value of goodwill at PowerSecure exceeding its carrying value in all years presented. However, Southern Company recorded goodwill impairment charges totaling \$34 million in 2019 as a result of its decision to sell certain PowerSecure business units. See Note 15 to the financial statements under “Southern Company” for additional information. The continued COVID-19 pandemic and related responses continue to disrupt supply chains, reduce labor availability and productivity, and reduce economic activity. These effects could have a variety of adverse impacts on Southern Company and its subsidiaries, including the \$263 million of goodwill recorded at PowerSecure. If the impact of the COVID-19 pandemic becomes significant to the operating results of PowerSecure and its businesses, a portion of the associated goodwill may become impaired. The ultimate outcome of this matter cannot be determined at this time.

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The judgments made in determining the estimated fair value assigned to each class of assets acquired and liabilities assumed, as well as asset lives, can significantly impact the applicable Registrant’s results of operations. Fair values and useful lives are determined based on, among other factors, the expected future period of benefit of the asset, the various characteristics of the asset, and projected cash flows. As the determination of an asset’s fair value and useful life involves management making certain estimates and because these estimates form the basis for the determination of whether or not an impairment charge should be recorded, the applicable Registrants consider these estimates to be critical accounting estimates.

See Note 1 to the financial statements under “Goodwill and Other Intangible Assets and Liabilities” for additional information regarding the applicable Registrants’ goodwill.

Long-Lived Assets (Southern Company, Southern Power, and Southern Company Gas)

Impairments of long-lived assets of the traditional electric utilities and natural gas distribution utilities are generally related to specific regulatory disallowances. The applicable Registrants assess their other long-lived assets for impairment whenever events or changes in circumstances indicate that an asset’s carrying amount may not be recoverable. If an indicator exists, the asset is tested for recoverability by comparing the asset carrying value to the sum of the undiscounted expected future cash flows directly attributable to the asset’s use and eventual disposition. If the estimate of undiscounted future cash flows is less than the carrying value of the asset, the fair value of the asset is determined and a loss is recorded equal to the difference between the carrying value and the fair value of the asset. In addition, when assets are identified as held for sale, an impairment loss is recognized to the extent the carrying value of the assets or asset group exceeds their fair value less cost to sell. A high degree of judgment is required in developing estimates related to these evaluations, which are based on projections of various factors, some of which have been quite volatile in recent years.

Southern Power’s investments in long-lived assets are primarily generation assets. Excluding the natural gas distribution utilities, Southern Company Gas’ investments in long-lived assets are primarily natural gas transportation and storage facility assets, whether in service or under construction. In addition, exclusive of the traditional electric operating companies and natural gas distribution utilities, Southern Company’s investments in long-lived assets also include investments in leveraged leases. During 2020, Southern Company recorded impairment charges totaling \$206 million (\$105 million after tax) related to two of its leveraged lease investments.

For Southern Power, examples of impairment indicators could include significant changes in construction schedules, current period losses combined with a history of losses or a projection of continuing losses, a significant decrease in market prices, the inability to remarket generating capacity for an extended period, or the unplanned termination of a customer contract or the inability of a customer to perform under the terms of the contract. For Southern Company Gas, examples of impairment indicators could include, but are not limited to, significant changes in the U.S. natural gas storage market, construction schedules, current period losses combined with a history of losses or a projection of continuing losses, a significant decrease in market prices, the inability to renew or extend customer contracts or the inability of a customer to perform under the terms of the contract, attrition rates, or the inability to deploy a development project. For Southern Company’s investments in leveraged leases, impairment indicators include changes in estimates of future rental payments to be received under the lease as well as the residual value of the leased asset at the end of the lease.

As the determination of the expected future cash flows generated from an asset, an asset’s fair value, and useful life involves management making certain estimates and because these estimates form the basis for the determination of whether or not an impairment charge should be recorded, the applicable Registrants consider these estimates to be critical accounting estimates.

See Note 3 to the financial statements under “Other Matters” and Note 15 to the financial statements for additional information on certain assets recently evaluated for impairment, including Southern Company’s leveraged lease investments.

Derivatives and Hedging Activities (Southern Company and Southern Company Gas)

Determining whether a contract meets the definition of a derivative instrument, contains an embedded derivative requiring bifurcation, or qualifies for hedge accounting treatment is complex. The treatment of a single contract may vary from period to period depending upon accounting elections, changes in the applicable Registrant’s assessment of the likelihood of future hedged transactions, or new interpretations of accounting guidance. As a result, judgment is required in determining the appropriate accounting treatment. In addition, the estimated fair value of derivative instruments may change significantly from period to period depending upon market conditions, and changes in hedge effectiveness may impact the accounting treatment.

Derivative instruments (including certain derivative instruments embedded in other contracts) are recorded on the balance sheets as either assets or liabilities measured at their fair value. If the transaction qualifies for, and is designated as, a normal purchase or normal sale, it is exempt from fair value accounting treatment and is, instead, subject to traditional accrual accounting. The applicable Registrant utilizes market data or assumptions that market participants would use in pricing the derivative asset or liability, including assumptions about risk and the risks inherent in the inputs of the valuation technique.

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Changes in the derivatives’ fair value are recognized concurrently in earnings unless specific hedge accounting criteria are met. If the derivatives meet those criteria, derivative gains and losses offset related results of the hedged item in the income statement in the case of a fair value hedge, or gains and losses are deferred in OCI on the balance sheets until the hedged transaction affects earnings in the case of a cash flow hedge. Additionally, a company is required to formally designate a derivative as a hedge as well as document and assess the effectiveness of derivatives associated with transactions that receive hedge accounting treatment.

Southern Company Gas uses derivative instruments primarily to reduce the impact to its results of operations due to the risk of changes in the price of natural gas and, to a lesser extent, Southern Company Gas hedges against warmer-than-normal weather and interest rates. The majority of these contracts are over-the-counter wholesale contracts for the purchase or sale of natural gas or consist of contracts which do not include asset management agreements, financial optionality, or potential embedded derivatives. The fair value of natural gas derivative instruments used to manage exposure to changing natural gas prices reflects the estimated amounts that Southern Company Gas would receive or pay to terminate or close the contracts at the reporting date, taking into account the current unrealized gains or losses on open contracts. For derivatives utilized at gas marketing services and wholesale gas services that are not designated as accounting hedges, changes in fair value are reported as gains or losses in results of operations in the period of change. Gas marketing services records derivative gains or losses arising from cash flow hedges in OCI and reclassifies them into earnings in the same period that the underlying hedged item is recognized in earnings.

Derivative assets and liabilities are classified based on the lowest level of input that is significant to the fair value measurement. The assessment of the significance of a particular input to the fair value measurement requires judgment and may affect the valuation of fair value assets and liabilities and their placement within the fair value hierarchy. The determination of the fair value of the derivative instruments incorporates various required factors. These factors include:

- the creditworthiness of the counterparties involved and the impact of credit enhancements (such as cash deposits and letters of credit);
- events specific to a given counterparty; and
- the impact of nonperformance risk on liabilities.

A significant change in the underlying market prices or pricing assumptions used in pricing derivative assets or liabilities may result in a significant financial statement impact.

Given the assumptions used in pricing the derivative asset or liability, Southern Company and Southern Company Gas consider the valuation of derivative assets and liabilities a critical accounting estimate. See FINANCIAL CONDITION AND LIQUIDITY – “Market Price Risk” herein and Note 14 to the financial statements for more information.

Contingent Obligations (All Registrants)

The Registrants are subject to a number of federal and state laws and regulations, as well as other factors and conditions that subject them to environmental, litigation, and other risks. See FUTURE EARNINGS POTENTIAL herein and Notes 2 and 3 to the financial statements for more information regarding certain of these contingencies. The Registrants periodically evaluate their exposure to such risks and record reserves for those matters where a non-tax-related loss is considered probable and reasonably estimable. The adequacy of reserves can be significantly affected by external events or conditions that can be unpredictable; thus, the ultimate outcome of such matters could materially affect the results of operations, cash flows, or financial condition of the Registrants.

Recently Issued Accounting Standards

See Note 1 to the financial statements under “Recently Adopted Accounting Standards” for additional information.

On March 12, 2020, the FASB issued ASU 2020–04, *Reference Rate Reform (Topic 848): Facilitation of the Effects of Reference Rate Reform on Financial Reporting* (ASU 2020–04) providing temporary guidance to ease the potential burden in accounting for reference rate reform primarily resulting from the discontinuation of LIBOR, which is currently expected to begin phasing out on December 31, 2021. The amendments in ASU 2020–04 are elective and apply to all entities that have contracts, hedging relationships, and other transactions that reference LIBOR or another reference rate expected to be discontinued. The new guidance provides the following optional expedients: (i) simplifies accounting analyses under current GAAP for contract modifications; (ii) simplifies the assessment of hedge effectiveness and allows hedging relationships affected by reference rate reform to continue; and (iii) allows a one-time election to sell or transfer debt securities classified as held to maturity that reference a rate affected by reference rate reform. An entity may elect to apply the amendments prospectively from March 12, 2020 through December 31, 2022 by accounting topic.

The Registrants currently reference LIBOR for certain debt and hedging arrangements. Contract language has been, or is expected to be, incorporated into each of these agreements to address the transition to an alternative rate for agreements that will be in place at the transition date. While existing effective hedging relationships are expected to continue, the Registrants will continue to evaluate the provisions of ASU 2020–04 and the impacts of transitioning to an alternative rate. The ultimate outcome of the transition cannot be determined at this time, but is not expected to have a material impact on the Registrants’ financial statements. See FINANCIAL CONDITION AND LIQUIDITY – “Financing Activities” herein and Note 14 to the financial statements under “Interest Rate Derivatives” herein for additional information.

FINANCIAL CONDITION AND LIQUIDITY

Overview

The financial condition of each Registrant remained stable at December 31, 2020. The Registrants maintained adequate access to capital throughout 2020, including through a period of volatility in the short-term financial markets during the first quarter 2020 primarily related to the COVID-19 pandemic. As a precautionary measure, in the first quarter 2020, Southern Company, Georgia Power, Mississippi Power, and Southern Company Gas increased their outstanding short-term debt and cash and cash equivalents by entering into new bank term loans, entering into and funding new committed and uncommitted credit facilities, and funding existing uncommitted credit facilities. During the second half of 2020, most of these additional borrowings were repaid. No material changes occurred in the terms of the applicable Registrants’ bank credit arrangements or their interest expense on short-term debt as a result of these actions. The Registrants experienced no material counterparty credit losses during 2020 as a result of the volatility in the financial markets during the first half of 2020.

The Registrants’ cash requirements primarily consist of funding ongoing operations, including unconsolidated subsidiaries, as well as common stock dividends, capital expenditures, and debt maturities. Southern Power’s cash requirements also include distributions to noncontrolling interests. Capital expenditures and other investing activities for the traditional electric operating companies include investments to meet projected long-term demand requirements, including to build new generation facilities, to maintain existing generation facilities, to comply with environmental regulations including adding environmental modifications to certain existing generating units and closures of ash ponds, to expand and improve transmission and distribution facilities, and for restoration following major storms. Southern Power’s capital expenditures and other investing activities may include acquisitions or new construction associated with its overall growth strategy and to maintain its existing generation fleet’s performance. Southern Company Gas’ capital expenditures and other investing activities include investments to meet projected long-term demand requirements, to maintain existing natural gas distribution systems as well as to update and expand these systems, and to comply with environmental regulations. See “Cash Requirements” herein for additional information.

Operating cash flows provide a substantial portion of the Registrants’ cash needs. During 2020, Southern Power utilized tax credits, which provided \$340 million in operating cash flows. For the three-year period from 2021 through 2023, each Registrant’s projected stock dividends, capital expenditures, and debt maturities, as well as distributions to noncontrolling interests for Southern Power, are expected to exceed its operating cash flows. Southern Company plans to finance future cash needs in excess of its operating cash flows primarily by accessing borrowings from financial institutions and issuing debt and hybrid securities in the capital markets. Each Subsidiary Registrant plans to finance its future cash needs in excess of its operating cash flows primarily through external securities issuances, borrowings from financial institutions, and equity contributions from Southern Company. In addition, Georgia Power plans to utilize borrowings through the FFB and Southern Power plans to utilize tax equity partnership contributions. The Registrants plan to use commercial paper to manage seasonal variations in operating cash flows and for other working capital needs and continue to monitor their access to short-term and long-term capital markets as well as their bank credit arrangements to meet future capital and liquidity needs. See “Sources of Capital” and “Financing Activities” herein for additional information.

The Registrants’ investments in their qualified pension plans and Alabama Power’s and Georgia Power’s investments in their nuclear decommissioning trust funds increased in value at December 31, 2020 as compared to December 31, 2019. No contributions to the qualified pension plan were made during 2020 and no mandatory contributions to the qualified pension plans are anticipated during 2021. See Notes 6 and 11 to the financial statements under “Nuclear Decommissioning” and “Pension Plans,” respectively, for additional information.

At the end of 2020, the market price of Southern Company’s common stock was \$61.43 per share (based on the closing price as reported on the NYSE) and the book value was \$26.48 per share, representing a market-to-book value ratio of 232%, compared to \$63.70, \$26.11, and 244%, respectively, at the end of 2019.

Cash Requirements

Capital Expenditures

Total estimated capital expenditures, including LTSA and nuclear fuel commitments, for the Registrants through 2025 based on their current construction programs are as follows:

	2021	2022	2023	2024	2025
<i>(in billions)</i>					
Southern Company ^{(a)(b)(c)}	\$8.2	\$7.0	\$7.0	\$6.8	\$6.7
Alabama Power ^(a)	1.9	1.8	1.7	1.6	1.6
Georgia Power ^(b)	3.8	3.0	3.1	3.1	3.1
Mississippi Power	0.3	0.2	0.3	0.3	0.3
Southern Power ^(c)	0.7	0.2	0.2	0.1	0.1
Southern Company Gas	1.5	1.7	1.7	1.7	1.6

(a) Includes amounts related to Plant Barry Unit 8. See Note 2 to the financial statements under “Alabama Power” for additional information.

(b) Includes expenditures of approximately \$1.3 billion and \$0.4 billion for the construction of Plant Vogtle Units 3 and 4 in 2021 and 2022, respectively.

(c) Excludes approximately \$0.5 billion per year for 2021 through 2025 for Southern Power’s planned acquisitions and placeholder growth, which may vary materially due to market opportunities and Southern Power’s ability to execute its growth strategy.

These capital expenditures include estimates to comply with environmental laws and regulations, but do not include any potential compliance costs associated with any future regulation of CO2 emissions from fossil fuel-fired electric generating units. See FUTURE EARNINGS POTENTIAL – “Environmental Matters” herein for additional information. At December 31, 2020, significant purchase commitments were outstanding in connection with the Registrants’ construction programs.

The traditional electric operating companies also anticipate expenditures associated with closure and monitoring of ash ponds and landfills in accordance with the CCR Rule and the related state rules, which are reflected in the applicable Registrants’ ARO liabilities. Alabama Power’s cost estimates are based on closure-in-place for all of its ash ponds. The cost estimates for Georgia Power and Mississippi Power are based on a combination of closure-in-place for some ash ponds and closure by removal for others. These anticipated costs are likely to change, and could change materially, as assumptions and details pertaining to closure are refined and compliance activities continue. Current estimates of these costs through 2025 are provided in the table below. Material expenditures in future years for ARO settlements will also be required for ash ponds, nuclear decommissioning (for Alabama Power and Georgia Power), and other liabilities reflected in the applicable Registrants’ AROs, as discussed further in Note 6 to the financial statements. Also see FUTURE EARNINGS POTENTIAL – “Environmental Matters – Environmental Laws and Regulations – Coal Combustion Residuals” herein.

	2021	2022	2023	2024	2025
<i>(in millions)</i>					
Southern Company	\$585	\$759	\$957	\$903	\$931
Alabama Power	254	338	412	354	299
Georgia Power	287	354	467	498	601
Mississippi Power	28	23	23	20	14

The construction programs are subject to periodic review and revision, and actual construction costs may vary from these estimates because of numerous factors. These factors include: changes in business conditions; changes in load projections; changes in environmental laws and regulations; the outcome of any legal challenges to environmental rules; changes in electric generating plants, including unit retirements and replacements and adding or changing fuel sources at existing electric generating units, to meet regulatory requirements; changes in FERC rules and regulations; state regulatory agency approvals; changes in the expected environmental compliance program; changes in legislation; the cost and efficiency of construction labor, equipment, and materials; project scope and design changes; abnormal weather; delays in construction due to judicial or regulatory action; storm impacts; and the cost of capital. The continued COVID-19 pandemic could also impair the ability to develop, construct, and operate facilities. In addition, there can be no assurance that costs related to capital expenditures will be fully recovered. Additionally, expenditures associated with Southern Power’s planned acquisitions may vary due to market opportunities and the execution of its growth strategy. See Note 15 to the financial statements under “Southern Power” for additional information regarding Southern Power’s plant acquisitions and construction projects.

The construction program of Georgia Power includes Plant Vogtle Units 3 and 4, which includes components based on new technology that only within the last few years began initial operation in the global nuclear industry at this scale and which may be subject to additional revised cost estimates during construction. See Note 2 to the financial statements under “Georgia Power – Nuclear Construction” for information regarding Plant Vogtle Units 3 and 4 and additional factors that may impact construction expenditures.

See FUTURE EARNINGS POTENTIAL – “Construction Programs” herein for additional information.

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Other Significant Cash Requirements

Long-term debt maturities and the interest payable on long-term debt each represent a significant cash requirement for the Registrants. See Note 8 to the financial statements for information regarding the Registrants’ long-term debt at December 31, 2020, the weighted average interest rate applicable to each long-term debt category, and a schedule of long-term debt maturities over the next five years. The Registrants plan to continue, when economically feasible, to retire higher-cost securities and replace these obligations with lower-cost capital if market conditions permit.

Fuel and purchased power costs represent a significant component of funding ongoing operations for the traditional electric operating companies and Southern Power. See Note 3 to the financial statements under “Commitments” for information on Southern Company Gas’ commitments for pipeline charges, storage capacity, and gas supply. Total estimated costs for fuel and purchased power commitments at December 31, 2020 for the applicable Registrants are provided in the table below. Fuel costs include purchases of coal (for the traditional electric operating companies) and natural gas (for the traditional electric operating companies and Southern Power), as well as the related transportation and storage. In most cases, these contracts contain provisions for price escalation, minimum purchase levels, and other financial commitments. Natural gas purchase commitments are based on various indices at the time of delivery; the amounts reflected below have been estimated based on the NYMEX future prices at December 31, 2020. As discussed under “Capital Expenditures” herein, estimated expenditures for nuclear fuel are included in the applicable Registrants’ construction programs for the years 2021 through 2025. Nuclear fuel commitments at December 31, 2020 that extend beyond 2025 are included in the table below. Purchased power costs represent estimated minimum obligations for various PPAs for the purchase of capacity and energy, except for those accounted for as leases, which are discussed in Note 9 to the financial statements.

	2021	2022	2023	2024	2025	Thereafter
	<i>(in millions)</i>					
Southern Company ^(*)	\$ 2,818	\$ 1,831	\$883	\$705	\$659	\$ 5,607
Alabama Power	888	643	289	183	171	1,205
Georgia Power ^(*)	1,037	656	339	302	299	3,894
Mississippi Power	342	210	115	102	82	502
Southern Power	551	322	140	118	107	5

(*) Excludes capacity payments related to Plant Vogtle Units 1 and 2, which are discussed in Note 3 to the financial statements under “Commitments.”

The traditional electric operating companies and Southern Power have entered into LTSAs for the purpose of securing maintenance support for certain of their generating facilities. See Note 1 to the financial statements under “Long-term Service Agreements” for additional information. As discussed under “Capital Expenditures” herein, estimated expenditures related to LTSAs are included in the applicable Registrants’ construction programs for the years 2021 through 2025. Total estimated payments for LTSA commitments at December 31, 2020 that extend beyond 2025 are provided in the following table and include price escalation based on inflation indices:

	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Power
	<i>(in millions)</i>				
LTSA commitments (after 2025)	\$1,871	\$206	\$191	\$178	\$1,296

In addition, Southern Power has certain other operations and maintenance agreements. Total estimated costs for these commitments at December 31, 2020 are provided in the table below.

	2021	2022	2023	2024	2025	Thereafter
	<i>(in millions)</i>					
Southern Power's operations and maintenance agreements	\$65	\$48	\$41	\$36	\$25	\$194

See Note 9 to the financial statements for information on the Registrants’ operating lease obligations, including a maturity analysis of the lease liabilities over the next five years and thereafter.

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Sources of Capital

Southern Company intends to meet its future capital needs through operating cash flows, borrowings from financial institutions, and debt and equity issuances in the capital markets. Equity capital can be provided from any combination of Southern Company’s stock plans, private placements, or public offerings. Southern Company does not expect to issue any equity in the capital markets through 2025. See Note 8 to the financial statements under “Equity Units” for information on stock purchase contracts associated with Southern Company’s equity units.

The Subsidiary Registrants plan to obtain the funds to meet their future capital needs from sources similar to those they used in the past, which were primarily from operating cash flows, external securities issuances, borrowings from financial institutions, and equity contributions from Southern Company. In addition, Georgia Power plans to utilize borrowings from the FFB (as discussed further in Note 8 to the financial statements under “Long-term Debt – DOE Loan Guarantee Borrowings”) and Southern Power plans to utilize tax equity partnership contributions (as discussed further herein).

At certain periods during 2020, the traditional electric operating companies and the natural gas distribution utilities experienced a reduction in operating cash flows as a result of the temporary suspension of disconnections for non-payment by customers resulting from the COVID-19 pandemic and the related overall economic contraction. To date, this reduction of operating cash flows has not had a material impact on the liquidity of any of the Registrants, and, during the third quarter 2020, most of the temporary measures in place expired. The ultimate extent of the negative impact on the Registrants’ liquidity depends on the duration of the COVID-19 pandemic and any federal, state, or local response and cannot be determined at this time. See Note 2 to the financial statements for information regarding suspended disconnections for non-payment by the traditional electric operating companies and the natural gas distribution utilities.

The amount, type, and timing of any financings in 2021, as well as in subsequent years, will be contingent on investment opportunities and the Registrants’ capital requirements and will depend upon prevailing market conditions, regulatory approvals (for certain of the Subsidiary Registrants), and other factors. See “Cash Requirements” herein for additional information.

Southern Power utilizes tax equity partnerships as one of its financing sources, where the tax partner takes significantly all of the federal tax benefits. These tax equity partnerships are consolidated in Southern Power’s financial statements and are accounted for using HLBV methodology to allocate partnership gains and losses. During 2020, Southern Power obtained tax equity funding for the Reading and Skookumchuck wind projects and received proceeds totaling \$277 million. In addition, Southern Power received tax equity funding totaling \$16 million from existing partnerships. See Notes 1 and 15 to the financial statements under “General” and “Southern Power,” respectively, for additional information.

The issuance of securities by the traditional electric operating companies and Nicor Gas is generally subject to the approval of the applicable state PSC or other applicable state regulatory agency. The issuance of all securities by Mississippi Power and short-term securities by Georgia Power is generally subject to regulatory approval by the FERC. Additionally, with respect to the public offering of securities, Southern Company, the traditional electric operating companies, and Southern Power (excluding its subsidiaries), Southern Company Gas Capital, and Southern Company Gas (excluding its other subsidiaries) file registration statements with the SEC under the Securities Act of 1933, as amended (1933 Act). The amounts of securities authorized by the appropriate regulatory authorities, as well as the securities registered under the 1933 Act, are closely monitored and appropriate filings are made to ensure flexibility in the capital markets.

The Registrants generally obtain financing separately without credit support from any affiliate. See Note 8 to the financial statements under “Bank Credit Arrangements” for additional information. The Southern Company system does not maintain a centralized cash or money pool. Therefore, funds of each company are not commingled with funds of any other company in the Southern Company system, except in the case of Southern Company Gas, as described below.

The traditional electric operating companies and SEGCO may utilize a Southern Company subsidiary organized to issue and sell commercial paper at their request and for their benefit. Proceeds from such issuances for the benefit of an individual company are loaned directly to that company. The obligations of each traditional electric operating company and SEGCO under these arrangements are several and there is no cross-affiliate credit support. Alabama Power also maintains its own separate commercial paper program.

Southern Company Gas Capital obtains external financing for Southern Company Gas and its subsidiaries, other than Nicor Gas, which obtains financing separately without credit support from any affiliates. Southern Company Gas maintains commercial paper programs at Southern Company Gas Capital and Nicor Gas. Nicor Gas’ commercial paper program supports its working capital needs as Nicor Gas is not permitted to make money pool loans to affiliates. All of the other Southern Company Gas subsidiaries benefit from Southern Company Gas Capital’s commercial paper program.

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By regulation, Nicor Gas is restricted, to the extent of its retained earnings balance, in the amount it can dividend or loan to affiliates and is not permitted to make money pool loans to affiliates. At December 31, 2020, the amount of subsidiary retained earnings restricted to dividend totaled \$1.1 billion. This restriction did not impact Southern Company Gas’ ability to meet its cash obligations, nor does management expect such restriction to materially impact Southern Company Gas’ ability to meet its currently anticipated cash obligations.

Certain Registrants’ current liabilities frequently exceed their current assets because of long-term debt maturities and the periodic use of short-term debt as a funding source, as well as significant seasonal fluctuations in cash needs. The Registrants generally plan to refinance long-term debt as it matures. See Note 8 to the financial statements for additional information. Also see “Financing Activities” herein for information on financing activities that occurred subsequent to December 31, 2020. The following table shows the amount by which current liabilities exceeded current assets at December 31, 2020 for the applicable Registrants:

	Southern Company	Georgia Power	Mississippi Power	Southern Power	Southern Company Gas
At December 31, 2020					
			(in millions)		
Current liabilities in excess of current assets	\$3,462	\$1,343	\$572	\$250	\$303

The Registrants believe the need for working capital can be adequately met by utilizing operating cash flows, as well as commercial paper, lines of credit, and short-term bank notes, as market conditions permit. In addition, under certain circumstances, the Subsidiary Registrants may utilize equity contributions and/or loans from Southern Company.

Bank Credit Arrangements

At December 31, 2020, the Registrants’ unused committed credit arrangements with banks were as follows:

	Southern Company parent	Alabama Power	Georgia Power	Mississippi Power	Southern Power ^(a)	Southern Company Gas ^(b)	SEGC	Southern Company
At December 31, 2020								
				(in millions)				
Unused committed credit	\$1,999	\$1,328	\$1,728	\$250	\$591	\$1,745	\$30	\$7,671

- (a) At December 31, 2020, Southern Power also had two continuing letters of credit facilities for standby letters of credit, of which \$16 million was unused. Southern Power’s subsidiaries are not parties to its bank credit arrangements or letter of credit facilities.
- (b) Includes \$1.245 billion and \$500 million at Southern Company Gas Capital and Nicor Gas, respectively.

Subject to applicable market conditions, the Registrants, Nicor Gas, and SEGCO expect to renew or replace their bank credit arrangements as needed, prior to expiration. In connection therewith, the Registrants, Nicor Gas, and SEGCO may extend the maturity dates and/or increase or decrease the lending commitments thereunder. A portion of the unused credit with banks is allocated to provide liquidity support to the revenue bonds of the traditional electric operating companies and the commercial paper programs of the Registrants, Nicor Gas, and SEGCO. The amount of variable rate revenue bonds of the traditional electric operating companies outstanding requiring liquidity support at December 31, 2020 was approximately \$1.4 billion (comprised of approximately \$854 million at Alabama Power, \$550 million at Georgia Power, and \$34 million at Mississippi Power). In addition, at December 31, 2020, Georgia Power and Mississippi Power had approximately \$174 million and \$50 million, respectively, of fixed rate revenue bonds outstanding that are required to be remarketed within the next 12 months. See Note 8 to the financial statements under “Bank Credit Arrangements” for additional information.

Management's Discussion and Analysis of Financial Condition and Results of Operations

Short-term Borrowings

The Registrants, Nicor Gas, and SEGCO make short-term borrowings primarily through commercial paper programs that have the liquidity support of the committed bank credit arrangements described above. Southern Power’s subsidiaries are not issuers or obligors under its commercial paper program. Commercial paper and short-term bank term loans are included in notes payable in the balance sheets. Details of the Registrants’ short-term borrowings were as follows:

	Short-term Debt at the End of the Period					
	Amount Outstanding			Weighted Average Interest Rate		
	December 31,			December 31,		
	2020	2019	2018	2020	2019	2018
	(in millions)					
Southern Company	\$609	\$2,055	\$2,915	0.3%	2.1%	3.1%
Georgia Power	60	365	294	0.3	2.2	3.1
Mississippi Power	25	—	—	0.4	—	—
Southern Power	175	549	100	0.3	2.2	3.1
Southern Company Gas:						
Southern Company Gas Capital	\$220	\$ 372	\$ 403	0.3%	2.1%	3.1%
Nicor Gas	104	278	247	0.2	1.8	3.0
Southern Company Gas Total	\$324	\$ 650	\$ 650	0.2%	2.0%	3.0%

	Short-term Debt During the Period(*)								
	Average Amount Outstanding			Weighted Average Interest Rate			Maximum Amount Outstanding		
	2020	2019	2018	2020	2019	2018	2020	2019	2018
	(in millions)								
Southern Company	\$1,017	\$1,240	\$3,377	1.6%	2.6%	2.6%	\$2,113	\$2,914	\$5,447
Alabama Power	20	17	27	1.1	2.6	2.3	155	190	258
Georgia Power	264	371	139	1.7	2.7	2.5	478	935	710
Mississippi Power	9	—	68	1.6	—	2.0	40	—	300
Southern Power	64	76	188	1.5	2.7	2.5	550	578	385
Southern Company Gas:									
Southern Company Gas Capital	\$ 316	\$ 302	\$ 520	1.4%	2.6%	2.3%	\$ 641	\$ 490	\$1,361
Nicor Gas	49	91	123	1.4	2.3	2.2	278	278	275
Southern Company Gas Total	\$ 365	\$ 393	\$ 643	1.4%	2.5%	2.3%			

(*) Average and maximum amounts are based upon daily balances during the 12-month periods ended December 31, 2020, 2019, and 2018.

Management’s Discussion and Analysis of Financial Condition and Results of Operations

Analysis of Cash Flows

Net cash flows provided from (used for) operating, investing, and financing activities in 2020 and 2019 are presented in the following table:

Net cash provided from (used for):	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Power	Southern Company Gas
(in millions)						
2020						
Operating activities	\$ 6,696	\$ 1,742	\$ 2,784	\$ 298	\$ 901	\$ 1,207
Investing activities	(7,030)	(2,122)	(3,503)	(323)	374	(1,417)
Financing activities	(576)	16	676	(222)	(1,372)	180
2019						
Operating activities	\$ 5,781	\$ 1,779	\$ 2,907	\$ 339	\$ 1,385	\$ 1,067
Investing activities	(3,392)	(1,963)	(3,885)	(263)	(167)	(1,386)
Financing activities	(1,930)	765	918	(83)	(1,120)	298

Fluctuations in cash flows from financing activities vary from year to year based on capital needs and the maturity or redemption of securities.

Southern Company

Net cash provided from operating activities increased \$0.9 billion in 2020 as compared to 2019 primarily due to a \$1.1 billion voluntary contribution to the qualified pension plan in 2019 and the timing of vendor payments, partially offset by the timing of receivable collections and customer bill credits issued in 2020 by Alabama Power and Georgia Power. See Note 2 to the financial statements under “Alabama Power” and “Georgia Power” and Note 11 to the financial statements for additional information.

The net cash used for investing activities in 2020 and 2019 was primarily related to the Subsidiary Registrants’ construction programs, partially offset by proceeds from the sale transactions described in Note 15 to the financial statements, which totaled \$1.0 billion and \$5.1 billion in 2020 and 2019, respectively.

The net cash used for financing activities in 2020 and 2019 was primarily related to common stock dividend payments and net repayments of short-term bank debt and commercial paper, partially offset by net issuances of long-term debt and issuances of common stock.

Significant Balance Sheet Changes

Southern Company

Significant balance sheet changes in 2020 for Southern Company included:

- an increase of \$4.6 billion in total property, plant, and equipment primarily related to the Subsidiary Registrants’ construction programs;
- an increase of \$3.8 billion in long-term debt (including amounts due within one year) related to new issuances;
- a decrease of \$1.4 billion in notes payable related to net repayments of short-term bank debt and commercial paper;
- increases of \$0.9 billion and \$0.8 billion in AROs and regulatory assets associated with AROs, respectively, primarily related to cost estimate updates at Alabama Power and Georgia Power for ash pond facilities;
- a decrease of \$0.9 billion in cash and cash equivalents, as discussed further under “Analysis of Cash Flows – Southern Company” herein;
- a decrease of \$0.7 billion in assets held for sale related to the completion of Southern Power’s sale of Plant Mankato and Southern Company Gas’ sale of its interests in Pivotal LNG and Atlantic Coast Pipeline; and
- an increase of \$0.5 billion in total common stockholders’ equity related to net income, partially offset by common stock dividend payments.

See “Financing Activities” herein and Notes 5, 6, 8, and 15 to the financial statements for additional information.

Management’s Discussion and Analysis of Financial Condition and Results of Operations

Financing Activities

The following table outlines the Registrants’ long-term debt financing activities for the year ended December 31, 2020:

Company	Senior Note Issuances	Senior Note Maturities, Redemptions, and Repurchases	Revenue Bond Issuances and Reofferings of Purchased Bonds	Revenue Bond Maturities, Redemptions, and Repurchases	Other Long-Term Debt Issuances	Other Long-Term Debt Redemptions and Maturities ^(a)
(in millions)						
Southern Company parent	\$ 1,000	\$ 600	\$ —	\$ —	\$ 3,000	\$ 1,000
Alabama Power	600	250	87	87	—	—
Georgia Power	1,500	950	53	336	848	84
Mississippi Power	—	275	34	41	100	—
Southern Power	—	825	—	—	—	—
Southern Company Gas	500	—	—	—	325	—
Other	—	—	—	—	—	16
Elimination ^(b)	—	—	—	—	—	(6)
Southern Company	\$ 3,600	\$ 2,900	\$ 174	\$ 464	\$ 4,273	\$ 1,094

- (a) Includes reductions in finance lease obligations resulting from cash payments under finance leases and, for Georgia Power, principal amortization payments for FFB borrowings.
- (b) Represents reductions in affiliate finance lease obligations at Georgia Power, which are eliminated in Southern Company’s consolidated financial statements.

Except as otherwise described herein, the Registrants used the proceeds of debt issuances for their redemptions and maturities shown in the table above, to repay short-term indebtedness, and for general corporate purposes, including working capital. The Subsidiary Registrants also used the proceeds for their construction programs.

In addition to any financings that may be necessary to meet capital requirements and contractual obligations, the Registrants plan to continue, when economically feasible, a program to retire higher-cost securities and replace these obligations with lower-cost capital if market conditions permit.

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Southern Company

During 2020, Southern Company issued approximately 3.3 million shares of common stock through employee equity compensation plans and received proceeds of approximately \$74 million.

In January 2020, Southern Company issued \$1.0 billion aggregate principal amount of Series 2020A 4.95% Junior Subordinated Notes due January 30, 2080.

In March 2020, Southern Company borrowed \$250 million pursuant to a short-term uncommitted bank credit arrangement. In April 2020 and September 2020, Southern Company repaid \$50 million and \$200 million, respectively.

Also in March 2020, Southern Company entered into a \$75 million short-term floating rate bank loan bearing interest based on one-month LIBOR, which it repaid in September 2020.

In April 2020, Southern Company issued \$1.0 billion aggregate principal amount of Series 2020A 3.70% Senior Notes due April 30, 2030.

In May 2020, Southern Company redeemed all \$600 million aggregate principal amount of its Series 2015A 2.750% Senior Notes due June 15, 2020.

In September 2020, Southern Company issued \$1.25 billion aggregate principal amount of Series 2020B 4.00% Fixed-to-Fixed Reset Rate Junior Subordinated Notes due January 15, 2051 and \$750 million aggregate principal amount of Series 2020C 4.20% Junior Subordinated Notes due October 15, 2060.

In October 2020, Southern Company redeemed all of its \$1.0 billion aggregate principal amount outstanding of Series 2015A 6.25% Junior Subordinated Notes due October 15, 2075.

Subsequent to December 31, 2020, Southern Company borrowed \$25 million pursuant to a short-term uncommitted bank credit arrangement, bearing interest at a rate agreed upon by Southern Company and the bank from time to time.

Alabama Power

In March 2020, Alabama Power purchased and held approximately \$87 million aggregate principal amount of The Industrial Development Board of the City of Mobile, Alabama Pollution Control Revenue Bonds (Alabama Power Company Plant Barry Project), Series 2007-A, which were remarketed to the public in June 2020.

In August 2020, Alabama Power issued \$600 million aggregate principal amount of Series 2020A 1.45% Senior Notes due September 15, 2030.

In October 2020, Alabama Power repaid at maturity \$250 million aggregate principal amount of its Series 2010A 3.375% Senior Notes.

Subsequent to December 31, 2020, Alabama Power received a capital contribution totaling \$600 million from Southern Company.

Georgia Power

In January 2020, Georgia Power issued \$700 million aggregate principal amount of Series 2020A 2.10% Senior Notes due July 30, 2023, \$500 million aggregate principal amount of Series 2020B 3.70% Senior Notes due January 30, 2050, and an additional \$300 million aggregate principal amount of Series 2019B 2.65% Senior Notes due September 15, 2029.

In February 2020, Georgia Power redeemed all \$500 million aggregate principal amount of its Series 2017C 2.00% Senior Notes due September 8, 2020.

Also in February 2020, Georgia Power purchased and held approximately \$28 million, \$49 million, and \$18 million aggregate principal amounts of Development Authority of Monroe County (Georgia) Pollution Control Revenue Bonds (Georgia Power Company Plant Scherer Project), Second Series 2006, First Series 2012, and First Series 2013, respectively, which may be remarketed to the public at a later date.

In March 2020, Georgia Power repaid at maturity \$450 million aggregate principal amount of its Series 2017A 2.00% Senior Notes.

Also in March 2020, Georgia Power purchased and subsequently remarketed to the public approximately \$53 million of pollution control revenue bonds.

Also in March 2020, Georgia Power borrowed \$200 million pursuant to a \$250 million short-term uncommitted bank credit arrangement. In April 2020, Georgia Power borrowed the remaining \$50 million pursuant to this bank credit arrangement. In September 2020, Georgia Power repaid the full \$250 million.

Also in March 2020, Georgia Power extended one of its \$125 million short-term floating rate bank loans to a long-term term loan, which matures in June 2021.

Management's Discussion and Analysis of Financial Condition and Results of Operations

In June 2020, Georgia Power extended its other \$125 million short-term floating rate bank loan to mature in December 2020. In September 2020, Georgia Power repaid this \$125 million bank loan.

In June and December 2020, Georgia Power made additional borrowings under the FFB Credit Facilities in an aggregate principal amount of \$519 million and \$329 million, respectively, at an interest rate of 1.652% and 1.737%, respectively, through the final maturity date of February 20, 2044. The proceeds were used to reimburse Georgia Power for Eligible Project Costs relating to the construction of Plant Vogtle Units 3 and 4. During 2020, Georgia Power made principal amortization payments of \$73 million under the FFB Credit Facilities. See Note 8 to the financial statements under “Long-term Debt – DOE Loan Guarantee Borrowings” for additional information.

In December 2020, Georgia Power purchased and held approximately \$89 million aggregate principal amount of Development Authority of Monroe County (Georgia) Pollution Control Revenue Bonds (Georgia Power Company Plant Scherer Project), Second Series 2009, \$53 million aggregate principal amount of Development Authority of Floyd County (Georgia) Pollution Control Revenue Bonds (Georgia Power Company Plant Hammond Project), First Series 2010, and \$46 million aggregate principal amounts of Development Authority of Burke County (Georgia) Pollution Control Revenue Bonds (Georgia Power Company Plant Vogtle Project), First Series 1996, which may be remarketed to the public at a later date.

Subsequent to December 31, 2020, Georgia Power received a capital contribution totaling \$330 million from Southern Company and called for redemption all \$325 million aggregate principal amount of its Series 2016B 2.40% Senior Notes due April 1, 2021.

Mississippi Power

In February 2020, Mississippi Power entered into \$60 million and \$15 million floating rate bank term loans, which mature in December 2021 and January 2022, respectively, each bearing interest based on one-month LIBOR.

In March 2020, Mississippi Power entered into a \$125 million revolving credit arrangement that matures in March 2023 and borrowed \$40 million (short term) and \$25 million (long term) pursuant to the arrangement, each bearing interest based on one-month LIBOR. In May 2020, Mississippi Power repaid the \$40 million short-term portion.

In March 2020, Mississippi Power repaid at maturity the remaining \$275 million aggregate principal amount of its Series 2018A Floating Rate Senior Notes.

In April 2020, Mississippi Power purchased and held approximately \$11 million, \$14 million, and \$9 million aggregate principal amount of Mississippi Business Finance Corporation Solid Waste Disposal Facilities Revenue Bonds, Series 1995 (Mississippi Power Company Project), Solid Waste Disposal Facilities Revenue Refunding Bonds, Series 1998 (Mississippi Power Company Project), and Revenue Bonds, Series 1999 (Mississippi Power Company Project), respectively, which were remarketed to the public in May 2020.

Also in April 2020, Mississippi Power redeemed approximately \$7 million aggregate principal amount of The Industrial Development Board of the City of Eutaw, Alabama Pollution Control Revenue Refunding Bonds, Series 1992 (Mississippi Power Greene County Plant Project) due December 1, 2020.

Subsequent to December 31, 2020, Mississippi Power received capital contributions totaling \$100 million from Southern Company.

Southern Power

In February 2020, Southern Power repaid its \$100 million short-term floating rate bank loan entered into in December 2019.

In June 2020, Southern Power repaid at maturity \$300 million aggregate principal amount of its Series 2015B 2.375% Senior Notes.

In December 2020, Southern Power repaid at maturity \$525 million aggregate principal amount of its Series 2017A Floating Rate Senior Notes.

Subsequent to December 31, 2020, Southern Power issued \$400 million aggregate principal amount of Series 2021A 0.90% Senior Notes due January 15, 2026. An amount equal to the net proceeds of the senior notes is being allocated to finance or refinance, in whole or in part, one or more renewable energy projects.

Also subsequent to December 31, 2020, Southern Power made a return of capital to Southern Company totaling \$271 million.

Southern Company Gas

In March 2020, Southern Company Gas Capital, as borrower, and Southern Company Gas, as guarantor, entered into a \$150 million short-term floating rate bank loan bearing interest based on one-month LIBOR. In December 2020, Southern Company Gas Capital repaid the outstanding balance.

Also in March 2020, Southern Company Gas Capital borrowed approximately \$95 million pursuant to a short-term uncommitted bank credit arrangement, guaranteed by Southern Company Gas. In August 2020, Southern Company Gas Capital repaid the outstanding balance.

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In August 2020, Southern Company Gas Capital, as borrower, and Southern Company Gas, as guarantor, issued \$500 million aggregate principal amount of Series 2020A 1.75% Senior Notes due January 15, 2031.

In August 2020 and November 2020, Nicor Gas issued \$150 million and \$175 million, respectively, aggregate principal amount of first mortgage bonds in a private placement.

Subsequent to December 31, 2020, Atlanta Gas Light repaid at maturity \$30 million aggregate principal amount of 9.1% medium-term notes.

Credit Rating Risk

At December 31, 2020, the Registrants did not have any credit arrangements that would require material changes in payment schedules or terminations as a result of a credit rating downgrade.

There are certain contracts that could require collateral, but not accelerated payment, in the event of a credit rating change of certain Registrants to BBB and/or Baa2 or below. These contracts are primarily for physical electricity and natural gas purchases and sales, fuel purchases, fuel transportation and storage, energy price risk management, transmission, interest rate management, and, for Georgia Power, construction of new generation at Plant Vogtle Units 3 and 4.

The maximum potential collateral requirements under these contracts at December 31, 2020 were as follows:

Credit Ratings	Southern Company ^(*)	Alabama Power	Georgia Power	Mississippi Power	Southern Power ^(*)	Southern Company Gas
			<i>(in millions)</i>			
At BBB and/or Baa2	\$ 36	\$ 1	\$ —	\$ —	\$ 35	\$ —
At BBB- and/or Baa3	416	2	61	1	355	—
At BB+ and/or Ba1 or below	1,929	366	958	313	1,201	\$12

(*) Southern Power has PPAs that could require collateral, but not accelerated payment, in the event of a downgrade of Southern Power's credit. The PPAs require credit assurances without stating a specific credit rating. The amount of collateral required would depend upon actual losses resulting from a credit downgrade. Southern Power had \$105 million of cash collateral posted related to PPA requirements at December 31, 2020.

The amounts in the previous table for the traditional electric operating companies and Southern Power include certain agreements that could require collateral if either Alabama Power or Georgia Power has a credit rating change to below investment grade. Generally, collateral may be provided by a Southern Company guaranty, letter of credit, or cash. Additionally, a credit rating downgrade could impact the ability of the Registrants to access capital markets and would be likely to impact the cost at which they do so.

Mississippi Power and its largest retail customer, Chevron, have agreements under which Mississippi Power continues to provide retail service to the Chevron refinery in Pascagoula, Mississippi through 2038. The agreements grant Chevron a security interest in the co-generation assets owned by Mississippi Power located at the refinery that is exercisable upon the occurrence of (i) certain bankruptcy events or (ii) other events of default coupled with specific reductions in steam output at the facility and a downgrade of Mississippi Power's credit rating to below investment grade by two of the three rating agencies.

On August 27, 2020, Moody's upgraded Mississippi Power's senior unsecured long-term debt rating to Baa1 from Baa2 and revised its rating outlook to stable from positive.

On September 25, 2020, Fitch upgraded Mississippi Power's senior unsecured long-term debt rating to A- from BBB+ and revised its rating outlook to stable from positive.

Also on September 25, 2020, Fitch revised the ratings outlook of Southern Company and its subsidiaries (excluding Georgia Power and Mississippi Power) to stable from negative.

Market Price Risk

The Registrants had no material change in market risk exposure for the year ended December 31, 2020 when compared to the year ended December 31, 2019. See Note 14 to the financial statements for an in-depth discussion of the Registrants' derivatives, as well as Note 1 to the financial statements under "Financial Instruments" for additional information.

Due to cost-based rate regulation and other various cost recovery mechanisms, the traditional electric operating companies and the natural gas distribution utilities that sell natural gas directly to end-use customers continue to have limited exposure to market volatility in interest rates, foreign currency exchange rates, commodity fuel prices, and prices of electricity. The traditional electric operating companies and certain of the natural gas distribution utilities manage fuel-hedging programs implemented per the guidelines of their respective state PSCs or other applicable state regulatory agencies to hedge the impact of market fluctuations in natural gas prices for customers. Mississippi Power also manages wholesale fuel-hedging programs under agreements with its wholesale customers. Because energy from

Management's Discussion and Analysis of Financial Condition and Results of Operations

Southern Power's facilities is primarily sold under long-term PPAs with tolling agreements and provisions shifting substantially all of the responsibility for fuel cost to the counterparties, Southern Power's exposure to market volatility in commodity fuel prices and prices of electricity is generally limited. However, Southern Power has been and may continue to be exposed to market volatility in energy-related commodity prices as a result of uncontracted generating capacity. To mitigate residual risks relative to movements in electricity prices, the traditional electric operating companies and Southern Power may enter into physical fixed-price contracts for the purchase and sale of electricity through the wholesale electricity market and, to a lesser extent, financial hedge contracts for natural gas purchases; however, a significant portion of contracts are priced at market.

Certain of Southern Company Gas' non-regulated operations routinely utilize various types of derivative instruments to economically hedge certain commodity price and weather risks inherent in the natural gas industry. These instruments include a variety of exchange-traded and OTC energy contracts, such as forward contracts, futures contracts, options contracts, and swap agreements. Southern Company Gas' gas marketing services and wholesale gas services businesses also actively manage storage positions through a variety of hedging transactions for the purpose of managing exposures arising from changing natural gas prices. These hedging instruments are used to substantially protect economic margins (as spreads between wholesale and retail natural gas prices widen between periods) and thereby minimize exposure to declining operating margins. Some of these economic hedge activities may not qualify, or may not be designated, for hedge accounting treatment.

The following table provides information related to variable interest rate exposure on long-term debt (including amounts due within one year) at December 31, 2020 for the applicable Registrants:

At December 31, 2020	Southern Company ^(*)	Alabama Power	Georgia Power	Mississippi Power
		<i>(in millions, except percentages)</i>		
Long-term variable interest rate exposure	\$ 3,428	\$ 1,079	\$ 675	\$ 74
Weighted average interest rate on long-term variable interest rate exposure	0.77%	0.76%	0.23%	0.70%
Impact on annualized interest expense of 100 basis point change in interest rates	\$ 34	\$ 11	\$ 7	\$ 1

(*) Includes \$1.5 billion of long-term variable interest rate exposure at the Southern Company parent entity.

The Registrants may enter into interest rate derivatives designated as hedges, which are intended to mitigate interest rate volatility related to forecasted debt financings and existing fixed and floating rate obligations. See Note 14 to the financial statements under "Interest Rate Derivatives" for additional information.

Southern Power had foreign currency denominated debt of €1.1 billion at December 31, 2020. Southern Power has mitigated its exposure to foreign currency exchange rate risk through the use of foreign currency swaps converting all interest and principal payments to fixed-rate U.S. dollars. See Note 14 to the financial statements under "Foreign Currency Derivatives" for additional information.

Changes in fair value of energy-related derivative contracts for Southern Company and Southern Company Gas for the years ended December 31, 2020 and 2019 are provided in the table below. The fair value of energy-related derivative contracts was not material for the other Registrants. At December 31, 2020 and 2019, substantially all of the traditional electric operating companies' and certain of the natural gas distribution utilities' energy-related derivative contracts were designated as regulatory hedges and were related to the applicable company's fuel-hedging program.

	Southern Company ^(a)	Southern Company Gas ^(a)
	<i>(in millions)</i>	
Contracts outstanding at December 31, 2018, assets (liabilities), net	\$(201)	\$(167)
Contracts realized or settled	69	26
Current period changes ^(b)	105	213
Disposition	6	—
Contracts outstanding at December 31, 2019, assets (liabilities), net	\$ (21)	\$ 72
Contracts realized or settled	(14)	(98)
Current period changes ^(b)	142	127
Contracts outstanding at December 31, 2020, assets (liabilities), net	\$ 107	\$ 101

- (a) Excludes cash collateral held on deposit in broker margin accounts of \$28 million, \$99 million, and \$277 million at December 31, 2020, 2019, and 2018, respectively, and premium and intrinsic value associated with weather derivatives of \$6 million, \$4 million, and \$8 million at December 31, 2020, 2019, and 2018, respectively.
- (b) The changes in fair value of energy-related derivative contracts are substantially attributable to both the volume and the price of natural gas. Current period changes also include the changes in fair value of new contracts entered into during the period, if any.

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The net hedge volumes of energy-related derivative contracts for natural gas purchased (sold) at December 31, 2020 and 2019 for Southern Company and Southern Company Gas were as follows:

	Southern Company	Southern Company Gas
mmBtu Volume (in millions)		
At December 31, 2020:		
Commodity – Natural gas swaps	262	—
Commodity – Natural gas options	574	523
Total hedge volume	836	523
At December 31, 2019:		
Commodity – Natural gas swaps	327	—
Commodity – Natural gas options	262	218
Total hedge volume	589	218

Southern Company Gas’ derivative contracts are comprised of both long and short natural gas positions. A long position is a contract to purchase natural gas, and a short position is a contract to sell natural gas. The volumes presented above for Southern Company Gas represent the net of long natural gas positions of 4.42 billion mmBtu and short natural gas positions of 3.90 billion mmBtu at December 31, 2020 and the net of long natural gas positions of 4.10 billion mmBtu and short natural gas positions of 3.88 billion mmBtu at December 31, 2019.

For the Southern Company system, the weighted average swap contract cost per mmBtu was equal to market prices at December 31, 2020 and was approximately \$0.28 per mmBtu above market prices at December 31, 2019. The change in option fair value is primarily attributable to the volatility of the market and the underlying change in the natural gas price. Substantially all of the traditional electric operating companies’ natural gas hedge gains and losses are recovered through their respective fuel cost recovery clauses.

The Registrants use over-the-counter contracts that are not exchange traded but are fair valued using prices which are market observable, and thus fall into Level 2 of the fair value hierarchy. In addition, Southern Company Gas uses exchange-traded market-observable contracts, which are categorized as Level 1, and contracts that include a combination of observable and unobservable components, which are categorized as Level 3. See Note 13 to the financial statements for further discussion of fair value measurements. The maturities of the energy-related derivative contracts for Southern Company and Southern Company Gas at December 31, 2020 were as follows:

	Fair Value Measurements of Contracts at December 31, 2020			
	Total Fair Value	Maturity		
		2021	2022 – 2023	2024 – 2025
		(in millions)		
Southern Company				
Level 1 ^(a)	\$ 13	\$10	\$(11)	\$14
Level 2 ^(b)	66	49	5	12
Level 3	28	9	8	11
Southern Company total ^(c)	\$107	\$68	\$ 2	\$37
Southern Company Gas				
Level 1 ^(a)	\$ 13	\$10	\$(11)	\$14
Level 2 ^(b)	60	43	5	12
Level 3	28	9	8	11
Southern Company Gas total ^(c)	\$101	\$62	\$ 2	\$37

(a) Valued using NYMEX futures prices.
(b) Level 2 amounts for Southern Company Gas are valued using basis transactions that represent the cost to transport natural gas from a NYMEX delivery point to the contract delivery point. These transactions are based on quotes obtained either through electronic trading platforms or directly from brokers.
(c) Excludes cash collateral of \$28 million as well as premium and associated intrinsic value associated with weather derivatives of \$6 million at December 31, 2020.

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The Registrants are exposed to risk in the event of nonperformance by counterparties to energy-related and interest rate derivative contracts, as applicable. The Registrants only enter into agreements and material transactions with counterparties that have investment grade credit ratings by Moody’s and S&P, or with counterparties who have posted collateral to cover potential credit exposure. Therefore, the Registrants do not anticipate market risk exposure from nonperformance by the counterparties. For additional information, see Note 1 to the financial statements under “Financial Instruments” and Note 14 to the financial statements.

Southern Company performs periodic reviews of its leveraged lease transactions, both domestic and international, and the creditworthiness of the lessees, including a review of the value of the underlying leased assets and the credit ratings of the lessees. Southern Company’s domestic lease transactions generally do not have any credit enhancement mechanisms; however, the lessees in its international lease transactions have pledged various deposits as additional security to secure the obligations. The lessees in Southern Company’s international lease transactions are also required to provide additional collateral in the event of a credit downgrade below a certain level. See Notes 1 and 3 to the financial statements under “Leveraged Leases” and “Other Matters – Southern Company,” respectively, for additional information, including recent impairment charges related to certain leveraged lease investments.

Credit Risk

Except as discussed herein, the Southern Company system is not exposed to any concentrations of credit risk. Concentration of credit risk occurs at Atlanta Gas Light for amounts billed for services and other costs to its customers, which consist of the 16 Marketers in Georgia. For 2020, the four largest Marketers based on customer count, which includes SouthStar, accounted for 16% of Southern Company Gas’ total operating revenues. Southern Company Gas has a concentration of credit risk as measured by its 30-day receivable exposure plus forward exposure. At December 31, 2020, the top 20 counterparties of Southern Company Gas’ wholesale gas services segment represented approximately 58%, or \$234 million, of its total counterparty exposure and had a weighted average S&P equivalent credit rating of A-, all of which is consistent with the prior year.

Consolidated Statements of Income

For the Years Ended December 31, 2020, 2019, and 2018

	2020	2019	2018
		(in millions)	
Operating Revenues:			
Retail electric revenues	\$13,643	\$14,084	\$15,222
Wholesale electric revenues	1,945	2,152	2,516
Other electric revenues	672	636	664
Natural gas revenues	3,434	3,792	3,854
Other revenues	681	755	1,239
Total operating revenues	20,375	21,419	23,495
Operating Expenses:			
Fuel	2,967	3,622	4,637
Purchased power	799	816	971
Cost of natural gas	972	1,319	1,539
Cost of other sales	327	435	806
Other operations and maintenance	5,413	5,624	5,926
Depreciation and amortization	3,518	3,038	3,131
Taxes other than income taxes	1,234	1,230	1,315
Estimated loss on Plant Vogtle Units 3 and 4	325	—	1,060
Impairment charges	—	168	210
(Gain) loss on dispositions, net	(65)	(2,569)	(291)
Total operating expenses	15,490	13,683	19,304
Operating Income	4,885	7,736	4,191
Other Income and (Expense):			
Allowance for equity funds used during construction	149	128	138
Earnings from equity method investments	153	162	148
Interest expense, net of amounts capitalized	(1,821)	(1,736)	(1,842)
Impairment of leveraged leases	(206)	—	—
Other income (expense), net	336	252	114
Total other income and (expense)	(1,389)	(1,194)	(1,442)
Earnings Before Income Taxes	3,496	6,542	2,749
Income taxes	393	1,798	449
Consolidated Net Income	3,103	4,744	2,300
Dividends on preferred stock of subsidiaries	15	15	16
Net income (loss) attributable to noncontrolling interests	(31)	(10)	58
Consolidated Net Income Attributable to Southern Company	\$ 3,119	\$ 4,739	\$ 2,226
Common Stock Data:			
Earnings per share —			
Basic	\$ 2.95	\$ 4.53	\$ 2.18
Diluted	2.93	4.50	2.17
Average number of shares of common stock outstanding — (in millions)			
Basic	1,058	1,046	1,020
Diluted	1,065	1,054	1,025

The accompanying notes are an integral part of these consolidated financial statements.

Consolidated Statements of Comprehensive Income

For the Years Ended December 31, 2020, 2019, and 2018

	2020	2019	2018
		(in millions)	
Consolidated Net Income	\$3,103	\$4,744	\$2,300
Other comprehensive income (loss):			
Qualifying hedges:			
Changes in fair value, net of tax of \$3, \$(39), and \$(16), respectively	10	(115)	(47)
Reclassification adjustment for amounts included in net income, net of tax of \$(13), \$19, and \$24, respectively	(40)	57	72
Pension and other postretirement benefit plans:			
Benefit plan net gain (loss), net of tax of \$(17), \$(31), and \$(2), respectively	(55)	(64)	(5)
Reclassification adjustment for amounts included in net income, net of tax of \$3, \$1, and \$5, respectively	10	4	6
Total other comprehensive income (loss)	(75)	(118)	26
Dividends on preferred stock of subsidiaries	15	15	16
Comprehensive income (loss) attributable to noncontrolling interests	(31)	(10)	58
Consolidated Comprehensive Income Attributable to Southern Company	\$3,044	\$4,621	\$2,252

The accompanying notes are an integral part of these consolidated financial statements.

Consolidated Statements of Cash Flows

For the Years Ended December 31, 2020, 2019, and 2018

	2020	2019	2018
		(in millions)	
Operating Activities:			
Consolidated net income	\$ 3,103	\$ 4,744	\$ 2,300
Adjustments to reconcile consolidated net income to net cash provided from operating activities —			
Depreciation and amortization, total	3,905	3,331	3,549
Deferred income taxes	(241)	611	89
Utilization of federal investment tax credits	341	757	5
Allowance for equity funds used during construction	(149)	(128)	(138)
Pension, postretirement, and other employee benefits	(259)	(204)	(103)
Pension and postretirement funding	(2)	(1,136)	(4)
Settlement of asset retirement obligations	(442)	(328)	(244)
Storm damage accruals	325	168	74
Stock based compensation expense	113	107	125
Estimated loss on Plant Vogtle Units 3 and 4	325	—	1,060
Impairment charges	206	168	210
(Gain) loss on dispositions, net	(66)	(2,588)	(301)
Other, net	(74)	115	47
Changes in certain current assets and liabilities —			
—Receivables	(222)	630	(426)
—Fossil fuel for generation	(29)	(120)	123
—Materials and supplies	(157)	(17)	(176)
—Other current assets	(132)	132	98
—Accounts payable	(27)	(693)	291
—Accrued taxes	242	117	267
—Retail fuel cost over recovery	96	62	36
—Customer refunds	(236)	126	67
—Other current liabilities	76	(73)	(4)
Net cash provided from operating activities	6,696	5,781	6,945
Investing Activities:			
Business acquisitions, net of cash acquired	(81)	(50)	(65)
Property additions	(7,441)	(7,555)	(8,001)
Nuclear decommissioning trust fund purchases	(877)	(888)	(1,117)
Nuclear decommissioning trust fund sales	871	882	1,111
Proceeds from dispositions and asset sales	1,049	5,122	2,956
Cost of removal, net of salvage	(361)	(393)	(388)
Change in construction payables, net	37	(169)	50
Investments in unconsolidated subsidiaries	(80)	(148)	(114)
Payments pursuant to LTSAs	(211)	(234)	(186)
Other investing activities	64	41	(6)
Net cash used for investing activities	(7,030)	(3,392)	(5,760)

Consolidated Statements of Cash Flows (continued)

For the Years Ended December 31, 2020, 2019, and 2018

	2020	2019	2018
		(in millions)	
Financing Activities:			
Increase (decrease) in notes payable, net	(1,096)	640	(774)
Proceeds —			
Long-term debt	8,047	5,220	2,478
Common stock	74	844	1,090
Short-term borrowings	615	350	3,150
Redemptions and repurchases —			
Long-term debt	(4,458)	(4,347)	(5,533)
Preferred and preference stock	—	—	(33)
Short-term borrowings	(840)	(1,850)	(1,900)
Distributions to noncontrolling interests	(271)	(256)	(153)
Capital contributions from noncontrolling interests	363	196	2,551
Payment of common stock dividends	(2,685)	(2,570)	(2,425)
Other financing activities	(325)	(157)	(264)
Net cash used for financing activities	(576)	(1,930)	(1,813)
Net Change in Cash, Cash Equivalents, and Restricted Cash	(910)	459	(628)
Cash, Cash Equivalents, and Restricted Cash at Beginning of Year	1,978	1,519	2,147
Cash, Cash Equivalents, and Restricted Cash at End of Year	\$ 1,068	\$ 1,978	\$ 1,519
Supplemental Cash Flow Information:			
Cash paid during the period for —			
Interest (net of \$81, \$74, and \$72 capitalized, respectively)	\$ 1,683	\$ 1,651	\$ 1,794
Income taxes (net of refunds)	64	276	172
Noncash transactions — Accrued property additions at year-end	989	932	1,103

The accompanying notes are an integral part of these consolidated financial statements.

Consolidated Balance Sheets

At December 31, 2020 and 2019

Assets	2020	2019
	(in millions)	
Current Assets:		
Cash and cash equivalents	\$ 1,065	\$ 1,975
Receivables —		
Customer accounts	1,753	1,614
Energy marketing	516	428
Unbilled revenues	672	599
Other accounts and notes	512	817
Accumulated provision for uncollectible accounts	(118)	(49)
Materials and supplies	1,478	1,388
Fossil fuel for generation	550	521
Natural gas for sale	460	479
Prepaid expenses	276	314
Assets from risk management activities, net of collateral	147	183
Regulatory assets – asset retirement obligations	214	287
Other regulatory assets	810	885
Assets held for sale	60	188
Other current assets	222	188
Total current assets	8,617	9,817
Property, Plant, and Equipment:		
In service	110,516	105,114
Less: Accumulated depreciation	32,397	30,765
Plant in service, net of depreciation	78,119	74,349
Nuclear fuel, at amortized cost	818	851
Construction work in progress	8,697	7,880
Total property, plant, and equipment	87,634	83,080
Other Property and Investments:		
Goodwill	5,280	5,280
Nuclear decommissioning trusts, at fair value	2,303	2,036
Equity investments in unconsolidated subsidiaries	1,362	1,303
Other intangible assets, net of amortization of \$328 and \$280, respectively	487	536
Leveraged leases	556	788
Miscellaneous property and investments	398	391
Total other property and investments	10,386	10,334
Deferred Charges and Other Assets:		
Operating lease right-of-use assets, net of amortization	1,802	1,800
Deferred charges related to income taxes	796	798
Unamortized loss on reacquired debt	280	300
Regulatory assets – asset retirement obligations, deferred	4,934	4,094
Other regulatory assets, deferred	7,198	6,805
Assets held for sale, deferred	—	601
Other deferred charges and assets	1,288	1,071
Total deferred charges and other assets	16,298	15,469
Total Assets	\$122,935	\$118,700

The accompanying notes are an integral part of these consolidated financial statements.

Consolidated Balance Sheets (continued)

At December 31, 2020 and 2019

Liabilities and Stockholders' Equity	2020	2019
	(in millions)	
Current Liabilities:		
Securities due within one year	\$ 3,507	\$ 2,989
Notes payable	609	2,055
Energy marketing trade payables	494	442
Accounts payable	2,312	2,115
Customer deposits	487	496
Accrued taxes —		
Accrued income taxes	130	—
Other accrued taxes	699	659
Accrued interest	513	474
Accrued compensation	1,025	992
Asset retirement obligations	585	504
Other regulatory liabilities	509	756
Liabilities held for sale	—	5
Operating lease obligations	241	229
Other current liabilities	968	830
Total current liabilities	12,079	12,546
Long-Term Debt	45,073	41,798
Deferred Credits and Other Liabilities:		
Accumulated deferred income taxes	8,175	7,888
Deferred credits related to income taxes	5,767	6,078
Accumulated deferred ITCs	2,235	2,291
Employee benefit obligations	2,213	1,814
Operating lease obligations, deferred	1,611	1,615
Asset retirement obligations, deferred	10,099	9,282
Accrued environmental remediation	216	234
Other cost of removal obligations	2,211	2,239
Other regulatory liabilities, deferred	251	256
Other deferred credits and liabilities	480	609
Total deferred credits and other liabilities	33,258	32,306
Total Liabilities	90,410	86,650
Redeemable Preferred Stock of Subsidiaries:		
Cumulative preferred stock		
\$100 par or stated value – 4.20% to 4.92%		
(Authorized – 10 million shares; Outstanding – 0.5 million shares)	48	48
\$1 par value – 5.00% (Authorized – 28 million shares; Outstanding – 10 million shares)	243	243
Total redeemable preferred stock of subsidiaries (annual dividend requirement – \$15 million)	291	291
Common Stockholders' Equity:		
Common stock, par value \$5 per share (Authorized – 1.5 billion shares)	5,268	5,257
(Issued – 1.1 billion shares; Treasury – 1.0 million shares)		
Paid-in capital	11,834	11,734
Treasury, at cost	(46)	(42)
Retained earnings	11,311	10,877
Accumulated other comprehensive loss	(395)	(321)
Total common stockholders' equity	27,972	27,505
Noncontrolling interests	4,262	4,254
Total Stockholders' Equity (See accompanying statements)	32,234	31,759
Total Liabilities and Stockholders' Equity	\$122,935	\$118,700
Commitments and Contingent Matters (See notes)		

The accompanying notes are an integral part of these consolidated financial statements.

Consolidated Statements of Stockholders’ Equity

For the Years Ended December 31, 2020, 2019, and 2018

	Southern Company Common Stockholders' Equity								Total
	Number of Common Shares		Common Stock			Retained Earnings	Accumulated Other Comprehensive Income (Loss)	Noncontrolling Interests	
	Issued	Treasury	Par Value	Paid-In Capital	Treasury				
						(in millions)			
Balance at December 31, 2017	1,009	(1)	\$5,038	\$10,469	\$(36)	\$ 8,885	\$ (189)	\$1,361	\$25,528
Consolidated net income	—	—	—	—	—	2,226	—	58	2,284
Other comprehensive income	—	—	—	—	—	—	26	—	26
Stock issued	26	—	126	964	—	—	—	—	1,090
Stock-based compensation	—	—	—	84	—	—	—	—	84
Cash dividends of \$2.3800 per share	—	—	—	—	—	(2,425)	—	—	(2,425)
Contributions from noncontrolling interests	—	—	—	—	—	—	—	1,372	1,372
Distributions to noncontrolling interests	—	—	—	—	—	—	—	(164)	(164)
Sale of noncontrolling interests	—	—	—	(417)	—	—	—	1,690	1,273
Other	—	—	—	(6)	(2)	20	(40)	(1)	(29)
Balance at December 31, 2018	1,035	(1)	5,164	11,094	(38)	8,706	(203)	4,316	29,039
Consolidated net income (loss)	—	—	—	—	—	4,739	—	(10)	4,729
Other comprehensive income (loss)	—	—	—	—	—	—	(118)	—	(118)
Issuance of equity units ^(*)	—	—	—	(198)	—	—	—	—	(198)
Stock issued	19	—	93	751	—	—	—	—	844
Stock-based compensation	—	—	—	66	—	—	—	—	66
Cash dividends of \$2.4600 per share	—	—	—	—	—	(2,570)	—	—	(2,570)
Contributions from noncontrolling interests	—	—	—	—	—	—	—	276	276
Distributions to noncontrolling interests	—	—	—	—	—	—	—	(327)	(327)
Other	—	—	—	21	(4)	2	—	(1)	18
Balance at December 31, 2019	1,054	(1)	5,257	11,734	(42)	10,877	(321)	4,254	31,759
Consolidated net income (loss)	—	—	—	—	—	3,119	—	(31)	3,088
Other comprehensive income (loss)	—	—	—	—	—	—	(75)	—	(75)
Stock issued	4	—	11	63	—	—	—	—	74
Stock-based compensation	—	—	—	44	—	—	—	—	44
Cash dividends of \$2.5400 per share	—	—	—	—	—	(2,685)	—	—	(2,685)
Contributions from noncontrolling interests	—	—	—	—	—	—	—	307	307
Distributions to noncontrolling interests	—	—	—	—	—	—	—	(271)	(271)
Purchase of membership interests from noncontrolling interests	—	—	—	5	—	—	—	(65)	(60)
Sale of noncontrolling interests	—	—	—	(2)	—	—	—	67	65
Other	—	—	—	(10)	(4)	—	1	1	(12)
Balance at December 31, 2020	1,058	(1)	\$5,268	\$11,834	\$(46)	\$ 11,311	\$ (395)	\$4,262	\$32,234

(*) See Note 8 under “Equity Units” for additional information.

The accompanying notes are an integral part of these consolidated financial statements.

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1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

General

Southern Company is the parent company of three traditional electric operating companies, as well as Southern Power, Southern Company Gas, SCS, Southern Linc, Southern Holdings, Southern Nuclear, PowerSecure, and other direct and indirect subsidiaries. The traditional electric operating companies – Alabama Power, Georgia Power, and Mississippi Power – are vertically integrated utilities providing electric service in three Southeastern states. In January 2019, Southern Company completed the sale of Gulf Power (another traditional electric operating company through December 31, 2018) to NextEra Energy. Southern Power develops, constructs, acquires, owns, and manages power generation assets, including renewable energy and battery energy storage projects, and sells electricity at market-based rates in the wholesale market. Southern Company Gas distributes natural gas through natural gas distribution utilities, including Nicor Gas (Illinois), Atlanta Gas Light (Georgia), Virginia Natural Gas, and Chattanooga Gas (Tennessee). In 2018, Southern Company Gas sold its other natural gas utilities – Elizabethtown Gas (New Jersey), Florida City Gas, and Elkton Gas (Maryland). Southern Company Gas is also involved in several other complementary businesses including gas pipeline investments, wholesale gas services, and gas marketing services. SCS, the system service company, provides, at cost, specialized services to Southern Company and its subsidiary companies. Southern Linc provides digital wireless communications for use by Southern Company and its subsidiary companies and also markets these services to the public and provides fiber optics services within the Southeast. Southern Holdings is an intermediate holding company subsidiary, primarily for Southern Company's leveraged lease and other investments. Southern Nuclear operates and provides services to the Southern Company system's nuclear power plants, including Alabama Power's Plant Farley and Georgia Power's Plant Hatch and Plant Vogtle Units 1 and 2, and is currently managing construction and start-up of Plant Vogtle Units 3 and 4, which are co-owned by Georgia Power. PowerSecure provides energy solutions to electric utilities and their customers in the areas of distributed generation, energy storage and renewables, and energy efficiency. See Note 15 for information regarding disposition activities, including Southern Company's sale of Gulf Power.

The Registrants' financial statements reflect investments in subsidiaries on a consolidated basis. Intercompany transactions have been eliminated in consolidation. The equity method is used for investments in entities in which a Registrant has significant influence but does not have control and for VIEs where a Registrant has an equity investment but is not the primary beneficiary. Southern Power has controlling ownership in certain legal entities for which the contractual provisions represent profit-sharing arrangements because the allocations of cash distributions and tax benefits are not based on fixed ownership percentages. For these arrangements, the noncontrolling interest is accounted for under a balance sheet approach utilizing the HLBV method. The HLBV method calculates each partner's share of income based on the change in net equity the partner can legally claim in a HLBV at the end of the period compared to the beginning of the period. See "Variable Interest Entities" herein and Note 7 for additional information.

The traditional electric operating companies, Southern Power, certain subsidiaries of Southern Company Gas, and certain other subsidiaries are subject to regulation by the FERC, and the traditional electric operating companies and the natural gas distribution utilities are also subject to regulation by their respective state PSCs or other applicable state regulatory agencies. As such, the respective financial statements of the applicable Registrants reflect the effects of rate regulation in accordance with GAAP and comply with the accounting policies and practices prescribed by relevant state PSCs or other applicable state regulatory agencies.

The preparation of financial statements in conformity with GAAP requires the use of estimates, and the actual results may differ from those estimates. Certain prior years' data presented in the financial statements have been reclassified to conform to the current year presentation. These reclassifications had no impact on the Registrants' results of operations, financial position, or cash flows.

At December 31, 2020 and/or 2019, Southern Company, Southern Power, and Southern Company Gas each had assets and liabilities held for sale on their balance sheets. Unless otherwise noted, the disclosures herein related to specific asset and liability balances at December 31, 2020 and 2019 exclude assets and liabilities held for sale. See Note 15 under "Assets Held for Sale" for additional information including major classes of assets and liabilities classified as held for sale by Southern Company, Southern Power, and Southern Company Gas.

Recently Adopted Accounting Standards

Effective January 1, 2019, the Registrants adopted ASU No. 2016–02, *Leases (Topic 842)* (ASU 2016–02). ASU 2016–02 required lessees to recognize on the balance sheet a lease liability and a right-of-use asset for all leases. ASU 2016–02 also changed the recognition, measurement, and presentation of expense associated with leases and provided clarification regarding the identification of certain components of contracts that would represent a lease. Lessor accounting was relatively unchanged and there was no change to the accounting for existing leveraged leases. See Note 9 for additional information and related disclosures.

Affiliate Transactions

The traditional electric operating companies, Southern Power, and Southern Company Gas have agreements with SCS under which certain of the following services are rendered to them at direct or allocated cost: general executive and advisory, general and design engineering, operations, purchasing, accounting, finance, treasury, legal, tax, information technology, marketing, auditing, insurance and pension administration, human resources, systems and procedures, digital wireless communications, cellular tower space, and other services with respect to business and operations, construction management, and Southern Company power pool transactions. These costs are primarily included in other operations and maintenance expenses or capitalized to property, plant, and equipment. Costs for these services from SCS in 2020, 2019, and 2018 were as follows:

	Alabama Power	Georgia Power	Mississippi Power	Southern Power	Southern Company Gas
			(in millions)		
2020	\$478	\$639	\$149	\$87	\$237
2019	527	704	118	90	183
2018	508	653	104	98	194

Alabama Power and Georgia Power also have agreements with Southern Nuclear under which Southern Nuclear renders the following nuclear-related services at cost: general executive and advisory services; general operations, management, and technical services; administrative services including procurement, accounting, employee relations, systems, and procedures services; strategic planning and budgeting services; other services with respect to business and operations; and, for Georgia Power, construction management. These costs are primarily included in other operations and maintenance expenses or capitalized to property, plant, and equipment. Costs for these services in 2020, 2019, and 2018 amounted to \$262 million, \$256 million, and \$247 million, respectively, for Alabama Power and \$883 million, \$760 million, and \$780 million, respectively, for Georgia Power. See Note 2 under "Georgia Power – Nuclear Construction" for additional information regarding Southern Nuclear's construction management of Plant Vogtle Units 3 and 4 for Georgia Power.

Cost allocation methodologies used by SCS and Southern Nuclear prior to the repeal of the Public Utility Holding Company Act of 1935, as amended, were approved by the SEC. Subsequently, additional cost allocation methodologies have been reported to the FERC and management believes they are reasonable. The FERC permits services to be rendered at cost by system service companies.

Alabama Power's and Georgia Power's power purchases from affiliates through the Southern Company power pool are included in purchased power, affiliates on their respective statements of income. Mississippi Power's and Southern Power's power purchases from affiliates through the Southern Company power pool are included in purchased power on their respective statements of income and were as follows:

	Mississippi Power	Southern Power
	(in millions)	
2020	\$ 4	\$ 8
2019	3	14
2018	\$15	41

Notes to Financial Statements

Georgia Power has entered into several PPAs with Southern Power for capacity and energy. Georgia Power’s total expenses associated with these PPAs were \$141 million, \$177 million, and \$216 million in 2020, 2019, and 2018, respectively. Southern Power’s total revenues from all PPAs with Georgia Power, included in wholesale revenue affiliates on Southern Power’s consolidated statements of income, were \$139 million, \$174 million, and \$215 million for 2020, 2019, and 2018, respectively. Included within these revenues were affiliate PPAs accounted for as operating leases, which totaled \$115 million, \$116 million, and \$65 million for 2020, 2019, and 2018, respectively. See Note 9 for additional information.

SCS (as agent for Alabama Power, Georgia Power, and Southern Power) and Southern Company Gas have long-term interstate natural gas transportation agreements with SNG that are governed by the terms and conditions of SNG’s natural gas tariff and are subject to FERC regulation. See Note 7 under “Southern Company Gas – Equity Method Investments” for additional information. Transportation costs under these agreements in 2020, 2019, and 2018 were as follows:

	Alabama Power	Georgia Power	Southern Power	Southern Company Gas
		<i>(in millions)</i>		
2020	\$15	\$108	\$29	\$29
2019	17	99	28	31
2018	8	101	25	32

In 2018, SNG purchased the natural gas lateral pipeline serving Plant McDonough Units 4 through 6 from Georgia Power at net book value, as approved by the Georgia PSC. In January 2020, SNG paid Georgia Power \$142 million, which included \$71 million contributed to SNG by Southern Company Gas for its proportionate share. During the interim period, Georgia Power received a discounted shipping rate to reflect the deferred consideration and SNG constructed an extension to the pipeline.

SCS, as agent for the traditional electric operating companies and Southern Power, has agreements with certain subsidiaries of Southern Company Gas to purchase natural gas. Natural gas purchases made under these agreements were immaterial for Alabama Power and Mississippi Power and as follows for Georgia Power and Southern Power in 2020, 2019, and 2018:

	Georgia Power	Southern Power
	<i>(in millions)</i>	
2020	\$—	\$ 26
2019	4	64
2018	21	119

Alabama Power and Mississippi Power jointly own Plant Greene County. The companies have an agreement under which Alabama Power operates Plant Greene County and Mississippi Power reimburses Alabama Power for its proportionate share of non-fuel operations and maintenance expenses, which totaled \$9 million, \$9 million, and \$8 million in 2020, 2019, and 2018, respectively. See Note 5 under “Joint Ownership Agreements” for additional information.

The traditional electric operating companies each have agreements with Gulf Power. Alabama Power previously made transmission system upgrades to ensure firm delivery of energy under a non-affiliate PPA from the Central Alabama Generating Station, and, under a related tariff, received \$11 million from Gulf Power in 2018. Gulf Power owns a 25% portion of Plant Scherer Unit 3. Georgia Power operates Plant Scherer Unit 3 and Gulf Power reimburses Georgia Power for its 25% proportionate share of the related non-fuel expenses, which totaled \$8 million in 2018. Gulf Power also owns a 50% portion of Plant Daniel Units 1 and 2. Mississippi Power operates Plant Daniel and Gulf Power reimburses Mississippi Power for its proportionate share of all associated non-fuel operations and maintenance expenses, which totaled \$31 million in 2018. See Note 5 under “Joint Ownership Agreements” and Note 15 under “Southern Company” and “Alabama Power” for additional information.

Alabama Power and Georgia Power each have agreements with PowerSecure for equipment purchases and/or services related to utility infrastructure construction, distributed energy, and energy efficiency projects. Alabama Power’s costs for these services were immaterial for 2020 and totaled \$7 million and \$24 million in 2019 and 2018, respectively. Georgia Power’s costs for these equipment purchases and services totaled approximately \$11 million in 2020 and were immaterial for the other periods presented.

See Note 7 under “SEGCO” for information regarding Alabama Power’s and Georgia Power’s equity method investment in SEGCO and related affiliate purchased power costs, as well as Alabama Power’s gas pipeline ownership agreement with SEGCO.

Notes to Financial Statements

Southern Power has several agreements with SCS for transmission services, which are billed to Southern Power based on the Southern Company Open Access Transmission Tariff as filed with the FERC. Transmission services purchased by Southern Power from SCS totaled \$15 million, \$15 million, and \$12 million for 2020, 2019, and 2018, respectively, and were charged to other operations and maintenance expenses in Southern Power’s consolidated statements of income.

The traditional electric operating companies and Southern Power may jointly enter into various types of wholesale energy, natural gas, and certain other contracts, either directly or through SCS as agent. Each participating company may be jointly and severally liable for the obligations incurred under these agreements. See Note 14 under “Contingent Features” for additional information. Southern Power and the traditional electric operating companies generally settle amounts related to the above transactions on a monthly basis in the month following the performance of such services or the purchase or sale of electricity. See “Revenues – Southern Power” herein for additional information.

The traditional electric operating companies, Southern Power, and Southern Company Gas provide incidental services to and receive such services from other Southern Company subsidiaries which are generally minor in duration and amount. Except as described herein, the traditional electric operating companies, Southern Power, and Southern Company Gas neither provided nor received any material services to or from affiliates in any year presented.

Regulatory Assets and Liabilities

The traditional electric operating companies and the natural gas distribution utilities are subject to accounting requirements for the effects of rate regulation. Regulatory assets represent probable future revenues associated with certain costs that are expected to be recovered from customers through the ratemaking process. Regulatory liabilities represent costs recovered that are expected to be incurred in the future or probable future reductions in revenues associated with amounts that are expected to be credited to customers through the ratemaking process.

In the event that a portion of a traditional electric operating company’s or a natural gas distribution utility’s operations is no longer subject to applicable accounting rules for rate regulation, such company would be required to write off to income or reclassify to AOCI related regulatory assets and liabilities that are not specifically recoverable through regulated rates. In addition, the traditional electric operating company or the natural gas distribution utility would be required to determine if any impairment to other assets, including plant, exists and write down the assets, if impaired, to their fair values. All regulatory assets and liabilities are to be reflected in rates. See Note 2 for additional information including details of regulatory assets and liabilities reflected in the balance sheets for Southern Company, the traditional electric operating companies, and Southern Company Gas.

Revenues

The Registrants generate revenues from a variety of sources which are accounted for under various revenue accounting guidance, including revenue from contracts with customers, lease, derivative, and regulatory accounting. See Notes 4, 9, and 14 for additional information.

Traditional Electric Operating Companies

The majority of the revenues of the traditional electric operating companies are generated from contracts with retail electric customers. These revenues, generated from the integrated service to deliver electricity when and if called upon by the customer, are recognized as a single performance obligation satisfied over time, at a tariff rate, and as electricity is delivered to the customer during the month. Unbilled revenues related to retail sales are accrued at the end of each fiscal period. Retail rates may include provisions to adjust revenues for fluctuations in fuel costs, fuel hedging, the energy component of purchased power costs, and certain other costs. Revenues are adjusted for differences between these actual costs and amounts billed in current regulated rates. Under or over recovered regulatory clause revenues are recorded in the balance sheets and are recovered from or returned to customers, respectively, through adjustments to the billing factors. See Note 2 for additional information regarding regulatory matters of the traditional electric operating companies.

Wholesale capacity revenues from PPAs are recognized in amounts billable under the contract terms. Energy and other revenues are generally recognized as services are provided. The contracts for capacity and energy in a wholesale PPA have multiple performance obligations where the contract’s total transaction price is allocated to each performance obligation based on the standalone selling price. The standalone selling price is primarily determined by the price charged to customers for the specific goods or services transferred with the performance obligations. Generally, the traditional electric operating companies recognize revenue as the performance obligations are satisfied over time as electricity is delivered to the customer or as generation capacity is available to the customer.

Notes to Financial Statements

For both retail and wholesale revenues, the traditional electric operating companies have elected to recognize revenue for their sales of electricity and capacity using the invoice practical expedient as they generally have a right to consideration in an amount that corresponds directly with the value to the customer of the performance completed to date and that may be invoiced. Payment for goods and services rendered is typically due in the subsequent month following satisfaction of the Registrants’ performance obligation.

Southern Power

Southern Power sells capacity and energy at rates specified under contractual terms in long-term PPAs. These PPAs are accounted for as operating leases, non-derivatives, or normal sale derivatives. Capacity revenues from PPAs classified as operating leases are recognized on a straight-line basis over the term of the agreement. Energy revenues are recognized in the period the energy is delivered.

Southern Power’s non-lease contracts commonly include capacity and energy which are considered separate performance obligations. In these contracts, the total transaction price is allocated to each performance obligation based on the standalone selling price. The standalone selling price is primarily determined by the price charged to customers for the specific goods or services transferred with the performance obligations. Generally, Southern Power recognizes revenue as the performance obligations are satisfied over time, as electricity is delivered to the customer or as generation capacity is made available to the customer.

Southern Power generally has a right to consideration in an amount that corresponds directly with the value to the customer of the performance completed to date and may recognize revenue in the amount to which the entity has a right to invoice. Payment for goods and services rendered is typically due in the subsequent month following satisfaction of Southern Power’s performance obligation.

When multiple contracts exist with the same counterparty, the revenues from each contract are accounted for as separate arrangements.

Southern Power may also enter into contracts to sell short-term capacity in the wholesale electricity markets. These sales are generally classified as mark-to-market derivatives and net unrealized gains and losses on such contracts are recorded in wholesale revenues. See Note 14 and “Financial Instruments” herein for additional information.

Southern Company Gas

Gas Distribution Operations

Southern Company Gas records revenues when goods or services are provided to customers. Those revenues are based on rates approved by the state regulatory agencies of the natural gas distribution utilities. Atlanta Gas Light operates in a deregulated natural gas market whereby Marketers, rather than a traditional utility, sell natural gas to end-use customers in Georgia and handle customer billing functions. As required by the Georgia PSC, Atlanta Gas Light bills Marketers in equal monthly installments for each residential, commercial, and industrial end-use customer’s distribution costs as well as for capacity costs utilizing a seasonal rate design for the calculation of each residential end-use customer’s annual straight-fixed-variable charge, which reflects the historic volumetric usage pattern for the entire residential class.

The majority of the revenues of Southern Company Gas are generated from contracts with natural gas distribution customers. Revenues from this integrated service to deliver gas when and if called upon by the customer are recognized as a single performance obligation satisfied over time and are recognized at a tariff rate as gas is delivered to the customer during the month.

The standalone selling price is primarily determined by the price charged to customers for the specific goods or services transferred with the performance obligations. Generally, Southern Company Gas recognizes revenue as the performance obligations are satisfied over time as natural gas is delivered to the customer. The performance obligations related to wholesale gas services are satisfied, and revenue is recognized, at a point in time when natural gas is delivered to the customer.

Southern Company Gas has elected to recognize revenue for sales of gas using the invoice practical expedient as it generally has a right to consideration in an amount that corresponds directly with the value to the customer of the performance completed to date and that may be invoiced. Payment for goods and services rendered is typically due in the subsequent month following satisfaction of Southern Company Gas’ performance obligation.

With the exception of Atlanta Gas Light, the natural gas distribution utilities have rate structures that include volumetric rate designs that allow the opportunity to recover certain costs based on gas usage. Revenues from sales and transportation services are recognized in the same period in which the related volumes are delivered to customers. Revenues from residential and certain commercial and industrial customers are recognized on the basis of scheduled meter readings. Additionally, unbilled revenues are recognized for estimated deliveries of gas not yet billed to these customers, from the last bill date to the end of the accounting period. For other commercial and industrial customers and for all wholesale customers, revenues are based on actual deliveries through the end of the period.

Notes to Financial Statements

The tariffs for several of the natural gas distribution utilities include provisions which allow for the recognition of certain revenues prior to the time such revenues are billed to customers. These provisions are referred to as alternative revenue programs and provide for the recognition of certain revenues prior to billing, as long as the amounts recognized will be collected from customers within 24 months of recognition. These programs are as follows:

- *Weather normalization adjustments* – reduce customer bills when winter weather is colder than normal and increase customer bills when weather is warmer than normal and are included in the tariffs for Virginia Natural Gas, Chattanooga Gas, and, prior to its sale, Elizabethtown Gas;
- *Revenue normalization mechanisms* – mitigate the impact of conservation and declining customer usage and are contained in the tariffs for Virginia Natural Gas, Chattanooga Gas, Nicor Gas (effective November 1, 2019), and, prior to its sale, Elkton Gas; and
- *Revenue true-up adjustment* – included within the provisions of the GRAM program in which Atlanta Gas Light participates as a short-term alternative to formal rate case filings, the revenue true-up feature provides for a positive (or negative) adjustment to record revenue in the amount of any variance to budgeted revenues, which are submitted and approved annually as a requirement of GRAM. Such adjustments are reflected in customer billings in a subsequent program year.

Wholesale Gas Services

Southern Company Gas nets revenues from energy and risk management activities with the associated costs. Profits from sales between segments are eliminated and are recognized as goods or services sold to end-use customers. Southern Company Gas records transactions that qualify as derivatives at fair value with changes in fair value recognized in earnings in the period of change and characterized as unrealized gains or losses. Gains and losses on derivatives held for energy trading purposes are presented on a net basis in revenue.

Gas Marketing Services

Southern Company Gas recognizes revenues from natural gas sales and transportation services in the same period in which the related volumes are delivered to customers and recognizes sales revenues from residential and certain commercial and industrial customers on the basis of scheduled meter readings. Southern Company Gas also recognizes unbilled revenues for estimated deliveries of gas not yet billed to these customers from the most recent meter reading date to the end of the accounting period. For other commercial and industrial customers and for all wholesale customers, revenues are based on actual deliveries during the period.

Southern Company Gas recognizes revenues on 12-month utility-bill management contracts as the lesser of cumulative earned or cumulative billed amounts.

Concentration of Credit Risk

Southern Company Gas’ wholesale gas services business has a concentration of credit risk for services it provides to its counterparties. This credit risk is generally concentrated in 20 of its counterparties and is measured by 30-day receivable exposure plus forward exposure. Counterparty credit risk is evaluated using a S&P equivalent credit rating, which is determined by a process of converting the lower of the S&P or Moody’s rating to an internal rating ranging from 9 to 1, with 9 being equivalent to AAA/Aaa by S&P and Moody’s, respectively, and 1 being equivalent to D/Default by S&P and Moody’s, respectively. A counterparty that does not have an external rating is assigned an internal rating based on the strength of its financial ratios. As of December 31, 2020, the top 20 counterparties represented 58%, or \$234 million, of the total counterparty exposure and had a weighted average S&P equivalent rating of A-.

Concentration of credit risk occurs at Atlanta Gas Light for amounts billed for services and other costs to its customers, which consist of 16 Marketers in Georgia (including SouthStar). The credit risk exposure to the Marketers varies seasonally, with the lowest exposure in the non-peak summer months and the highest exposure in the peak winter months. Marketers are responsible for the retail sale of natural gas to end-use customers in Georgia. The functions of the retail sale of gas include the purchase and sale of natural gas, customer service, billings, and collections. The provisions of Atlanta Gas Light’s tariff allow Atlanta Gas Light to obtain credit security support in an amount equal to a minimum of two times a Marketer’s highest month’s estimated bill from Atlanta Gas Light.

Concentration of Revenue

Southern Company, Alabama Power, Georgia Power, Mississippi Power (with the exception of its full requirements cost-based MRA electric tariffs described below), and Southern Company Gas each have a diversified base of customers and no single customer or industry comprises 10% or more of each company’s revenues.

Mississippi Power provides service under long-term contracts with rural electric cooperative associations and a municipality located in southeastern Mississippi under full requirements cost-based MRA electric tariffs, which are subject to regulation by the FERC. The contracts with these wholesale customers represented 15.3% of Mississippi Power’s total operating revenues in 2020 and are generally subject to 10-year rolling cancellation notices. Historically, these wholesale customers have acted as a group and any changes in contractual relationships for one customer are likely to be followed by the other wholesale customers.

Notes to Financial Statements

Significant portions of Southern Power’s revenues have been derived from certain customers pursuant to PPAs. The following table shows the percentage of total revenues for Southern Power’s top three customers for each of the years presented:

	2020	2019	2018
Southern California Edison	9.4%	6.8%	6.2%
Georgia Power	8.0%	9.0%	9.8%
Duke Energy Corporation	6.7%	N/A	6.8%
Morgan Stanley Capital Group	N/A	4.9%	N/A

Fuel Costs

Fuel costs for the traditional electric operating companies and Southern Power are expensed as the fuel is used. Fuel expense generally includes fuel transportation costs and the cost of purchased emissions allowances as they are used. For Alabama Power and Georgia Power, fuel expense also includes the amortization of the cost of nuclear fuel. For the traditional electric operating companies, fuel costs also include gains and/or losses from fuel-hedging programs as approved by their respective state PSCs.

Cost of Natural Gas

Excluding Atlanta Gas Light, which does not sell natural gas to end-use customers, Southern Company Gas charges its utility customers for natural gas consumed using natural gas cost recovery mechanisms set by the applicable state regulatory agencies. Under these mechanisms, all prudently-incurred natural gas costs are passed through to customers without markup, subject to regulatory review. Southern Company Gas defers or accrues the difference between the actual cost of natural gas and the amount of commodity revenue earned in a given period such that no operating income is recognized related to these costs. The deferred or accrued amount is either billed or refunded to customers prospectively through adjustments to the commodity rate. Deferred and accrued natural gas costs are included in the balance sheets as regulatory assets and regulatory liabilities, respectively.

Southern Company Gas’ gas marketing services’ customers are charged for actual or estimated natural gas consumed. Within cost of natural gas, Southern Company Gas also includes costs of lost and unaccounted for gas, adjustments to reduce the value of inventories to market value, and gains and losses associated with certain derivatives.

Income Taxes

The Registrants use the liability method of accounting for deferred income taxes and provide deferred income taxes for all significant income tax temporary differences. In accordance with regulatory requirements, deferred federal ITCs for the traditional electric operating companies are deferred and amortized over the average life of the related property, with such amortization normally applied as a credit to reduce depreciation and amortization in the statements of income. Southern Power’s and the natural gas distribution utilities’ deferred federal ITCs, as well as certain state ITCs for Nicor Gas, are deferred and amortized to income tax expense over the life of the respective asset.

Under current tax law, certain projects at Southern Power related to the construction of renewable facilities are eligible for federal ITCs. Southern Power estimates eligible costs which, as they relate to acquisitions, may not be finalized until the allocation of the purchase price to assets has been finalized. Southern Power applies the deferred method to ITCs, whereby the ITCs are recorded as a deferred credit and amortized to income tax expense over the life of the respective asset. Furthermore, the tax basis of the asset is reduced by 50% of the ITCs received, resulting in a net deferred tax asset. Southern Power has elected to recognize the tax benefit of this basis difference as a reduction to income tax expense in the year in which the plant reaches commercial operation. State ITCs are recognized as an income tax benefit in the period in which the credits are generated. In addition, certain projects are eligible for federal and state PTCs, which are recognized as an income tax benefit based on KWH production.

Federal ITCs and PTCs, as well as state ITCs and other state tax credits available to reduce income taxes payable, were not fully utilized in 2020 and will be carried forward and utilized in future years. In addition, Southern Company is expected to have various state net operating loss (NOL) carryforwards for certain of its subsidiaries, including Mississippi Power and Southern Power, which would result in income tax benefits in the future, if utilized. See Note 10 under “Current and Deferred Income Taxes – Tax Credit Carryforwards” and “ – Net Operating Loss Carryforwards” for additional information.

The Registrants recognize tax positions that are “more likely than not” of being sustained upon examination by the appropriate taxing authorities. See Note 10 under “Unrecognized Tax Benefits” for additional information.

Notes to Financial Statements

Other Taxes

Taxes imposed on and collected from customers on behalf of governmental agencies are presented net on the Registrants’ statements of income and are excluded from the transaction price in determining the revenue related to contracts with a customer.

Southern Company Gas is taxed on its gas revenues by various governmental authorities, but is allowed to recover these taxes from its customers. Revenue taxes imposed on the natural gas distribution utilities are recorded at the amount charged to customers, which may include a small administrative fee, as operating revenues, and the related taxes imposed on Southern Company Gas are recorded as operating expenses on the statements of income. Revenue taxes included in operating expenses were \$104 million, \$114 million, and \$111 million in 2020, 2019, and 2018, respectively.

Allowance for Funds Used During Construction and Interest Capitalized

The traditional electric operating companies and the natural gas distribution utilities record AFUDC, which represents the estimated debt and equity costs of capital funds that are necessary to finance the construction of new regulated facilities. While cash is not realized currently, AFUDC increases the revenue requirement and is recovered over the service life of the asset through a higher rate base and higher depreciation. The equity component of AFUDC is not taxable.

Interest related to financing the construction of new facilities at Southern Power and new facilities not included in the traditional electric operating companies’ and Southern Company Gas’ regulated rates is capitalized in accordance with standard interest capitalization requirements.

Total AFUDC and interest capitalized for the Registrants in 2020, 2019, and 2018 was as follows:

	Southern Company	Alabama Power	Georgia Power(*)	Mississippi Power	Southern Power	Southern Company Gas
			(in millions)			
2020	\$ 230	\$ 61	\$ 138	\$ 1	\$ 11	\$ 18
2019	202	71	103	—	15	13
2018	210	84	94	—	17	14

(*) See Note 2 under “Georgia Power – Nuclear Construction” for information on the inclusion of a portion of construction costs related to Plant Vogtle Units 3 and 4 in Georgia Power’s rate base.

The average AFUDC composite rates for 2020, 2019, and 2018 for the traditional electric operating companies and the natural gas distribution utilities were as follows:

	2020	2019	2018
Alabama Power	8.1%	8.4%	8.3%
Georgia Power(*)	6.9%	6.9%	7.3%
Mississippi Power	5.4%	7.3%	3.3%
Southern Company Gas:			
Atlanta Gas Light	7.7%	7.8%	7.9%
Chattanooga Gas	7.1%	7.1%	7.4%
Nicor Gas	0.7%	2.3%	2.1%

(*) Excludes AFUDC related to the construction of Plant Vogtle Units 3 and 4. See Note 2 under “Georgia Power – Nuclear Construction” for additional information.

Impairment of Long-Lived Assets

The Registrants evaluate long-lived assets and finite-lived intangible assets for impairment when events or changes in circumstances indicate that the carrying value of such assets may not be recoverable. The determination of whether an impairment has occurred is based on either a specific regulatory disallowance, a sales transaction price that is less than the asset group’s carrying value, or an estimate of undiscounted future cash flows attributable to the asset group, as compared with the carrying value of the assets. If an impairment has occurred, the amount of the impairment recognized is determined by either the amount of regulatory disallowance or by estimating the fair value of the assets and recording a loss if the carrying value is greater than the fair value. For assets identified as held for sale, the carrying value is compared to the estimated fair value less the cost to sell in order to determine if an impairment loss is required. Until the assets are disposed of, their estimated fair value is re-evaluated when circumstances or events change. See Note 3 under “Other Matters – Southern Company” and “ – Southern Company Gas” and Note 15 under “Southern Company,” “Southern Power,” and “Southern Company Gas – Sale of Pivotal LNG and Atlantic Coast Pipeline” for information regarding impairment charges recorded during the periods presented.

Notes to Financial Statements

Goodwill and Other Intangible Assets and Liabilities

Southern Power’s intangible assets consist primarily of certain PPAs acquired, which are amortized over the term of the respective PPA. Southern Company Gas’ goodwill and other intangible assets and liabilities primarily relate to its 2016 acquisition by Southern Company. In addition to these items, Southern Company’s goodwill and other intangible assets also relate to its 2016 acquisition of PowerSecure.

Goodwill is not amortized, but is subject to an annual impairment test during the fourth quarter of each year, or more frequently if impairment indicators arise, as discussed below. Southern Company and Southern Company Gas each evaluated its goodwill in the fourth quarter 2020 and determined no impairment was required. If the impacts of the COVID-19 pandemic and related responses, including supply chain disruptions, reduced labor availability and/or productivity, and reduced economic activity, become significant to the operating results of PowerSecure and its businesses, a portion of its \$263 million of goodwill may become impaired. The ultimate outcome of this matter cannot be determined at this time.

A goodwill impairment charge of \$32 million was recorded in the second quarter 2019 in contemplation of the July 2019 sale of PowerSecure’s utility infrastructure services business. In the third quarter 2019, impairment charges of \$2 million and \$3 million were recorded to goodwill and other intangible assets, net, respectively, in contemplation of the December 2019 sale of PowerSecure’s lighting business. See Note 15 under “Southern Company” for additional information.

At December 31, 2020 and 2019, goodwill was as follows:

	Goodwill
	(in millions)
Southern Company	\$5,280
Southern Company Gas:	
Gas distribution operations	\$4,034
Gas marketing services	981
Southern Company Gas total	\$5,015

Notes to Financial Statements

At December 31, 2020 and 2019, other intangible assets were as follows:

	At December 31, 2020			At December 31, 2019		
	Gross Carrying Amount	Accumulated Amortization	Other Intangible Assets, Net	Gross Carrying Amount	Accumulated Amortization	Other Intangible Assets, Net
	(in millions)			(in millions)		
Southern Company						
Other intangible assets subject to amortization:						
Customer relationships	\$ 212	\$ (135)	\$ 77	\$212	\$(116)	\$ 96
Trade names	64	(31)	33	64	(25)	39
Storage and transportation contracts	64	(64)	—	64	(62)	2
PPA fair value adjustments	390	(89)	301	390	(69)	321
Other	10	(9)	1	11	(8)	3
Total other intangible assets subject to amortization	\$ 740	\$ (328)	\$412	\$741	\$(280)	\$461
Other intangible assets not subject to amortization:						
Federal Communications Commission licenses	75	—	75	75	—	75
Total other intangible assets	\$ 815	\$ (328)	\$487	\$816	\$(280)	\$536
Southern Power						
Other intangible assets subject to amortization:						
PPA fair value adjustments	\$ 390	\$ (89)	\$301	\$390	\$ (69)	\$321
Southern Company Gas						
Other intangible assets subject to amortization:						
Gas marketing services						
Customer relationships	\$ 156	\$ (119)	\$ 37	\$156	\$(104)	\$ 52
Trade names	26	(12)	14	26	(10)	16
Wholesale gas services						
Storage and transportation contracts	64	(64)	—	64	(62)	2
Total other intangible assets subject to amortization	\$ 246	\$ (195)	\$ 51	\$246	\$(176)	\$ 70

Notes to Financial Statements

Amortization associated with other intangible assets in 2020, 2019, and 2018 was as follows:

	2020	2019	2018
		<i>(in millions)</i>	
Southern Company ^(a)	\$49	\$61	\$89
Southern Power ^(b)	20	19	25
Southern Company Gas:			
Gas marketing services	\$17	\$23	\$32
Wholesale gas services ^(b)	2	8	20
Southern Company Gas total	\$19	\$31	\$52

(a) Includes \$22 million, \$27 million, and \$45 million in 2020, 2019, and 2018, respectively, recorded as a reduction to operating revenues.
(b) Recorded as a reduction to operating revenues.

At December 31, 2020, the estimated amortization associated with other intangible assets for the next five years is as follows:

	2021	2022	2023	2024	2025
			<i>(in millions)</i>		
Southern Company	\$43	\$39	\$37	\$35	\$32
Southern Power	20	20	20	20	20
Southern Company Gas	14	11	9	7	6

Intangible liabilities of \$91 million recorded under acquisition accounting for transportation contracts at Southern Company Gas were fully amortized as of December 31, 2019.

Acquisition Accounting

At the time of an acquisition, management will assess whether acquired assets and activities meet the definition of a business. For acquisitions that meet the definition of a business, operating results from the date of acquisition are included in the acquiring entity's financial statements. The purchase price, including any contingent consideration, is allocated based on the fair value of the identifiable assets acquired and liabilities assumed (including any intangible assets). Assets acquired that do not meet the definition of a business are accounted for as an asset acquisition. The purchase price of each asset acquisition is allocated based on the relative fair value of assets acquired.

Determining the fair value of assets acquired and liabilities assumed requires management judgment and management may engage independent valuation experts to assist in this process. Fair values are determined by using market participant assumptions and typically include the timing and amounts of future cash flows, incurred construction costs, the nature of acquired contracts, discount rates, power market prices, and expected asset lives. Any due diligence or transition costs incurred for potential or successful acquisitions are expensed as incurred.

Historically, contingent consideration primarily relates to fixed amounts due to the seller once an acquired construction project is placed in service. For contingent consideration with variable payments, management fair values the arrangement with any changes recorded in the statements of income. See Note 13 for additional fair value information.

Development Costs

For Southern Power, development costs are capitalized once a project is probable of completion, primarily based on a review of its economics and operational feasibility, as well as the status of power off-take agreements and regulatory approvals, if applicable. Southern Power's capitalized development costs are included in CWIP on the balance sheets. All of Southern Power's development costs incurred prior to the determination that a project is probable of completion are expensed as incurred and included in other operations and maintenance expense in the statements of income. If it is determined that a project is no longer probable of completion, any of Southern Power's capitalized development costs are expensed and included in other operations and maintenance expense in the statements of income.

Notes to Financial Statements

Long-Term Service Agreements

The traditional electric operating companies and Southern Power have entered into LTSAs for the purpose of securing maintenance support for certain of their generating facilities. The LTSAs cover all planned inspections on the covered equipment, which generally includes the cost of all labor and materials. The LTSAs also obligate the counterparties to cover the costs of unplanned maintenance on the covered equipment subject to limits and scope specified in each contract.

Payments made under the LTSAs for the performance of any planned inspections or unplanned capital maintenance are recorded in the statements of cash flows as investing activities. Receipts of major parts into materials and supplies inventory prior to planned inspections are treated as noncash transactions in the statements of cash flows. Any payments made prior to the work being performed are recorded as prepayments in other current assets and noncurrent assets on the balance sheets. At the time work is performed, an appropriate amount is accrued for future payments or transferred from the prepayment and recorded as property, plant, and equipment or expensed.

Transmission Receivables/Prepayments

As a result of Southern Power's acquisition and construction of generating facilities, Southern Power has transmission receivables and/or prepayments representing the portion of interconnection network and transmission upgrades that will be reimbursed to Southern Power. Upon completion of the related project, transmission costs are generally reimbursed by the interconnection provider within a five-year period and the receivable/prepayments are reduced as payments or services are received.

Cash and Cash Equivalents

For purposes of the financial statements, temporary cash investments are considered cash equivalents. Temporary cash investments are securities with original maturities of 90 days or less.

Restricted Cash

At December 31, 2020 and 2019, Southern Company Gas had \$2 million and \$3 million, respectively, of restricted cash held as collateral for workers' compensation, life insurance, and long-term disability insurance, which is included in cash, cash equivalents, and restricted cash on the statements of cash flows.

Storm Damage Reserves

Each traditional electric operating company maintains a reserve to cover or is allowed to defer and recover the cost of damages from major storms to its transmission and distribution lines and, for Mississippi Power, the cost of uninsured damages to its generation facilities and other property. Alabama Power also has authority from the Alabama PSC to accrue certain additional amounts as circumstances warrant. Alabama Power recorded additional accruals of \$100 million and \$84 million in 2020 and 2019, respectively. In accordance with their respective state PSC orders, the traditional electric operating companies accrued the following amounts related to storm damage recovery in 2020, 2019, and 2018:

	Southern Company ^{(a)(b)}	Alabama Power ^(b)	Georgia Power	Mississippi Power
		<i>(in millions)</i>		
2020	\$326	\$112	\$213	\$1
2019	170	139	30	1
2018	74	16	30	1

(a) Includes accruals at Gulf Power of \$26.9 million in 2018. See Note 15 under "Southern Company" for information regarding the sale of Gulf Power.
(b) Includes \$39 million applied in 2019 to Alabama Power's NDR from its remaining excess deferred income tax regulatory liability balance in accordance with an Alabama PSC order.

See Note 2 under "Alabama Power – Rate NDR," "Georgia Power – Storm Damage Recovery," and "Mississippi Power – System Restoration Rider" for additional information regarding each company's storm damage reserve.

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Leveraged Leases

At December 31, 2020 and 2019, a subsidiary of Southern Holdings had four leveraged lease agreements, with original terms ranging up to 45 years, which relate to energy generation, distribution, and transportation assets, including two international projects. Southern Company receives federal income tax deductions for depreciation and amortization, as well as interest on long-term debt related to these investments. Southern Company reviews all important lease assumptions at least annually, or more frequently if events or changes in circumstances indicate that a change in assumptions has occurred or may occur. These assumptions include the effective tax rate, the residual value, the credit quality of the lessees, and the timing of expected tax cash flows. See Notes 3 and 15 under “Other Matters – Southern Company” and “Southern Company,” respectively, for additional information on the leveraged lease investments, including impairment charges and completed and planned sales.

Southern Company’s net investment in leveraged leases consists of the following at December 31:

	2020 ^(*)	2019
	<i>(in millions)</i>	
Net rentals receivable	\$ 734	\$1,410
Unearned income	(178)	(622)
Investment in leveraged leases	556	788
Deferred taxes from leveraged leases	(7)	(238)
Net investment in leveraged leases	\$ 549	\$ 550

(*) Excludes the investment classified as held for sale at December 31, 2020. See Note 15 under “Assets Held for Sale” for additional information.

The following table provides a summary of the components of income related to leveraged lease investments. Income was impacted in 2020 and 2019 by the impairment charges discussed in Note 3 under “Other Matters – Southern Company.”

	2020	2019	2018
	<i>(in millions)</i>		
Pretax leveraged lease income (loss)	\$(180)	\$11	\$25
Income tax benefit (expense)	98	—	(6)
Net leveraged lease income (loss)	\$ (82)	\$11	\$19

Materials and Supplies

Materials and supplies for the traditional electric operating companies generally includes the average cost of transmission, distribution, and generating plant materials. Materials and supplies for Southern Company Gas generally includes propane gas inventory, fleet fuel, and other materials and supplies. Materials and supplies for Southern Power generally includes the average cost of generating plant materials.

Materials are recorded to inventory when purchased and then expensed or capitalized to property, plant, and equipment, as appropriate, at weighted average cost when installed. In addition, certain major parts are recorded as inventory when acquired and then capitalized at cost when installed to property, plant, and equipment.

Fuel Inventory

Fuel inventory for the traditional electric operating companies includes the average cost of coal, natural gas, oil, transportation, and emissions allowances. Fuel inventory for Southern Power, which is included in other current assets, includes the average cost of oil, natural gas, and emissions allowances. Fuel is recorded to inventory when purchased and then expensed, at weighted average cost, as used. Emissions allowances granted by the EPA are included in inventory at zero cost. The traditional electric operating companies recover fuel expense through fuel cost recovery rates approved by each state PSC or, for wholesale rates, the FERC.

Natural Gas for Sale

With the exception of Nicor Gas, the natural gas distribution utilities record natural gas inventories on a WACOG basis. In Georgia’s deregulated, competitive environment, Marketers sell natural gas to firm end-use customers at market-based prices. On a monthly basis, Atlanta Gas Light assigns to Marketers the majority of the pipeline storage services that it has under contract, along with a corresponding amount of inventory. Atlanta Gas Light retains and manages a portion of its pipeline storage assets and related natural gas inventories for system balancing and to serve system demand.

Nicor Gas’ natural gas inventory is carried at cost on a LIFO basis. Inventory decrements occurring during the year that are restored prior to year end are charged to cost of natural gas at the estimated annual replacement cost. Inventory decrements that are not restored prior to year end are charged to cost of natural gas at the actual LIFO cost of the inventory layers liquidated. The cost of natural gas, including

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inventory costs, is recovered from customers under a purchased gas recovery mechanism adjusted for differences between actual costs and amounts billed; therefore, LIFO liquidations have no impact on Southern Company’s or Southern Company Gas’ net income. At December 31, 2020, the Nicor Gas LIFO inventory balance was \$178 million. Based on the average cost of gas purchased in December 2020, the estimated replacement cost of Nicor Gas’ inventory at December 31, 2020 was \$259 million.

Southern Company Gas’ gas marketing services, wholesale gas services, and all other segments record inventory at LOCOM, with cost determined on a WACOG basis. For these segments, Southern Company Gas evaluates the weighted average cost of its natural gas inventories against market prices to determine whether any declines in market prices below the WACOG are other than temporary. For any declines considered to be other than temporary, Southern Company Gas records LOCOM adjustments to cost of natural gas to reduce the value of its natural gas inventories to market value. LOCOM adjustments for wholesale gas services were \$1 million, \$21 million, and \$10 million during 2020, 2019, and 2018, respectively.

Energy Marketing Receivables and Payables

Southern Company Gas’ wholesale gas services provides services to retail gas marketers, wholesale gas marketers, utility companies, and industrial customers. These counterparties utilize netting agreements that enable wholesale gas services to net receivables and payables by counterparty upon settlement. Southern Company Gas’ wholesale gas services also nets across product lines and against cash collateral, provided the netting and cash collateral agreements include such provisions. While the amounts due from, or owed to, wholesale gas services’ counterparties are settled net, they are recorded on a gross basis in the balance sheets as energy marketing receivables and energy marketing payables.

Southern Company Gas’ wholesale gas services has trade and credit contracts that contain minimum credit rating requirements. These credit rating requirements typically give counterparties the right to suspend or terminate credit if Southern Company Gas’ credit ratings are downgraded to non-investment grade status. Under such circumstances, Southern Company Gas’ wholesale gas services would need to post collateral to continue transacting business with some of its counterparties. As of December 31, 2020 and 2019, the required collateral in the event of a credit rating downgrade was \$5 million and \$11 million, respectively.

Southern Company Gas’ wholesale gas services uses established credit policies to determine and monitor the creditworthiness of counterparties, including requirements to post collateral or other credit security, as well as the quality of pledged collateral. Collateral or credit security is most often in the form of cash or letters of credit from an investment-grade financial institution, but may also include cash or U.S. government securities held by a trustee. When more than one derivative transaction with the same counterparty is outstanding and a legally enforceable netting agreement exists with that counterparty, the “net” mark-to-market exposure represents a reasonable measure of Southern Company Gas’ credit risk with that counterparty. Southern Company Gas’ wholesale gas services also uses other netting agreements with certain counterparties with whom it conducts significant transactions.

See “Concentration of Credit Risk” herein for additional information.

Provision for Uncollectible Accounts

The customers of the traditional electric operating companies and the natural gas distribution utilities are billed monthly. For the majority of receivables, a provision for uncollectible accounts is established based on historical collection experience and other factors. For the remaining receivables, if the company is aware of a specific customer’s inability to pay, a provision for uncollectible accounts is recorded to reduce the receivable balance to the amount reasonably expected to be collected. If circumstances change, the estimate of the recoverability of accounts receivable could change as well. Circumstances that could affect this estimate include, but are not limited to, customer credit issues, customer deposits, and general economic conditions. Customers’ accounts are written off once they are deemed to be uncollectible. For all periods presented, uncollectible accounts averaged less than 1% of revenues for each Registrant.

Credit risk exposure at Nicor Gas is mitigated by a bad debt rider approved by the Illinois Commission. The bad debt rider provides for the recovery from (or refund to) customers of the difference between Nicor Gas’ actual bad debt experience on an annual basis and the benchmark bad debt expense used to establish its base rates for the respective year.

See Note 2 for information regarding recovery of incremental bad debt expense related to the COVID-19 pandemic at certain of the traditional electric operating companies and the natural gas distribution utilities.

Notes to Financial Statements

Financial Instruments

The traditional electric operating companies and Southern Power use derivative financial instruments to limit exposure to fluctuations in interest rates, the prices of certain fuel purchases, electricity purchases and sales, and occasionally foreign currency exchange rates. Southern Company Gas uses derivative financial instruments to limit exposure to fluctuations in natural gas prices, weather, interest rates, and commodity prices. All derivative financial instruments are recognized as either assets or liabilities on the balance sheets (included in “Other” or shown separately as “Risk Management Activities”) and are measured at fair value. See Note 13 for additional information regarding fair value. Substantially all of the traditional electric operating companies’ and Southern Power’s bulk energy purchases and sales contracts that meet the definition of a derivative are excluded from fair value accounting requirements because they qualify for the “normal” scope exception, and are accounted for under the accrual method. Derivative contracts that qualify as cash flow hedges of anticipated transactions or are recoverable through the traditional electric operating companies’ and the natural gas distribution utilities’ fuel-hedging programs result in the deferral of related gains and losses in AOCI or regulatory assets and liabilities, respectively, until the hedged transactions occur. Other derivative contracts that qualify as fair value hedges are marked to market through current period income and are recorded on a net basis in the statements of income. Cash flows from derivatives are classified on the statements of cash flows in the same category as the hedged item. See Note 14 for additional information regarding derivatives.

The Registrants offset fair value amounts recognized for multiple derivative instruments executed with the same counterparty under netting arrangements. The Registrants had no outstanding collateral repayment obligations or rights to reclaim collateral arising from derivative instruments recognized at December 31, 2020.

The Registrants are exposed to potential losses related to financial instruments in the event of counterparties’ nonperformance. The Registrants have established risk management policies and controls to determine and monitor the creditworthiness of counterparties in order to mitigate their exposure to counterparty credit risk.

Southern Company Gas

Southern Company Gas enters into weather derivative contracts as economic hedges of natural gas revenues in the event of warmer-than-normal weather in the Heating Season. Exchange-traded options are carried at fair value, with changes reflected in natural gas revenues. Non-exchange-traded options are accounted for using the intrinsic value method. Changes in the intrinsic value for non-exchange-traded contracts are also reflected in natural gas revenues in the statements of income.

Wholesale gas services purchases natural gas for storage when the current market price paid to buy and transport natural gas plus the cost to store and finance the natural gas is less than the market price that can be received in the future, resulting in positive net natural gas revenues. NYMEX futures and OTC contracts are used to sell natural gas at that future price to substantially protect the natural gas revenues that will ultimately be realized when the stored natural gas is sold. Southern Company Gas enters into transactions to secure transportation capacity between delivery points in order to serve its customers and various markets. NYMEX futures and OTC contracts are used to capture the price differential or spread between the locations served by the capacity in order to substantially protect the natural gas revenues that will ultimately be realized when the physical flow of natural gas between delivery points occurs. These contracts generally meet the definition of derivatives and are carried at fair value on the balance sheets, with changes in fair value recorded in natural gas revenues on the statements of income in the period of change. These contracts are not designated as hedges for accounting purposes.

The purchase, transportation, storage, and sale of natural gas are accounted for on a weighted average cost or accrual basis, as appropriate, rather than on the fair value basis utilized for the derivatives used to mitigate the natural gas price risk associated with the storage and transportation portfolio. Monthly demand charges are incurred for the contracted storage and transportation capacity and payments associated with asset management agreements, and these demand charges and payments are recognized on the statements of income in the period they are incurred. This difference in accounting methods can result in volatility in reported earnings, even though the economic margin is substantially unchanged from the dates the transactions were consummated.

Comprehensive Income

The objective of comprehensive income is to report a measure of all changes in common stock equity of an enterprise that result from transactions and other economic events of the period other than transactions with owners. Comprehensive income consists of net income attributable to the Registrant, changes in the fair value of qualifying cash flow hedges, and reclassifications for amounts included in net income. Comprehensive income also consists of certain changes in pension and other postretirement benefit plans for Southern Company, Southern Power, and Southern Company Gas.

Notes to Financial Statements

AOCI (loss) balances, net of tax effects, for Southern Company, Southern Power, and Southern Company Gas were as follows:

	Qualifying Hedges	Pension and Other Postretirement Benefit Plans	Accumulated Other Comprehensive Income (Loss)
(in millions)			
Southern Company			
Balance at December 31, 2019	\$(179)	\$(142)	\$(321)
Current period change	(30)	(45)	(75)
Balance at December 31, 2020 ^(*)	\$(209)	\$(187)	\$(395)
Southern Power			
Balance at December 31, 2019	\$ 11	\$ (37)	\$ (26)
Current period change	(32)	(10)	(42)
Balance at December 31, 2020 ^(*)	\$ (21)	\$ (47)	\$ (67)
Southern Company Gas			
Balance at December 31, 2019	\$ (6)	\$ 13	\$ 7
Current period change	(14)	(15)	(29)
Balance at December 31, 2020	\$ (20)	\$ (2)	\$ (22)

(*) May not add due to rounding.

Variable Interest Entities

The Registrants may hold ownership interests in a number of business ventures with varying ownership structures. Partnership interests and other variable interests are evaluated to determine if each entity is a VIE. The primary beneficiary of a VIE is required to consolidate the VIE when it has both the power to direct the activities of the VIE that most significantly impact the VIE’s economic performance and the obligation to absorb losses or the right to receive benefits from the VIE that could potentially be significant to the VIE. See Note 7 for additional information regarding VIEs.

Alabama Power has established a wholly-owned trust to issue preferred securities. See Note 8 under “Long-term Debt” for additional information. However, Alabama Power is not considered the primary beneficiary of the trust. Therefore, the investment in the trust is reflected as other investments, and the related loan from the trust is reflected as long-term debt in Alabama Power’s balance sheets.

Notes to Financial Statements

2. REGULATORY MATTERS

Regulatory Assets and Liabilities

Details of regulatory assets and (liabilities) reflected in the balance sheets at December 31, 2020 and 2019 are provided in the following tables:

	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Company Gas
	(in millions)				
At December 31, 2020					
AROs ^{(a)(s)}	\$ 5,147	\$ 1,470	\$ 3,457	\$ 212	\$ —
Retiree benefit plans ^{(b)(s)}	4,958	1,265	1,647	238	187
Remaining net book value of retired assets ^(c)	1,183	632	527	24	—
Deferred income tax charges ^(d)	801	235	531	32	—
Environmental remediation ^{(e)(s)}	310	—	41	—	269
Loss on reacquired debt ^(f)	304	47	248	6	3
Storm damage ^(g)	262	—	262	—	—
Vacation pay ^{(h)(s)}	207	80	104	10	13
Under recovered regulatory clause revenues ⁽ⁱ⁾	185	58	—	52	75
Regulatory clauses ⁽ⁱ⁾	142	142	—	—	—
Nuclear outage ^(k)	101	61	40	—	—
Long-term debt fair value adjustment ^(l)	92	—	—	—	92
Kemper County energy facility assets, net ^(m)	50	—	—	50	—
Plant Daniel Units 3 and 4 ⁽ⁿ⁾	32	—	—	32	—
Other regulatory assets ^(o)	205	52	68	4	81
Deferred income tax credits ^(d)	(6,016)	(2,016)	(2,805)	(320)	(847)
Other cost of removal obligations ^(a)	(1,999)	(335)	212	(194)	(1,649)
Over recovered regulatory clause revenues ⁽ⁱ⁾	(185)	(46)	(44)	—	(95)
Storm/property damage reserves ^(p)	(81)	(77)	—	(4)	—
Customer refunds ^(q)	(56)	(50)	(6)	—	—
Other regulatory liabilities ^(r)	(149)	(37)	(30)	(6)	(54)
Total regulatory assets (liabilities), net	\$ 5,493	\$ 1,481	\$ 4,252	\$ 136	\$(1,925)

At December 31, 2019

Retiree benefit plans ^{(b)(s)}	\$ 4,423	\$ 1,131	\$ 1,516	\$ 213	\$ 167
AROs ^{(a)(s)}	4,381	1,043	3,119	210	—
Remaining net book value of retired assets ^(c)	1,275	649	596	30	—
Deferred income tax charges ^(d)	803	245	523	33	—
Storm damage ^(g)	410	—	410	—	—
Environmental remediation ^{(e)(s)}	349	—	52	—	296
Loss on reacquired debt ^(f)	323	52	262	6	4
Vacation pay ^{(h)(s)}	186	72	93	9	11
Under recovered regulatory clause revenues ⁽ⁱ⁾	159	40	—	47	72
Regulatory clauses ⁽ⁱ⁾	142	142	—	—	—
Long-term debt fair value adjustment ^(l)	107	—	—	—	107
Nuclear outage ^(k)	105	78	27	—	—
Fuel-hedging (realized and unrealized) losses ^(t)	102	22	53	27	—
Kemper County energy facility assets, net ^(m)	61	—	—	61	—
Plant Daniel Units 3 and 4 ⁽ⁿ⁾	34	—	—	34	—
Other regulatory assets ^(o)	127	45	23	6	53
Deferred income tax credits ^(d)	(6,301)	(1,960)	(3,078)	(358)	(874)
Other cost of removal obligations ^(a)	(2,084)	(412)	156	(189)	(1,606)
Customer refunds ^(q)	(285)	(56)	(229)	—	—
Over recovered regulatory clause revenues ⁽ⁱ⁾	(205)	(112)	(10)	—	(82)
Storm/property damage reserves ^(p)	(204)	(150)	—	(55)	—
Other regulatory liabilities ^(r)	(70)	(19)	(6)	(10)	(22)
Total regulatory assets (liabilities), net	\$ 3,838	\$ 810	\$ 3,507	\$ 64	\$(1,874)

Notes to Financial Statements

Unless otherwise noted, the following recovery and amortization periods for these regulatory assets and (liabilities) have been approved by the respective state PSC or regulatory agency:

- (a) AROs and other cost of removal obligations generally are recorded over the related property lives, which may range up to 53 years for Alabama Power, 60 years for Georgia Power, 55 years for Mississippi Power, and 80 years for Southern Company Gas. AROs and cost of removal obligations will be settled and trued up following completion of the related activities. Effective January 1, 2020, Georgia Power is recovering CCR AROs, including past under recovered costs and estimated annual compliance costs, over three-year periods ending December 31, 2022, 2023, and 2024 through its Environmental Compliance Cost Recovery (ECCR) tariff, as discussed further under “Georgia Power – Rate Plans” herein. See Note 6 for additional information on AROs.
- (b) Recovered and amortized over the average remaining service period, which may range up to 13 years for Alabama Power, 13 years for Georgia Power, 14 years for Mississippi Power, and 13 years for Southern Company Gas. Southern Company’s balances also include amounts at SCS and Southern Nuclear that are allocated to the applicable regulated utilities. See Note 11 for additional information.
- (c) Alabama Power: Primarily represents the net book value of Plant Gorgas Units 8, 9, and 10 (\$585 million at December 31, 2020). Being amortized over remaining periods not exceeding 17 years (through 2037).
Georgia Power: Net book values of Plant Hammond Units 1 through 4 and Plant Branch Units 2 through 4 (totaling \$503 million at December 31, 2020) are being amortized over remaining periods of between two and 15 years (between 2022 and 2035) and the net book values of Plant McIntosh Unit 1 and Plant Mitchell Unit 3 (totaling \$24 million at December 31, 2020) are being amortized through 2022.
Mississippi Power: Represents net book value associated with Plant Watson and Plant Greene County. The retail and wholesale portions totaling approximately \$11 million and \$13 million at December 31, 2020, respectively, are being amortized over a four-year period through 2024 and a 10-year period through 2030, respectively. See “Mississippi Power – Environmental Compliance Overview Plan” herein for additional information.
- (d) Deferred income tax charges are recovered and deferred income tax credits are amortized over the related property lives, which may range up to 53 years for Alabama Power, 60 years for Georgia Power, 55 years for Mississippi Power, and 80 years for Southern Company Gas. See Note 10 for additional information. Included in the deferred income tax charges are amounts (\$8 million, \$9 million, and \$1 million for Alabama Power, Georgia Power, and Mississippi Power, respectively, at December 31, 2020) for the retiree Medicare drug subsidy, which are being recovered and amortized through 2027, 2022, and 2024 for Alabama Power, Georgia Power, and Mississippi Power, respectively. As a result of the Tax Reform Legislation, these accounts include certain deferred income tax assets and liabilities not subject to normalization, as described further below:
Alabama Power: Related amounts are being recovered and amortized ratably over the related property lives.
Georgia Power: Related amounts at December 31, 2020 include \$145 million of deferred income tax assets related to CWIP for Plant Vogtle Units 3 and 4 and approximately \$440 million of deferred income tax liabilities. The recovery of deferred income tax assets related to CWIP for Plant Vogtle Units 3 and 4 is expected to be determined in a future regulatory proceeding. Effective January 1, 2020, the deferred income tax liabilities are being amortized through 2022.
Mississippi Power: Related amounts at December 31, 2020 include \$74 million of deferred income tax liabilities, consisting of the retail portion of \$66 million being amortized over three years (through 2023) and the wholesale portion of \$9 million being amortized over two years (through 2021). See “Mississippi Power – 2019 Base Rate Case” and “ – Municipal and Rural Associations Tariff” herein for additional information.
Southern Company Gas: Related amounts at December 31, 2020 include \$8 million of deferred income tax liabilities, which are being amortized through 2024. See “Southern Company Gas – Rate Proceedings” herein for additional information.
- (e) Georgia Power is recovering \$12 million annually for environmental remediation. Southern Company Gas’ costs are recovered through environmental cost recovery mechanisms when the remediation work is performed. See Note 3 under “Environmental Remediation” for additional information.
- (f) Recovered over either the remaining life of the original issue or, if refinanced, over the remaining life of the new issue. At December 31, 2020, the remaining amortization periods do not exceed 28 years for Alabama Power, 32 years for Georgia Power, eight years for Mississippi Power, and seven years for Southern Company Gas.
- (g) Georgia Power is recovering approximately \$213 million annually for storm damage. See “Georgia Power – Storm Damage Recovery” herein and Note 1 under “Storm Damage Reserves” for additional information.
- (h) Recorded as earned by employees and recovered as paid, generally within one year. Includes both vacation and banked holiday pay, if applicable.
- (i) Alabama Power: Balances are recorded monthly and expected to be recovered or returned within nine years. Recovery periods could change based on several factors including changes in cost estimates, load forecasts, and timing of rate adjustments. See “Alabama Power – Rate CNP PPA,” “ – Rate CNP Compliance,” and “ – Rate ECR” herein for additional information.
Georgia Power: Balances are recorded monthly and expected to be recovered or returned within two years. See “Georgia Power – Rate Plans” herein for additional information.
Mississippi Power: At December 31, 2020, \$37 million is being amortized over a four-year period through March 2024 and the remaining \$15 million is expected to be recovered through various rate recovery mechanisms over a period to be determined in future rate filings. See “Mississippi Power – Ad Valorem Tax Adjustment” herein for additional information.
Southern Company Gas: Balances are recorded and recovered or amortized over periods generally not exceeding five years. In addition to natural gas cost recovery mechanisms, the natural gas distribution utilities have various other cost recovery mechanisms for the recovery of costs, including those related to infrastructure replacement programs.
- (j) Will be amortized concurrently with the effective date of Alabama Power’s next depreciation study, which is expected to occur no later than 2023.
- (k) Nuclear outage costs are deferred to a regulatory asset when incurred and amortized over a subsequent period of 18 months for Alabama Power and up to 24 months for Georgia Power. See Note 5 for additional information.
- (l) Recovered over the remaining lives of the original debt issuances at acquisition, which range up to 18 years at December 31, 2020.
- (m) Includes \$62 million of regulatory assets and \$12 million of regulatory liabilities at December 31, 2020. The retail portion includes \$50 million of regulatory assets and \$12 million of regulatory liabilities that are expected to be fully amortized by 2024 and 2023, respectively. The wholesale portion includes \$12 million of regulatory assets that are expected to be fully amortized by 2029. See Note 3 under “Mississippi Power – Other Matters – Kemper County Energy Facility” for additional information.
- (n) Represents the difference between Mississippi Power’s revenue requirement for Plant Daniel Units 3 and 4 under purchase accounting and operating lease accounting, which is expected to be amortized over a period to be determined in future retail and wholesale rate filings.

Notes to Financial Statements

- (o) Except as otherwise noted, comprised of numerous immaterial components with remaining amortization periods generally not exceeding 23 years for Alabama Power, three years for Georgia Power, four years for Mississippi Power, and 20 years for Southern Company Gas at December 31, 2020. Balances at December 31, 2020 include deferred COVID-19 costs (except for Alabama Power), as discussed further under "Deferral of Incremental COVID-19 Costs" for each applicable Registrant herein. Balances for Georgia Power also include certain operations and maintenance costs associated with software and cloud computing projects for which the recovery period will be determined in its next base rate case.
- (p) Amortized as related expenses are incurred. See "Alabama Power – Rate NDR" and "Mississippi Power – System Restoration Rider" herein for additional information.
- (q) Primarily includes approximately \$50 million and \$53 million at December 31, 2020 and 2019, respectively, for Alabama Power and \$110 million at December 31, 2019 for Georgia Power as a result of each company exceeding its allowed retail return range. Georgia Power's December 31, 2019 balance also includes approximately \$105 million pursuant to the Georgia Power Tax Reform Settlement Agreement. Georgia Power's balances also include immaterial amounts related to refunds for transmission service customers. See "Alabama Power" and "Georgia Power – Rate Plans" herein for additional information.
- (r) Comprised of numerous immaterial components with remaining amortization periods generally not exceeding 17 years for Alabama Power, 12 years for Georgia Power, three years for Mississippi Power, and 20 years for Southern Company Gas at December 31, 2020.
- (s) Generally not earning a return as they are excluded from rate base or are offset in rate base by a corresponding asset or liability.
- (t) Fuel-hedging assets and liabilities are recorded over the life of the underlying hedged purchase contracts. Upon final settlement, actual costs incurred are recovered through the applicable traditional electric operating company's fuel cost recovery mechanism. Purchase contracts generally do not exceed three and a half years for Alabama Power, three years for Georgia Power, and five years for Mississippi Power. Immaterial amounts at December 31, 2020 are included in other regulatory assets and liabilities.

Alabama Power

Alabama Power’s revenues from regulated retail operations are collected through various rate mechanisms subject to the oversight of the Alabama PSC. Alabama Power currently recovers its costs from the regulated retail business primarily through Rate RSE, Rate CNP, Rate ECR, and Rate NDR. In addition, the Alabama PSC issues accounting orders to address current events impacting Alabama Power.

Petition for Certificate of Convenience and Necessity

On August 14, 2020, the Alabama PSC issued its order regarding Alabama Power’s September 2019 petition for a CCN, which authorized Alabama Power to (i) construct an approximately 720-MW combined cycle facility at Alabama Power’s Plant Barry (Plant Barry Unit 8) that is expected to be placed in service by the end of 2023, (ii) complete the acquisition of the Central Alabama Generating Station, which occurred on August 31, 2020, (iii) purchase approximately 240 MWs of combined cycle generation under a long-term PPA, which began on September 1, 2020, and (iv) pursue up to approximately 200 MWs of cost-effective demand-side management and distributed energy resource programs. Alabama Power’s petition for a CCN was predicated on the results of Alabama Power’s 2019 IRP provided to the Alabama PSC, which identified an approximately 2,400-MW resource need for Alabama Power, driven by the need for additional winter reserve capacity. See Note 15 under "Alabama Power" for additional information on the acquisition of the Central Alabama Generating Station.

The Alabama PSC authorized the recovery of actual costs for the construction of Plant Barry Unit 8 up to 5% above the estimated in-service cost of \$652 million. In so doing, it recognized the potential for developments that could cause the project costs to exceed the capped amount, in which case Alabama Power would provide documentation to the Alabama PSC to explain and justify potential recovery of the additional costs. At December 31, 2020, project expenditures associated with Plant Barry Unit 8 included in CWIP totaled approximately \$66 million.

The Alabama PSC further directed that the proposed solar generation of approximately 400 MWs, coupled with battery energy storage systems (solar/battery systems), be evaluated under an existing Renewable Generation Certificate (RGC) issued by the Alabama PSC in September 2015. The contracts proposed in the CCN petition expired on July 31, 2020. Any future requests for solar/battery systems will be evaluated under the RGC process.

Energy Alabama, Gasp, Inc., and the Sierra Club filed requests for reconsideration and rehearing with the Alabama PSC, and, on December 10, 2020, the Alabama PSC issued an order denying the requests. On January 7, 2021, Energy Alabama and Gasp, Inc. filed judicial appeals regarding both the Alabama PSC’s August 14, 2020 CCN order and the December 10, 2020 order denying reconsideration and rehearing.

Alabama Power expects to recover costs associated with Plant Barry Unit 8 pursuant to its Rate CNP New Plant. Alabama Power is recovering all costs associated with the Central Alabama Generating Station through the inclusion in Rate RSE of revenues from the existing power sales agreement and, on expiration of that agreement, expects to recover costs pursuant to Rate CNP New Plant. The recovery of costs associated with laws, regulations, and other such mandates directed at the utility industry are expected to be recovered through Rate CNP Compliance. Alabama Power expects to recover the capacity-related costs associated with the PPAs through its Rate CNP PPA. In addition, fuel and energy-related costs are expected to be recovered through Rate ECR. Any remaining costs associated with Plant Barry Unit 8 and the acquisition of the Central Alabama Generating Station are expected to be recovered through Rate RSE.

The ultimate outcome of these matters cannot be determined at this time.

Notes to Financial Statements

Rate RSE

The Alabama PSC has adopted Rate RSE that provides for periodic annual adjustments based upon Alabama Power’s projected weighted common equity return (WCER) compared to an allowable range. Rate RSE adjustments are based on forward-looking information for the applicable upcoming calendar year. Rate RSE adjustments for any two-year period, when averaged together, cannot exceed 4.0% and any annual adjustment is limited to 5.0%. When the projected WCER is under the allowed range, there is an adjusting point of 5.98% and eligibility for a performance-based adder of seven basis points, or 0.07%, to the WCER adjusting point if Alabama Power (i) has an "A" credit rating equivalent with at least one of the recognized rating agencies or (ii) is in the top one-third of a designated customer value benchmark survey. As initially designed, if Alabama Power’s actual retail return was above the allowed WCER range, the excess would be refunded to customers unless otherwise directed by the Alabama PSC; however, there was no provision for additional customer billings should the actual retail return fall below the WCER range.

In 2018, the Alabama PSC approved modifications to Rate RSE and other commitments designed to position Alabama Power to address the growing pressure on its credit quality resulting from the Tax Reform Legislation, without increasing retail rates under Rate RSE in the near term. Alabama Power continues to reduce growth in total debt by increasing equity, with corresponding reductions in debt issuances, thereby de-leveraging its capital structure. Alabama Power’s goal is to achieve an equity ratio of approximately 55% by the end of 2025. At December 31, 2020 and 2019, Alabama Power’s equity ratio was approximately 51.6% and 50.3%, respectively.

The approved modifications to Rate RSE began for billings in January 2019. The modifications include reducing the top of the allowed WCER range from 6.21% to 6.15% and modifications to the refund mechanism applicable to prior year actual results that allow Alabama Power to retain a portion of the revenue that causes the actual WCER for a given year to exceed the allowed range.

Generally, during a year without a Rate RSE upward adjustment, if Alabama Power’s actual WCER is between 6.15% and 7.65%, customers will receive 25% of the amount between 6.15% and 6.65%, 40% of the amount between 6.65% and 7.15%, and 75% of the amount between 7.15% and 7.65%. Customers will receive all amounts in excess of an actual WCER of 7.65%. During a year with a Rate RSE upward adjustment, if Alabama Power’s actual WCER exceeds 6.15%, customers receive 50% of the amount between 6.15% and 6.90% and all amounts in excess of an actual WCER of 6.90%. There is no provision for additional customer billings should the actual retail return fall below the WCER range.

In conjunction with these modifications to Rate RSE, in 2018, Alabama Power consented to a moratorium on any upward adjustments under Rate RSE for 2019 and 2020 and to return \$50 million to customers through bill credits in 2019. Retail rates under Rate RSE remained unchanged for 2019 and 2020.

Together with Rate RSE, Alabama Power has an established retail tariff that provides for an adjustment to customer billings to recognize the impact of a change in the statutory income tax rate. In accordance with this tariff, Alabama Power returned \$267 million to retail customers through bill credits during 2018 as a result of the change in the federal income tax rate under the Tax Reform Legislation.

At December 31, 2018, Alabama Power’s retail return exceeded the allowed WCER range, which resulted in Alabama Power establishing a regulatory liability of \$109 million for Rate RSE refunds. In accordance with an Alabama PSC order issued in February 2019, Alabama Power applied \$78 million to reduce the Rate ECR under recovered balance and the remaining \$31 million was refunded to customers through bill credits starting in July 2019. At December 31, 2019 and 2020, Alabama Power’s WCER exceeded 6.15%, resulting in Alabama Power establishing a current regulatory liability of \$53 million and \$50 million, respectively, for Rate RSE refunds. In April 2020, the regulatory liability at December 31, 2019 was refunded to customers through bill credits. The \$50 million regulatory liability at December 31, 2020 will be refunded to customers through bill credits in April 2021.

During 2019, Alabama Power provided to the Alabama PSC and the Alabama Office of the Attorney General information related to the operation and utilization of Rate RSE, in accordance with the rules governing the operation of Rate RSE. During 2020, the Alabama PSC concluded that Rate RSE continues to fulfill its intended purposes and that no significant revisions are needed or warranted.

On December 1, 2020, Alabama Power made its required annual Rate RSE submission to the Alabama PSC of projected data for calendar year 2021, resulting in an increase of 4.09%, or approximately \$228 million annually, that became effective for the billing month of January 2021.

Rate CNP New Plant

Rate CNP New Plant allows for recovery of Alabama Power's retail costs associated with newly developed or acquired certificated generating facilities placed into retail service. No adjustments to Rate CNP New Plant occurred during the period 2018 through 2020. See "Petition for Certificate of Convenience and Necessity" herein for additional information.

Rate CNP PPA

Rate CNP PPA allows for the recovery of Alabama Power’s retail costs associated with certificated PPAs. Revenues for Rate CNP PPA, as recorded on the financial statements, are adjusted for differences in actual recoverable costs and amounts billed in current regulated rates. Accordingly, changes in the billing factor will have no significant effect on Southern Company’s or Alabama Power’s revenues or net income but will affect annual cash flow. No adjustments to Rate CNP PPA occurred during the period 2018 through 2020 and no adjustment is expected for 2021. At December 31, 2020 and 2019, Alabama Power had an under recovered Rate CNP PPA balance of \$58 million and \$40 million, respectively, which is included in other regulatory assets, deferred on the balance sheet.

Rate CNP Compliance

Rate CNP Compliance allows for the recovery of Alabama Power’s retail costs associated with laws, regulations, and other such mandates directed at the utility industry involving the environment, security, reliability, safety, sustainability, or similar considerations impacting Alabama Power’s facilities or operations. Rate CNP Compliance is based on forward-looking information and provides for the recovery of these costs pursuant to factors that are calculated and submitted to the Alabama PSC by December 1 with rates effective for the following calendar year. Compliance costs to be recovered include operations and maintenance expenses, depreciation, and a return on certain invested capital. Revenues for Rate CNP Compliance, as recorded on the financial statements, are adjusted for differences in actual recoverable costs and amounts billed in current regulated rates. Accordingly, changes in the billing factor will have no significant effect on Southern Company’s or Alabama Power’s revenues or net income, but will affect annual cash flow. Changes in Rate CNP Compliance-related operations and maintenance expenses and depreciation generally will have no effect on net income.

In November 2018, 2019, and 2020, Alabama Power submitted calculations associated with its cost of complying with governmental mandates for the following calendar year, as provided under Rate CNP Compliance. The 2018 filing reflected a projected under recovered retail revenue requirement of approximately \$205 million, which was recovered in the billing months of January 2019 through December 2019. The 2019 filing reflected a projected over recovered retail revenue requirement, which resulted in a rate decrease of approximately \$68 million that became effective for the billing month of January 2020. The 2020 filing reflected a projected under recovered retail revenue requirement of approximately \$59 million.

On December 1, 2020, the Alabama PSC issued a consent order that Alabama Power leave the 2020 Rate CNP Compliance factor in effect for 2021, with any prior year under collected amount deemed recovered before any current year amounts are recovered. Any remaining under recovered amount will be reflected in the 2021 filing.

At December 31, 2020, Alabama Power had an over recovered Rate CNP Compliance balance of \$28 million included in other regulatory liabilities, current on the balance sheet. At December 31, 2019, Alabama Power had an over recovered Rate CNP Compliance balance of \$62 million, of which \$55 million is included in other regulatory liabilities, current and \$7 million is included in other regulatory liabilities, deferred on the balance sheet.

Rate ECR

Rate ECR recovers Alabama Power’s retail energy costs based on an estimate of future energy costs and the current over or under recovered balance. Revenues recognized under Rate ECR and recorded on the financial statements are adjusted for the difference in actual recoverable fuel costs and amounts billed in current regulated rates. The difference in the recoverable fuel costs and amounts billed gives rise to the over or under recovered amounts recorded as regulatory assets or liabilities. Alabama Power, along with the Alabama PSC, continually monitors the over or under recovered cost balance to determine whether an adjustment to billing rates is required. Changes in the Rate ECR factor have no significant effect on Southern Company’s or Alabama Power’s net income but will impact operating cash flows. The Alabama PSC may approve billing rates under Rate ECR of up to 5.910 cents per KWH.

In May 2018, the Alabama PSC approved an increase to Rate ECR from 2.015 cents per KWH to 2.353 cents per KWH effective July 2018 through December 2018. In December 2018, the Alabama PSC issued a consent order to leave this rate in effect through December 31, 2019.

As discussed herein under “Rate RSE,” in accordance with an Alabama PSC order issued in February 2019, Alabama Power utilized \$78 million of the 2018 Rate RSE refund liability to reduce the Rate ECR under recovered balance.

In December 2019, the Alabama PSC approved a decrease to Rate ECR from 2.353 cents per KWH to 2.160 cents per KWH, equal to 1.82%, or approximately \$102 million annually, that became effective for the billing month of January 2020.

In October 2020, Alabama Power reduced its over-collected fuel balance by \$94.3 million in accordance with an August 7, 2020 Alabama PSC order authorizing Alabama Power to reduce its over-collected fuel balance by \$100 million and return that amount to customers in the form of bill credits, with any undistributed amount remaining in the regulatory liability for the benefit of customers.

On December 1, 2020, the Alabama PSC approved a decrease to Rate ECR from 2.160 cents per KWH to 1.960 cents per KWH, equal to 1.84%, or approximately \$103 million annually, that became effective for the billing month of January 2021. The rate will adjust to 5.910 cents per KWH in January 2022 absent a further order from the Alabama PSC.

At December 31, 2020, Alabama Power’s over recovered fuel costs totaled \$18 million and is included in other regulatory liabilities, current on the balance sheet. At December 31, 2019, Alabama Power’s over recovered fuel costs totaled \$49 million, of which \$32 million is included in other regulatory liabilities, current and \$17 million is included in other regulatory liabilities, deferred on the balance sheet. These classifications are based on estimates, which include such factors as weather, generation availability, energy demand, and the price of energy. A change in any of these factors could have a significant impact on the timing of any recovery or return of fuel costs.

Tax Reform Accounting Order

In 2018, the Alabama PSC approved an accounting order that authorized Alabama Power to defer the benefits of federal excess deferred income taxes associated with the Tax Reform Legislation for the year ended December 31, 2018 as a regulatory liability and to use up to \$30 million of such deferrals to offset under recovered amounts under Rate ECR. The final excess deferred tax liability for the year ended December 31, 2018 totaled approximately \$69 million, of which \$30 million was used to offset the Rate ECR under recovered balance. In December 2019, the Alabama PSC issued an order authorizing Alabama Power to apply the remaining deferred balance of approximately \$39 million to increase the balance in the NDR. See “Rate NDR” herein and Note 10 under “Current and Deferred Income Taxes” for additional information.

Software Accounting Order

In February 2019, the Alabama PSC approved an accounting order that authorizes Alabama Power to establish a regulatory asset for operations and maintenance costs associated with software implementation projects. The regulatory asset will be amortized ratably over the life of the related software. At December 31, 2020 and 2019, the regulatory asset balance totaled \$17 million and \$6 million, respectively, and is included in other deferred charges and assets on the balance sheet.

Plant Greene County

Alabama Power jointly owns Plant Greene County with an affiliate, Mississippi Power. See Note 5 under “Joint Ownership Agreements” for additional information. In December 2019, Mississippi Power updated its proposed RMP, originally filed in 2018 with the Mississippi PSC. The RMP proposed a four-year acceleration of the retirement of Plant Greene County Units 1 and 2 to the third quarter 2021 and the third quarter 2022, respectively. On December 17, 2020, the Mississippi PSC issued an order concluding the RMP docket and requiring Mississippi Power to incorporate into its 2021 IRP a schedule of early or anticipated retirement of 950 MWs of fossil-steam generation, which could include Plant Greene County, by year-end 2027 to reduce Mississippi Power’s excess reserve margin. Mississippi Power’s IRP is scheduled to be filed in April 2021.

Any proposed Plant Greene County unit retirements by Mississippi Power would require the completion of transmission and system reliability improvements, as well as agreement by Alabama Power. Alabama Power will continue to monitor the status of Mississippi Power’s IRP and associated regulatory processes, as well as the transmission and system reliability improvements. Alabama Power will review all the facts and circumstances and will evaluate all of its alternatives prior to reaching a final determination on the ongoing operations of Plant Greene County. The ultimate outcome of this matter cannot be determined at this time.

Rate NDR

Based on an order from the Alabama PSC, Alabama Power maintains a reserve for operations and maintenance expenses to cover the cost of damages from major storms to its transmission and distribution facilities. The order approves a separate monthly Rate NDR charge to customers consisting of two components. The first component is intended to establish and maintain a reserve balance for future storms and is an on-going part of customer billing. When the reserve balance falls below \$50 million, a reserve establishment charge will be activated (and the on-going reserve maintenance charge concurrently suspended) until the reserve balance reaches \$75 million.

The second component of the Rate NDR charge is intended to allow recovery of any existing deferred storm-related operations and maintenance costs and any future reserve deficits over a 24-month period. The Alabama PSC order gives Alabama Power authority to record a deficit balance in the NDR when costs of storm damage exceed any established reserve balance. Absent further Alabama PSC approval, the maximum total Rate NDR charge consisting of both components is \$10 per month per non-residential customer account and \$5 per month per residential customer account. Alabama Power has the authority, based on an order from the Alabama PSC, to accrue certain additional amounts as circumstances warrant. The order allows for reliability-related expenditures to be charged against the additional accruals when the NDR balance exceeds \$75 million. Alabama Power may designate a portion of the NDR to reliability-related expenditures as a part of an annual budget process for the following year or during the current year for identified unbudgeted reliability-related expenditures that are incurred. Accruals that have not been designated can be used to offset storm charges. Additional accruals to

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the NDR enhance Alabama Power’s ability to mitigate the financial effects of future natural disasters, promote system reliability, and offset costs retail customers would otherwise bear. Alabama Power made additional accruals of \$100 million and \$84 million in 2020 and 2019, respectively. There were no such accruals in 2018.

As discussed herein under “Tax Reform Accounting Order,” in accordance with an Alabama PSC order issued in December 2019, Alabama Power also applied the remaining excess deferred income tax regulatory liability balance of approximately \$39 million to increase the balance in the NDR, resulting in an accumulated balance of \$150 million at December 31, 2019. Of this amount, Alabama Power designated \$37 million to be applied to budgeted reliability-related expenditures for 2020, which was included in other regulatory liabilities, current and was utilized in 2020. The remaining NDR balance of \$113 million was included in other regulatory liabilities, deferred on the balance sheet.

Alabama Power collected approximately \$16 million annually in 2018 and 2019 through the reserve establishment charge. Effective with March 2020 billings, the reserve establishment charge was suspended and the reserve maintenance charge was activated as a result of the NDR balance exceeding \$75 million. Alabama Power collected approximately \$5 million in 2020 and expects to collect \$3 million annually beginning in 2021 unless the NDR balance falls below \$50 million. During 2020, Alabama Power recorded \$51 million and \$67 million against the NDR for damages incurred to its transmission and distribution facilities from Hurricane Sally and Hurricane Zeta, respectively. The remaining balance of \$77 million is included in other regulatory liabilities, deferred on the balance sheet.

As revenue from the Rate NDR charge is recognized, an equal amount of operations and maintenance expenses related to the NDR will also be recognized. As a result, the Rate NDR charge will not have an effect on net income but will impact operating cash flows.

Environmental Accounting Order

Based on an order from the Alabama PSC (Environmental Accounting Order), Alabama Power is authorized to establish a regulatory asset to record the unrecovered investment costs, including the unrecovered plant asset balance and the unrecovered costs associated with site removal and closure associated with future unit retirements caused by environmental regulations. The regulatory asset is amortized and recovered over the affected unit’s remaining useful life, as established prior to the decision regarding early retirement, through Rate CNP Compliance.

Georgia Power

Georgia Power’s revenues from regulated retail operations are collected through various rate mechanisms subject to the oversight of the Georgia PSC. Georgia Power currently recovers its costs from the regulated retail business through the 2019 ARP, which includes traditional base tariffs, Demand-Side Management (DSM) tariffs, the Environmental Compliance Cost Recovery (ECCR) tariff, and Municipal Franchise Fee (MFF) tariffs. In addition, financing costs on certified construction costs of Plant Vogtle Units 3 and 4 are being collected through the NCCR tariff and fuel costs are collected through a fuel cost recovery tariff, both under separate regulatory proceedings.

As approved by the Georgia PSC in the seventeenth VCM proceeding, prior to the expected in-service date of Plant Vogtle Unit 3, Georgia Power expects to file a request to adjust retail base rates to include the portion of costs related to Plant Vogtle Unit 3 and common facilities that were deemed prudent in a previous stipulated agreement. As costs are included in retail base rates, the related financing costs will no longer be recovered through the NCCR tariff. See “Nuclear Construction” herein for additional information on Plant Vogtle Units 3 and 4.

Rate Plans

2019 ARP

In December 2019, the Georgia PSC voted to approve the 2019 ARP, under which Georgia Power increased its rates on January 1, 2020. On December 15, 2020, the Georgia PSC approved tariff adjustments effective January 1, 2021. Details of tariff adjustments are provided in the table below:

Tariff	2020	2021
	<i>(in millions)</i>	
Traditional base	\$ —	\$120
ECCR(*)	318	2
DSM	12	(15)
MFF	12	4
Total	\$ 342	\$111

(*) Effective January 1, 2020, CCR AROs are being recovered through the ECCR tariff.

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In July 2019, the Georgia PSC voted to approve Georgia Power’s modified triennial IRP (Georgia Power 2019 IRP), including Georgia Power’s proposed environmental compliance strategy associated with ash pond and certain landfill closures and post-closure care in compliance with the CCR Rule and the related state rule. In the 2019 ARP, the Georgia PSC approved recovery of the estimated under recovered balance of these compliance costs at December 31, 2019 over a three-year period ending December 31, 2022 and recovery of estimated compliance costs for 2020, 2021, and 2022 over three-year periods ending December 31, 2022, 2023, and 2024, respectively, with recovery of construction contingency beginning in the year following actual expenditure. The ECCR tariff is expected to be revised for actual expenditures and updated estimates through future annual compliance filings. On February 4, 2020, the Georgia PSC denied a motion for reconsideration filed by the Sierra Club regarding the Georgia PSC’s decision in the 2019 ARP allowing Georgia Power to recover compliance costs for CCR AROs, and, on December 7, 2020, the Superior Court of Fulton County affirmed the decision of the Georgia PSC. On January 5, 2021, the Sierra Club filed a notice of appeal with the Georgia Court of Appeals. The ultimate outcome of this matter cannot be determined at this time. See Note 6 for additional information regarding Georgia Power’s AROs.

Under the 2019 ARP, Georgia Power’s retail ROE is set at 10.50%, and earnings will be evaluated against a retail ROE range of 9.50% to 12.00%. Any retail earnings above 12.00% will be shared, with 40% being applied to reduce regulatory assets, 40% directly refunded to customers, and the remaining 20% retained by Georgia Power. There will be no recovery of any earnings shortfall below 9.50% on an actual basis. However, if at any time during the term of the 2019 ARP, Georgia Power projects that its retail earnings will be below 9.50% for any calendar year, it could petition the Georgia PSC for implementation of the Interim Cost Recovery (ICR) tariff to adjust Georgia Power’s retail rates to achieve a 9.50% ROE. The Georgia PSC would have 90 days to rule on Georgia Power’s request. The ICR tariff would expire at the earlier of January 1, 2023 or the end of the calendar year in which the ICR tariff becomes effective. In lieu of requesting implementation of an ICR tariff, or if the Georgia PSC chooses not to implement the ICR tariff, Georgia Power may file a full rate case. In 2020, Georgia Power’s retail ROE was within the allowed retail ROE range.

Additionally, under the 2019 ARP and pursuant to the sharing mechanism approved in the 2013 ARP whereby two-thirds of any earnings above the top of the allowed ROE range are shared with Georgia Power’s customers, (i) Georgia Power used 50% (approximately \$50 million) of the customer share of earnings above the band in 2018 to reduce regulatory assets and refunded 50% (approximately \$50 million) to customers in 2020 and (ii) Georgia Power agreed to forego its share of 2019 earnings in excess of the earnings band so 50% (approximately \$60 million) of all earnings over the 2019 band were refunded to customers in 2020 and 50% (approximately \$60 million) were used to reduce regulatory assets.

Except as provided above, Georgia Power will not file for a general base rate increase while the 2019 ARP is in effect. Georgia Power is required to file a general base rate case by July 1, 2022, in response to which the Georgia PSC would be expected to determine whether the 2019 ARP should be continued, modified, or discontinued.

2013 ARP

Under the 2013 ARP, there were no changes to Georgia Power’s traditional base tariffs, ECCR tariff, DSM tariffs, or MFF tariffs in 2019. Georgia Power’s retail ROE under the 2013 ARP was set at 10.95% and earnings were evaluated against a retail ROE range of 10.00% to 12.00%. Two-thirds of any earnings above 12.00% were to be directly refunded to customers, with the remaining one-third retained by Georgia Power. In 2019 and 2018, Georgia Power’s retail ROE exceeded 12.00% and, under the modified sharing mechanism pursuant to the 2019 ARP, Georgia Power reduced regulatory assets by a total of approximately \$110 million and accrued refunds for retail customers of a total of approximately \$110 million. In June 2020 and October 2020, Georgia Power issued bill credits to retail customers of approximately \$50 million and \$60 million, respectively, related to the excess retail earnings in 2018 and 2019, respectively. See “2019 ARP” herein for additional information.

Deferral of Incremental COVID-19 Costs

On April 7, 2020 and June 2, 2020, in response to the COVID-19 pandemic, the Georgia PSC approved orders directing Georgia Power to continue its previous, voluntary suspension of customer disconnections through July 14, 2020 and to defer the resulting incremental bad debt as a regulatory asset. On June 16, 2020 and July 7, 2020, the Georgia PSC approved orders establishing a methodology for identifying incremental bad debt and allowing the deferral of other incremental costs associated with the COVID-19 pandemic. The period over which such costs will be recovered is expected to be determined in Georgia Power’s next base rate case. At December 31, 2020, the incremental costs deferred totaled approximately \$38 million. The ultimate outcome of this matter cannot be determined at this time.

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Fuel Cost Recovery

Georgia Power has established fuel cost recovery rates approved by the Georgia PSC. On May 28, 2020, the Georgia PSC approved a stipulation agreement among Georgia Power, the staff of the Georgia PSC, and certain intervenors to lower total fuel billings by approximately \$740 million over a two-year period effective June 1, 2020. In addition, Georgia Power further lowered fuel billings by approximately \$44 million under an interim fuel rider effective June 1, 2020 through September 30, 2020. Georgia Power continues to be allowed to adjust its fuel cost recovery rates under an interim fuel rider prior to the next fuel case if the under or over recovered fuel balance exceeds \$200 million. Georgia Power is scheduled to file its next fuel case no later than February 28, 2023.

Georgia Power's over recovered fuel balance totaled \$113 million at December 31, 2020 and is included in other current liabilities on Southern Company's balance sheets and over recovered fuel clause revenues on Georgia Power's balance sheets. At December 31, 2019, Georgia Power's over recovered fuel balance totaled \$73 million and is included in other deferred credits and liabilities on Southern Company's and Georgia Power's balance sheets.

Georgia Power's fuel cost recovery mechanism includes costs associated with a natural gas hedging program, as revised and approved by the Georgia PSC, allowing the use of an array of derivative instruments within a 36-month time horizon.

Fuel cost recovery revenues as recorded on the financial statements are adjusted for differences in actual recoverable fuel costs and amounts billed in current regulated rates. Accordingly, changes in the billing factor will not have a significant effect on Southern Company's or Georgia Power's revenues or net income but will affect operating cash flows.

Storm Damage Recovery

Georgia Power defers and recovers certain costs related to damages from major storms as mandated by the Georgia PSC. Beginning January 1, 2020, Georgia Power is recovering \$213 million annually under the 2019 ARP. At December 31, 2020 and 2019, the balance in the regulatory asset related to storm damage was \$262 million and \$410 million, respectively, with \$213 million for each year included in other regulatory assets, current on Southern Company's balance sheets and regulatory assets – storm damage on Georgia Power's balance sheets and \$49 million and \$197 million, respectively, included in other regulatory assets, deferred on Southern Company's and Georgia Power's balance sheets. During October 2020, Tropical Storm Zeta caused significant damage to Georgia Power's transmission and distribution facilities. The incremental restoration costs related to this tropical storm deferred in the regulatory asset for storm damage totaled approximately \$50 million. The rate of storm damage cost recovery is expected to be adjusted in future regulatory proceedings as necessary. As a result of this regulatory treatment, costs related to storms are not expected to have a material impact on Southern Company's or Georgia Power's financial statements.

Nuclear Construction

In 2009, the Georgia PSC certified construction of Plant Vogtle Units 3 and 4, in which Georgia Power holds a 45.7% ownership interest. In 2012, the NRC issued the related combined construction and operating licenses, which allowed full construction of the two AP1000 nuclear units (with electric generating capacity of approximately 1,100 MWs each) and related facilities to begin. Until March 2017, construction on Plant Vogtle Units 3 and 4 continued under the Vogtle 3 and 4 Agreement, which was a substantially fixed price agreement.

In connection with the EPC Contractor's bankruptcy filing in March 2017, Georgia Power, acting for itself and as agent for the other Vogtle Owners, entered into several transitional arrangements to allow construction to continue. In July 2017, Georgia Power, acting for itself and as agent for the other Vogtle Owners, entered into the Vogtle Services Agreement, whereby Westinghouse provides facility design and engineering services, procurement and technical support, and staff augmentation on a time and materials cost basis. The Vogtle Services Agreement provides that it will continue until the start-up and testing of Plant Vogtle Units 3 and 4 are complete and electricity is generated and sold from both units. The Vogtle Services Agreement is terminable by the Vogtle Owners upon 30 days' written notice.

In October 2017, Georgia Power, acting for itself and as agent for the other Vogtle Owners, executed the Bechtel Agreement, a cost reimbursable plus fee arrangement, whereby Bechtel is reimbursed for actual costs plus a base fee and an at-risk fee, which is subject to adjustment based on Bechtel's performance against cost and schedule targets. Each Vogtle Owner is severally (not jointly) liable for its proportionate share, based on its ownership interest, of all amounts owed to Bechtel under the Bechtel Agreement. The Vogtle Owners may terminate the Bechtel Agreement at any time for their convenience, provided that the Vogtle Owners will be required to pay amounts related to work performed prior to the termination (including the applicable portion of the base fee), certain termination-related costs, and, at certain stages of the work, the applicable portion of the at-risk fee. Bechtel may terminate the Bechtel Agreement under certain circumstances, including certain Vogtle Owner suspensions of work, certain breaches of the Bechtel Agreement by the Vogtle Owners, Vogtle Owner insolvency, and certain other events.

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See Note 8 under "Long-term Debt – DOE Loan Guarantee Borrowings" for information on the Amended and Restated Loan Guarantee Agreement, including applicable covenants, events of default, mandatory prepayment events, and conditions to borrowing.

Cost and Schedule

Georgia Power's approximate proportionate share of the remaining estimated capital cost to complete Plant Vogtle Units 3 and 4 by the expected in-service dates of November 2021 and November 2022, respectively, is as follows:

	(in billions)
Base project capital cost forecast ^{(a)(b)}	\$ 8.5
Construction contingency estimate	0.2
Total project capital cost forecast ^{(a)(b)}	8.7
Net investment as of December 31, 2020 ^(b)	(7.2)
Remaining estimate to complete ^(a)	\$ 1.5

- (a) Excludes financing costs expected to be capitalized through AFUDC of approximately \$246 million, of which \$93 million had been accrued through December 31, 2020.
- (b) Net of \$1.7 billion received from Toshiba under the Guarantee Settlement Agreement and approximately \$188 million in related customer refunds.

Georgia Power estimates that its financing costs for construction of Plant Vogtle Units 3 and 4 will total approximately \$3.0 billion, of which \$2.6 billion had been incurred through December 31, 2020.

As part of its ongoing processes, Southern Nuclear continues to evaluate cost and schedule forecasts on a regular basis to incorporate current information available, particularly in the areas of engineering support, commodity installation, system turnovers and related test results, and workforce statistics. Southern Nuclear has established aggressive target values for monthly construction production and system turnover activities as part of a strategy that was designed to maintain margin to the regulatory-approved in-service dates of November 2021 for Unit 3 and November 2022 for Unit 4.

As of June 30, 2020, assignments of contingency exceeded the remaining balance of the \$366 million construction contingency originally established in the second quarter 2018 by approximately \$34 million and Georgia Power established \$115 million of additional construction contingency. During the third and fourth quarters 2020, this construction contingency, plus an additional \$5 million, was fully assigned to the base capital cost forecast. Assignment of contingency during 2020 addressed cost risks related to construction productivity, including the April 2020 reduction in workforce designed to mitigate impacts of the COVID-19 pandemic described below; other COVID-19 impacts; craft labor incentives; additional resources for supervision, field support, project management, initial test program, start-up, engineering support, and operations and maintenance support; subcontracts; and procurement, among other factors. These factors continue to represent further potential cost risk to the project; therefore, Georgia Power established \$171 million of additional construction contingency as of December 31, 2020.

After considering the significant level of uncertainty that exists regarding the future recoverability of these costs since the ultimate outcome of these matters is subject to the outcome of future assessments by management, as well as Georgia PSC decisions in future regulatory proceedings, Georgia Power recorded total pre-tax charges to income of \$149 million (\$111 million after tax) and \$176 million (\$131 million after tax) for the increases in the total project capital cost forecast as of June 30, 2020 and December 31, 2020, respectively. As and when these amounts are spent, Georgia Power may request the Georgia PSC to evaluate those expenditures for rate recovery.

In mid-March 2020, Southern Nuclear began implementing policies and procedures designed to mitigate the risk of transmission of COVID-19 at the construction site, including worker distancing measures, isolating individuals who have tested positive for COVID-19, are showing symptoms consistent with COVID-19, are being tested for COVID-19, or have been in close contact with such persons, requiring self-quarantine, and adopting additional precautionary measures. In April 2020, Georgia Power, acting for itself and as agent for the other Vogtle Owners, announced a reduction in workforce at Plant Vogtle Units 3 and 4 and began reducing the then-existing site workforce by approximately 20%. This reduction in workforce was a mitigation action intended to address the impact of the COVID-19 pandemic on the Plant Vogtle Units 3 and 4 workforce and construction site, including challenges with labor productivity that were exacerbated by the impact of the COVID-19 pandemic, by increasing productivity of the remaining workforce and reducing workforce fatigue and absenteeism. Further, it was also intended to allow for increased social distancing by the workforce and facilitate compliance with the recommendations from the Centers for Disease Control and Prevention. The April 2020 workforce reduction did reduce absenteeism, providing an improvement in operational efficiency and allowing for increased social distancing. Since April 2020, the number of active cases at the site has fluctuated and has continued to impact productivity levels and pace of activity completion.

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The lower productivity levels and slower pace of activity completion contributed to a backlog to the aggressive site work plan established at the beginning of 2020. To address these issues, in July 2020, Southern Nuclear updated its aggressive site work plan for both Unit 3 and Unit 4; however, through October 2020, the project continued to face challenges in meeting the updated aggressive site work plan targets including, but not limited to, overall construction and subcontractor labor productivity, resulting in further extension of certain milestone dates in the aggressive site work plan. From November 2020 through January 2021, the number of active COVID-19 cases at the site increased significantly, consistent with a national rise in cases, which further impacted productivity and the pace of activity completion. In addition, and exacerbated by this rise in COVID-19 cases, the project continues to face challenges including, but not limited to, higher than expected absenteeism; overall construction and subcontractor labor productivity; system turnover and testing activities; and electrical equipment and commodity installation.

As a result of these factors, overall production levels were not achieved at the levels anticipated, contributing to the December 31, 2020 allocation of construction contingency and increase in total project capital cost forecast described previously. Georgia Power estimates the productivity impacts of the COVID-19 pandemic have consumed approximately three to four months of schedule margin previously embedded in the site work plan for Unit 3 and Unit 4. Also, after considering these factors, Southern Nuclear has further extended certain milestone dates, including the start of hot functional testing and fuel load for Unit 3, from those established in October 2020. These updated milestone dates are expected to support the regulatory-approved in-service dates of November 2021 and November 2022 for Units 3 and 4, respectively. With minimal schedule margin remaining, the Unit 3 schedule is challenged, and any further extension of the hot functional testing or fuel load milestones, or other delays from the challenges described below, could impact the ability to achieve the November 2021 in-service date. As Unit 3 approaches hot functional testing, achievement of the extended milestone dates for Unit 3 primarily depends on improvements in the pace of work package completion and system turnovers, as well as the level of any required construction remediation work. Achievement of the extended milestone dates for Unit 4 primarily depends on overall construction productivity and production levels significantly improving as well as appropriate levels of craft laborers, particularly electrical and pipefitter craft labor, being added and maintained.

In addition, the continuing effects of the COVID-19 pandemic could further disrupt or delay construction and testing activities at Plant Vogtle Units 3 and 4. Georgia Power's proportionate share of the estimated incremental cost associated with COVID-19 mitigation actions and impacts on construction productivity is currently estimated to be between \$150 million and \$190 million and is included in the total project capital cost. As described previously, estimated costs associated with near-term COVID-19 mitigation actions and related impacts on construction productivity were included in the additional contingency established as of December 31, 2020.

As construction, including subcontract work, continues and testing and system turnover activities increase, challenges with management of contractors and vendors; subcontractor performance; supervision of craft labor and related productivity, particularly in the installation of electrical, mechanical, and instrumentation and controls commodities, ability to attract and retain craft labor, and/or related cost escalation; procurement, fabrication, delivery, assembly, installation, system turnover, and the initial testing and start-up, including any required engineering changes or any remediation related thereto, of plant systems, structures, or components (some of which are based on new technology that only within the last few years began initial operation in the global nuclear industry at this scale), any of which may require additional labor and/or materials; or other issues could arise and change the projected schedule and estimated cost.

There have been technical and procedural challenges to the construction and licensing of Plant Vogtle Units 3 and 4 at the federal and state level and additional challenges may arise. Processes are in place that are designed to assure compliance with the requirements specified in the Westinghouse Design Control Document and the combined construction and operating licenses, including inspections by Southern Nuclear and the NRC that occur throughout construction. Findings resulting from such inspections could require additional remediation and/or further NRC oversight. In addition, certain license amendment requests have been filed and approved or are pending before the NRC. On August 10, 2020, the Atomic Safety and Licensing Board rejected the Blue Ridge Environmental Defense League's (BREDL) May 11, 2020 petition challenging a license amendment request. The staff of the NRC has issued the requested amendment to the combined construction and operating license for Plant Vogtle Unit 3. BREDL appealed the Atomic Safety and Licensing Board decision to the NRC, which the NRC denied on December 22, 2020. BREDL also filed a motion to reopen the proceeding and submitted an amended contention on December 7, 2020, which is pending before the NRC.

In September 2020, Southern Nuclear notified the NRC of its intent to load fuel for Unit 3 in 2021. Various design and other licensing-based compliance matters, including the timely submittal by Southern Nuclear of the ITAAC documentation for each unit and the related reviews and approvals by the NRC necessary to support NRC authorization to load fuel, may arise, which may result in additional license amendments or require other resolution. If any license amendment requests or other licensing-based compliance issues, including inspections and ITAACs, are not resolved in a timely manner, there may be delays in the project schedule that could result in increased costs.

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The ultimate outcome of these matters cannot be determined at this time. However, any schedule extension beyond the regulatory-approved in-service dates is currently estimated to result in additional base capital costs for Georgia Power of approximately \$25 million per month for Unit 3 and approximately \$15 million per month for Unit 4, as well as the related AFUDC. While Georgia Power is not precluded from seeking recovery of any future capital cost forecast increase, management will ultimately determine whether or not to seek recovery. Any further changes to the capital cost forecast that are not expected to be recoverable through regulated rates will be required to be charged to income and such charges could be material.

Joint Owner Contracts

In November 2017, the Vogtle Owners entered into an amendment to their joint ownership agreements for Plant Vogtle Units 3 and 4 to provide for, among other conditions, additional Vogtle Owner approval requirements. Effective in August 2018, the Vogtle Owners further amended the joint ownership agreements to clarify and provide procedures for certain provisions of the joint ownership agreements related to adverse events that require the vote of the holders of at least 90% of the ownership interests in Plant Vogtle Units 3 and 4 to continue construction (as amended, and together with the November 2017 amendment, the Vogtle Joint Ownership Agreements). The Vogtle Joint Ownership Agreements also confirm that the Vogtle Owners' sole recourse against Georgia Power or Southern Nuclear for any action or inaction in connection with their performance as agent for the Vogtle Owners is limited to removal of Georgia Power and/or Southern Nuclear as agent, except in cases of willful misconduct.

As a result of an increase in the total project capital cost forecast and Georgia Power's decision not to seek rate recovery of the increase in the base capital costs in conjunction with the nineteenth VCM report in 2018, the holders of at least 90% of the ownership interests in Plant Vogtle Units 3 and 4 were required to vote to continue construction. In September 2018, the Vogtle Owners unanimously voted to continue construction of Plant Vogtle Units 3 and 4.

Amendments to the Vogtle Joint Ownership Agreements

In connection with the vote to continue construction, Georgia Power entered into (i) a binding term sheet (Vogtle Owner Term Sheet) with the other Vogtle Owners and MEAG Power's wholly-owned subsidiaries MEAG Power SPVJ, LLC (MEAG SPVJ), MEAG Power SPVM, LLC (MEAG SPVM), and MEAG Power SPVP, LLC (MEAG SPVP) to take certain actions which partially mitigate potential financial exposure for the other Vogtle Owners, including additional amendments to the Vogtle Joint Ownership Agreements and the purchase of PTCs from the other Vogtle Owners at pre-established prices, and (ii) a term sheet (MEAG Term Sheet) with MEAG Power and MEAG SPVJ to provide up to \$300 million of funding with respect to MEAG SPVJ's ownership interest in Plant Vogtle Units 3 and 4 under certain circumstances. In January 2019, Georgia Power, MEAG Power, and MEAG SPVJ entered into an agreement to implement the provisions of the MEAG Term Sheet. In February 2019, Georgia Power, the other Vogtle Owners, and MEAG Power's wholly-owned subsidiaries MEAG SPVJ, MEAG SPVM, and MEAG SPVP entered into certain amendments to the Vogtle Joint Ownership Agreements to implement the provisions of the Vogtle Owner Term Sheet (Global Amendments).

As previously disclosed, pursuant to the Global Amendments: (i) each Vogtle Owner must pay its proportionate share of qualifying construction costs for Plant Vogtle Units 3 and 4 based on its ownership percentage up to the estimated cost at completion (EAC) for Plant Vogtle Units 3 and 4 which formed the basis of Georgia Power's forecast of \$8.4 billion in the nineteenth VCM plus \$800 million; (ii) Georgia Power will be responsible for 55.7% of actual qualifying construction costs between \$800 million and \$1.6 billion over the EAC in the nineteenth VCM (resulting in \$80 million of potential additional costs to Georgia Power), with the remaining Vogtle Owners responsible for 44.3% of such costs pro rata in accordance with their respective ownership interests; and (iii) Georgia Power will be responsible for 65.7% of qualifying construction costs between \$1.6 billion and \$2.1 billion over the EAC in the nineteenth VCM (resulting in a further \$100 million of potential additional costs to Georgia Power), with the remaining Vogtle Owners responsible for 34.3% of such costs pro rata in accordance with their respective ownership interests. If the EAC is revised and exceeds the EAC in the nineteenth VCM by more than \$2.1 billion, each of the other Vogtle Owners will have a one-time option at the time the project budget forecast is so revised to tender a portion of its ownership interest to Georgia Power in exchange for Georgia Power's agreement to pay 100% of such Vogtle Owner's remaining share of total construction costs in excess of the EAC in the nineteenth VCM plus \$2.1 billion.

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In addition, pursuant to the Global Amendments, the holders of at least 90% of the ownership interests in Plant Vogtle Units 3 and 4 must vote to continue construction if certain adverse events occur, including, among other events: (i) the bankruptcy of Toshiba; (ii) the termination or rejection in bankruptcy of certain agreements, including the Vogtle Services Agreement, the Bechtel Agreement, or the agency agreement with Southern Nuclear; (iii) Georgia Power's public announcement of its intention not to submit for rate recovery any portion of its investment in Plant Vogtle Units 3 and 4 or the Georgia PSC determines that any of Georgia Power's costs relating to the construction of Plant Vogtle Units 3 and 4 will not be recovered in retail rates, excluding any additional amounts paid by Georgia Power on behalf of the other Vogtle Owners pursuant to the Global Amendments described above and the first 6% of costs during any six-month VCM reporting period that are disallowed by the Georgia PSC for recovery, or for which Georgia Power elects not to seek cost recovery, through retail rates; and (iv) an incremental extension of one year or more over the most recently approved schedule.

The ultimate outcome of these matters cannot be determined at this time.

Regulatory Matters

In 2009, the Georgia PSC voted to certify construction of Plant Vogtle Units 3 and 4 with a certified capital cost of \$4.418 billion. In addition, in 2009 the Georgia PSC approved inclusion of the Plant Vogtle Units 3 and 4 related CWIP accounts in rate base, and the State of Georgia enacted the Georgia Nuclear Energy Financing Act, which allows Georgia Power to recover financing costs for Plant Vogtle Units 3 and 4. Financing costs are recovered on all applicable certified costs through annual adjustments to the NCCR tariff up to the certified capital cost of \$4.418 billion. At December 31, 2020, Georgia Power had recovered approximately \$2.5 billion of financing costs. Financing costs related to capital costs above \$4.418 billion are being recognized through AFUDC and are expected to be recovered through retail rates over the life of Plant Vogtle Units 3 and 4; however, Georgia Power will not record AFUDC related to any capital costs in excess of the total deemed reasonable by the Georgia PSC (currently \$7.3 billion) and not requested for rate recovery. On November 3, 2020, the Georgia PSC approved Georgia Power's request to decrease the NCCR tariff by \$142 million annually, effective January 1, 2021.

Georgia Power is required to file semi-annual VCM reports with the Georgia PSC by February 28 and August 31 of each year. In 2013, in connection with the eighth VCM report, the Georgia PSC approved a stipulation between Georgia Power and the staff of the Georgia PSC to waive the requirement to amend the Plant Vogtle Units 3 and 4 certificate in accordance with the 2009 certification order until the completion of Plant Vogtle Unit 3, or earlier if deemed appropriate by the Georgia PSC and Georgia Power.

In 2016, the Georgia PSC voted to approve a settlement agreement (Vogtle Cost Settlement Agreement) resolving certain prudency matters in connection with the fifteenth VCM report. In December 2017, the Georgia PSC voted to approve (and issued its related order on January 11, 2018) Georgia Power's seventeenth VCM report and modified the Vogtle Cost Settlement Agreement. The Vogtle Cost Settlement Agreement, as modified by the January 11, 2018 order, resolved the following regulatory matters related to Plant Vogtle Units 3 and 4: (i) none of the \$3.3 billion of costs incurred through December 31, 2015 and reflected in the fourteenth VCM report should be disallowed from rate base on the basis of imprudence; (ii) the Contractor Settlement Agreement was reasonable and prudent and none of the \$0.3 billion paid pursuant to the Contractor Settlement Agreement should be disallowed from rate base on the basis of imprudence; (iii) (a) capital costs incurred up to \$5.68 billion would be presumed to be reasonable and prudent with the burden of proof on any party challenging such costs, (b) Georgia Power would have the burden to show that any capital costs above \$5.68 billion were prudent, and (c) a revised capital cost forecast of \$7.3 billion (after reflecting the impact of payments received under the Guarantee Settlement Agreement and related customer refunds) was found reasonable; (iv) construction of Plant Vogtle Units 3 and 4 should be completed, with Southern Nuclear serving as project manager and Bechtel as primary contractor; (v) approved and deemed reasonable Georgia Power's revised schedule placing Plant Vogtle Units 3 and 4 in service in November 2021 and November 2022, respectively; (vi) confirmed that the revised cost forecast does not represent a cost cap and that prudence decisions on cost recovery will be made at a later date, consistent with applicable Georgia law; (vii) reduced the ROE used to calculate the NCCR tariff (a) from 10.95% (the ROE rate setting point authorized by the Georgia PSC in the 2013 ARP) to 10.00% effective January 1, 2016, (b) from 10.00% to 8.30%, effective January 1, 2020, and (c) from 8.30% to 5.30%, effective January 1, 2021 (provided that the ROE in no case will be less than Georgia Power's average cost of long-term debt); (viii) reduced the ROE used for AFUDC equity for Plant Vogtle Units 3 and 4 from 10.00% to Georgia Power's average cost of long-term debt, effective January 1, 2018; and (ix) agreed that upon Unit 3 reaching commercial operation, retail base rates would be adjusted to include the costs related to Unit 3 and common facilities deemed prudent in the Vogtle Cost Settlement Agreement. The January 11, 2018 order also stated that if Plant Vogtle Units 3 and 4 are not commercially operational by June 1, 2021 and June 1, 2022, respectively, the ROE used to calculate the NCCR tariff will be further reduced by 10 basis points each month (but not lower than Georgia Power's average cost of long-term debt) until the respective Unit is commercially operational. The ROE reductions negatively impacted earnings by approximately \$150 million, \$75 million, and \$100 million in 2020, 2019, and 2018, respectively, and are estimated to have negative earnings impacts of approximately \$260 million and \$200 million in 2021 and 2022, respectively. In its January 11, 2018 order, the Georgia PSC also stated if other conditions change and assumptions upon which Georgia Power's seventeenth VCM report are based do not materialize, the Georgia PSC reserved the right to reconsider the decision to continue construction.

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In 2018, Georgia Interfaith Power & Light, Inc., Partnership for Southern Equity, Inc., and Georgia Watch filed petitions in Fulton County Superior Court seeking judicial review of the Georgia PSC's January 11, 2018 order. The petitions were dismissed by the Fulton County Superior Court and later remanded by the Georgia Court of Appeals. The Fulton County Superior Court issued another order dismissing the petitions and, in August 2020, the petitioners withdrew their notice of appeal. This matter is now concluded.

The Georgia PSC has approved 23 VCM reports covering periods through June 30, 2020, including total construction capital costs incurred through that date of \$8.1 billion (before \$1.7 billion of payments received under the Guarantee Settlement Agreement and approximately \$188 million in related customer refunds). The Georgia PSC's order approving the twenty-third VCM report also instructed Georgia Power and the staff of the Georgia PSC to develop a mutually-agreeable recommendation to the Georgia PSC by the end of March 2021 regarding the procedure for and the timing, form, and substance of the rate adjustment filing related to the Unit 3 and common facility costs. Georgia Power expects to file its twenty-fourth VCM report with the Georgia PSC on February 18, 2021, covering the period from July 1, 2020 through December 31, 2020, requesting approval of \$670 million of construction capital costs incurred during that period.

The ultimate outcome of these matters cannot be determined at this time.

Mississippi Power

Mississippi Power's rates and charges for service to retail customers are subject to the regulatory oversight of the Mississippi PSC. Mississippi Power's rates are a combination of base rates and several separate cost recovery clauses for specific categories of costs. These separate cost recovery clauses address such items as fuel and purchased power, ad valorem taxes, property damage, and the costs of compliance with environmental laws and regulations. Costs not addressed through one of the specific cost recovery clauses are expected to be recovered through Mississippi Power's base rates.

2019 Base Rate Case

On March 17, 2020, the Mississippi PSC approved a settlement agreement between Mississippi Power and the Mississippi Public Utilities Staff related to Mississippi Power's base rate case filed in November 2019 (Mississippi Power Rate Case Settlement Agreement).

Under the terms of the Mississippi Power Rate Case Settlement Agreement, annual retail rates decreased approximately \$16.7 million, or 1.85%, effective for the first billing cycle of April 2020, based on a test year period of January 1, 2020 through December 31, 2020, a 53% average equity ratio, an allowed maximum actual equity ratio of 55% by the end of 2020, and a 7.57% return on investment.

Additionally, the Mississippi Power Rate Case Settlement Agreement: (i) established common amortization periods of four years for regulatory assets and three years for regulatory liabilities included in the approved revenue requirement, including those related to unprotected deferred income taxes; (ii) established new depreciation rates reflecting an annual increase in depreciation of approximately \$10 million; and (iii) excluded certain compensation costs totaling approximately \$3.9 million. It also eliminated separate rates for costs associated with Plant Ratcliffe and energy efficiency initiatives and includes such costs in the PEP, ECO Plan, and ad valorem tax adjustment factor, as applicable. In accordance with the previous order of the Mississippi PSC suspending the operation of PEP and the ECO Plan for 2018 through 2020, Mississippi Power submitted its 2021 ECO Plan filing on February 12, 2021 and plans to submit its 2021 PEP filing in March 2021.

Performance Evaluation Plan

Mississippi Power's retail base rates generally are set under the PEP, a rate plan approved by the Mississippi PSC. In recognition that Mississippi Power's long-term financial success is dependent upon how well it satisfies its customers' needs, PEP includes performance indicators that directly tie customer service indicators to Mississippi Power's allowed ROE. PEP measures Mississippi Power's performance on a 10-point scale as a weighted average of results in three areas: average customer price, as compared to prices of other regional utilities (weighted at 40%); service reliability, measured in percentage of time customers had electric service (40%); and customer satisfaction, measured in a survey of residential customers (20%). Typically, two PEP filings are made for each calendar year: the PEP projected filing and the PEP lookback filing. On July 24, 2020, the Mississippi PSC approved Mississippi Power's revisions to the PEP compliance rate clause as agreed to in the Mississippi Power Rate Case Settlement Agreement. These revisions include, among other things, changing the filing date for the annual PEP rate projected filing from November of the immediately preceding year to March of the current year, utilizing a historic test year adjusted for "known and measurable" changes, using discounted cash flow and regression formulas to determine base ROE, and moving all embedded ad valorem property taxes currently collected in PEP to the ad valorem tax adjustment clause. The PEP lookback filing will continue to be filed after the end of the year and allows for review of the actual revenue requirement.

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In 2018, Mississippi Power revised its annual projected PEP filing for 2018 to reflect the impacts of the Tax Reform Legislation. The revised filing requested an increase of \$26 million in annual revenues, based on a performance adjusted ROE of 9.33% and an increased equity ratio of 50%. Mississippi Power and the MPUS entered into a settlement agreement, which was approved by the Mississippi PSC, with respect to the 2018 PEP filing and all unresolved PEP filings for prior years (2018 PEP Settlement Agreement). Rates under the 2018 PEP Settlement Agreement became effective with the first billing cycle of September 2018. The 2018 PEP Settlement Agreement provided for an increase of approximately \$21.6 million in annual base retail revenues, which excluded certain compensation costs contested by the MPUS, as well as approximately \$2 million subsequently approved for recovery through the 2018 Energy Efficiency Cost Rider. Under the 2018 PEP Settlement Agreement, Mississippi Power deferred a portion of the contested compensation costs for 2018 and 2019 as a regulatory asset totaling \$4 million, which was included in other regulatory assets, deferred on the balance sheet at December 31, 2019. These costs are being recovered over a four-year period through March 2024 as approved in the Mississippi Power Rate Case Settlement Agreement.

Pursuant to the 2018 PEP Settlement Agreement, Mississippi Power’s performance-adjusted allowed ROE was 9.31% and its allowed equity ratio was capped at 51%, pending further review by the Mississippi PSC. In lieu of the requested equity ratio increase, Mississippi Power retained \$44 million of excess accumulated deferred income taxes resulting from the Tax Reform Legislation. The Mississippi Power Rate Case Settlement Agreement set amortization periods for the excess accumulated deferred income taxes, as discussed under “2019 Base Rate Case” herein.

Pursuant to the 2018 PEP Settlement Agreement, Mississippi Power was not required to make any PEP filings for regulatory years 2018, 2019, and 2020. Mississippi Power plans to submit its 2021 PEP filing in March 2021. The ultimate outcome of this matter cannot be determined at this time.

Operations Review

In 2018, the Mississippi PSC began an operations review of Mississippi Power. The review includes, but is not limited to, a comparative analysis of its costs, its cost recovery framework, and ways in which it may streamline management operations for the reasonable benefit of ratepayers. The ultimate outcome of this matter cannot be determined at this time.

Reserve Margin Plan

In December 2019, Mississippi Power updated its proposed RMP, originally filed in 2018, as required by the Mississippi PSC. In 2018, Mississippi Power had proposed alternatives to reduce its reserve margin and lower or avoid operating costs, with the most economic alternatives being the two-year and seven-year acceleration of the retirement of Plant Watson Units 4 and 5, respectively, to the first quarter 2022 and the four-year acceleration of the retirement of Plant Greene County Units 1 and 2 to the third quarter 2021 and the third quarter 2022, respectively. The December 2019 update noted that Plant Daniel Units 1 and 2 currently have long-term economics similar to Plant Watson Unit 5. The Plant Greene County unit retirements would require the completion by Alabama Power of transmission and system reliability improvements, as well as agreement by Alabama Power.

On December 17, 2020, the Mississippi PSC issued an order concluding the RMP docket and requiring Mississippi Power to incorporate into its 2021 IRP a schedule of early or anticipated retirement of 950 MWs of fossil-steam generation by year-end 2027 to reduce Mississippi Power’s excess reserve margin. The order stated that Mississippi Power will be allowed to defer any retirement-related costs as regulatory assets for future recovery. Mississippi Power’s IRP is scheduled to be filed in April 2021.

The ultimate outcome of these matters cannot be determined at this time. See Note 3 under “Other Matters – Mississippi Power” for additional information on Plant Daniel Units 1 and 2.

Environmental Compliance Overview Plan

In accordance with a 2011 accounting order from the Mississippi PSC, Mississippi Power has the authority to defer in a regulatory asset for future recovery all plant retirement- or partial retirement-related costs resulting from environmental regulations.

In 2018, the Mississippi PSC approved an annual increase in revenues related to the ECO Plan of approximately \$17 million, effective with the first billing cycle for September 2018. This increase represented the maximum 2% annual increase in revenues and primarily related to the carryforward from the prior year. The increase was the result of Mississippi PSC approval of an agreement between Mississippi Power and the MPUS to settle the 2018 ECO Plan filing (ECO Settlement Agreement) and was sufficient to recover costs through 2019, including remaining amounts deferred from prior years along with the related carrying costs. In accordance with the ECO Settlement Agreement, Mississippi Power was not required to make any ECO Plan filings for 2018, 2019, and 2020, and any necessary adjustments were reflected in Mississippi Power’s 2019 base rate case. The ECO Settlement Agreement contains the same terms as the 2018 PEP Settlement Agreement described herein with respect to allowed ROE and equity ratio.

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In October 2019, the Mississippi PSC approved Mississippi Power’s July 2019 request for a CPCN to complete certain environmental compliance projects, primarily associated with the Plant Daniel coal units co-owned 50% with Gulf Power. The total estimated cost is approximately \$125 million, with Mississippi Power’s share of approximately \$66 million being proposed for recovery through its ECO Plan. Approximately \$17 million of Mississippi Power’s share is associated with ash pond closure and is reflected in Mississippi Power’s ARO liabilities. See Note 6 for additional information on AROs and Note 3 under “Other Matters – Mississippi Power” for additional information on Gulf Power’s ownership in Plant Daniel.

On February 12, 2021, Mississippi Power submitted its ECO Plan filing for 2021, which requested an annual decrease in revenues of approximately \$9 million primarily due to a change in the amortization periods of certain regulatory assets and liabilities. The ultimate outcome of this matter cannot be determined at this time.

Fuel Cost Recovery

Mississippi Power annually establishes and is required to file for an adjustment to the retail fuel cost recovery factor that is approved by the Mississippi PSC. The Mississippi PSC approved an increase of \$39 million effective February 2018, decreases of \$35 million and \$24 million effective in February 2019 and 2020, respectively, and an increase of \$2 million effective in February 2021. At December 31, 2020 and 2019, over recovered retail fuel costs totaled approximately \$24 million and \$23 million, respectively, and were included in other current liabilities on Southern Company’s balance sheets and over recovered regulatory clause liabilities on Mississippi Power’s balance sheets.

Mississippi Power has wholesale MRA and Market Based (MB) fuel cost recovery factors. Effective with the first billing cycles for January 2019, 2020, and 2021, annual revenues under the wholesale MRA fuel rate increased \$16 million, increased \$1 million, and decreased \$5 million, respectively. The wholesale MB fuel rate did not change materially in any period presented. At December 31, 2020 and 2019, over recovered wholesale fuel costs totaled approximately \$10 million and \$6 million, respectively, and were included in other current liabilities on Southern Company’s balance sheets and over recovered regulatory clause liabilities on Mississippi Power’s balance sheets.

Mississippi Power’s operating revenues are adjusted for differences in actual recoverable fuel cost and amounts billed in accordance with the currently approved cost recovery rate. Accordingly, changes in the billing factor should have no significant effect on Mississippi Power’s revenues or net income but will affect operating cash flows.

Ad Valorem Tax Adjustment

Mississippi Power establishes annually an ad valorem tax adjustment factor that is approved by the Mississippi PSC to collect the ad valorem taxes paid by Mississippi Power. In 2020, 2019, and 2018, the annual revenues collected through the ad valorem tax adjustment factor increased by \$10 million, decreased by \$2 million, and increased by \$7 million, respectively. On February 12, 2021, Mississippi Power submitted its ad valorem tax adjustment factor filing for 2021, which requested an annual increase in revenues of approximately \$28 million, primarily due to higher ad valorem taxes and inclusion of the ad valorem taxes previously recovered in PEP in accordance with the Mississippi Power Rate Case Settlement Agreement. The ultimate outcome of this matter cannot be determined at this time.

System Restoration Rider

Mississippi Power carries insurance for the cost of certain types of damage to generation plants and general property. However, Mississippi Power is self-insured for the cost of storm, fire, and other uninsured casualty damage to its property, including transmission and distribution facilities. As permitted by the Mississippi PSC and the FERC, Mississippi Power accrues for the cost of such damage through an annual expense accrual which is credited to regulatory liability accounts for the retail and wholesale jurisdictions. The cost of repairing actual damage resulting from such events that individually exceed \$50,000 is charged to the reserve. Every three years the Mississippi PSC, the MPUS, and Mississippi Power agree on SRR revenue level(s) for the ensuing period, based on historical data, expected exposure, type and amount of insurance coverage, excluding insurance cost, and any other relevant information. The accrual amount and the reserve balance are determined based on the SRR revenue level(s). If a significant change in circumstances occurs, then the SRR revenue level can be adjusted more frequently if Mississippi Power, the MPUS, and the Mississippi PSC deem the change appropriate. The property damage reserve accrual will be the difference between the approved SRR revenues and the SRR revenue requirement. In addition, SRR allows Mississippi Power to set up a regulatory asset, pending review, if the allowable actual retail property damage costs exceed the amount in the retail property damage reserve. The SRR rate was zero for all years presented.

On October 28, 2020, Hurricane Zeta hit the Gulf Coast of Mississippi causing major damage to Mississippi Power’s transmission and distribution infrastructure and, as a result, approximately \$43 million was charged to the retail property damage reserve. These costs are expected to be addressed in a subsequent SRR rate filing. The ultimate outcome of this matter cannot be determined at this time.

Mississippi Power made retail SRR annual expense accruals of \$1 million in 2020, 2019, and 2018. As of December 31, 2020, the retail property damage reserve balance was \$4 million.

Deferral of Incremental COVID-19 Costs

On April 14, 2020 and May 12, 2020, in order to mitigate the economic impact of the COVID-19 pandemic on customers, the Mississippi PSC approved orders directing Mississippi Power to continue its previous, voluntary suspension of customer disconnections through May 26, 2020 and to defer as a regulatory asset all necessary and reasonable incremental costs or expenses to plan, prepare, stage, or react to protect and keep safe its employees and customers, and to reliably operate its utility system during the COVID-19 pandemic. The period over which such costs will be recovered is expected to be determined in a future PEP filing. At December 31, 2020, the incremental costs deferred totaled approximately \$1 million. The ultimate outcome of this matter cannot be determined at this time.

Municipal and Rural Associations Tariff

Mississippi Power provides wholesale electric service to Cooperative Energy, East Mississippi Electric Power Association, and the City of Collins, all located in southeastern Mississippi, under a long-term, cost-based, FERC-regulated MRA tariff.

In 2017, Mississippi Power and Cooperative Energy executed, and the FERC accepted, a Shared Service Agreement (SSA), as part of the MRA tariff, under which Mississippi Power and Cooperative Energy will share in providing electricity to the Cooperative Energy delivery points under the tariff, effective January 1, 2018. The SSA may be cancelled by Cooperative Energy with 10 years notice. As of December 31, 2020, Cooperative Energy has the option to decrease its use of Mississippi Power’s generation services under the MRA tariff up to 2.5% annually, with required notice, up to a maximum total reduction of 11%, or approximately \$9 million in cumulative annual base revenues.

In May 2019, the FERC accepted Mississippi Power’s requested \$3.7 million annual decrease in MRA base rates effective January 1, 2019, as agreed upon in a settlement agreement reached with its wholesale customers resolving all matters related to the Kemper County energy facility, similar to the 2018 PEP Settlement Agreement, and reflecting the impacts of the Tax Reform Legislation.

On June 25, 2020, the FERC accepted Mississippi Power’s requested \$2 million annual increase in MRA base rates effective June 1, 2020, as agreed upon in a settlement agreement reached with its wholesale customers.

Cooperative Energy Power Supply Agreement

Effective April 1, 2018, Mississippi Power and Cooperative Energy amended and extended a previous power supply agreement (PSA) through March 31, 2021, which was subsequently extended through May 31, 2021. The amendment increased the total capacity from 86 MWs to 286 MWs. The parties are currently negotiating a further extension of the agreement. The ultimate outcome of this matter cannot be determined at this time.

Cooperative Energy also has a 10-year network integration transmission service agreement (NITSA) with SCS for transmission service to certain delivery points on Mississippi Power’s transmission system through March 31, 2021. As a result of the PSA amendment, Cooperative Energy and SCS also amended the terms of the NITSA, which the FERC approved, to provide for the purchase of incremental transmission capacity from April 1, 2018 through March 31, 2021. On February 7, 2021, the NITSA was renewed for a 10-year term beginning April 1, 2021.

Southern Company Gas

Utility Regulation and Rate Design

The natural gas distribution utilities are subject to regulation and oversight by their respective state regulatory agencies. Rates charged to customers vary according to customer class (residential, commercial, or industrial) and rate jurisdiction. These agencies approve rates designed to provide the opportunity to generate revenues to recover all prudently-incurred costs, including a return on rate base sufficient to pay interest on debt and provide a reasonable ROE.

As a result of operating in a deregulated environment, Atlanta Gas Light earns revenue by charging rates to its customers based primarily on monthly fixed charges that are set by the Georgia PSC and adjusted periodically. The Marketers add these fixed charges when billing customers. This mechanism, called a straight-fixed-variable rate design, minimizes the seasonality of Atlanta Gas Light’s revenues since the monthly fixed charge is not volumetric or directly weather dependent.

With the exception of Atlanta Gas Light, the earnings of the natural gas distribution utilities can be affected by customer consumption patterns that are largely a function of weather conditions and price levels for natural gas. Specifically, customer demand substantially increases during the Heating Season when natural gas is used for heating purposes. Southern Company Gas has various mechanisms, such as weather and revenue normalization mechanisms and weather derivative instruments, that limit exposure to weather changes within typical ranges in these utilities’ respective service territories.

In addition to natural gas cost recovery mechanisms, other cost recovery mechanisms and regulatory riders, which vary by utility, allow recovery of certain costs, such as those related to infrastructure replacement programs as well as environmental remediation, energy efficiency plans, and bad debts. In traditional rate designs, utilities recover a significant portion of the fixed customer service and pipeline infrastructure costs based on assumed natural gas volumes used by customers. The utilities, including Nicor Gas beginning in November 2019, have decoupled regulatory mechanisms that Southern Company Gas believes encourage conservation by separating the recoverable amount of these fixed costs from the amounts of natural gas used by customers. See “Rate Proceedings” for additional information. Also see “Infrastructure Replacement Programs and Capital Projects” for additional information regarding infrastructure replacement programs at certain of the natural gas distribution utilities.

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The following table provides regulatory information for Southern Company Gas’ natural gas distribution utilities:

	Nicor Gas	Atlanta Gas Light	Virginia Natural Gas	Chattanooga Gas
Authorized ROE ^(a)	9.73%	10.25%	9.50%	9.80%
Weather normalization mechanisms ^(b)			✓	✓
Decoupled, including straight-fixed-variable rates ^(c)	✓	✓	✓	
Regulatory infrastructure program rates ^(d)	✓		✓	
Bad debt rider ^(e)	✓		✓	✓
Energy efficiency plan ^(f)	✓		✓	
Annual base rate adjustment mechanism ^(g)		✓		✓
Year of last base rate case decision	2019	2019	2017	2018

- (a) Represents the authorized ROE, or the mid-point of the authorized ROE range, at December 31, 2020.
- (b) Designed to help stabilize operating results by allowing recovery of costs in the event of unseasonal weather, but are not direct offsets to the potential impacts on earnings of weather and customer consumption.
- (c) Allows for recovery of fixed customer service costs separately from assumed natural gas volumes used by customers and provides a benchmark level of revenue for recovery.
- (d) Programs that update or expand distribution systems and LNG facilities.
- (e) The recovery (refund) of bad debt expense over (under) an established benchmark expense. The gas portion of bad debt expense is recovered through purchased gas adjustment mechanisms. Nicor Gas also has a rider to recover the non-gas portion of bad debt expense.
- (f) Recovery of costs associated with plans to achieve specified energy savings goals.
- (g) Regulatory mechanism allowing annual adjustments to base rates up or down based on authorized ROE and/or ROE range.

Infrastructure Replacement Programs and Capital Projects

In addition to capital expenditures recovered through base rates by each of the natural gas distribution utilities, Nicor Gas and Virginia Natural Gas have separate rate riders that provide timely recovery of capital expenditures for specific infrastructure replacement programs. Total capital expenditures incurred during 2020 for gas distribution operations were \$1.5 billion.

The following table and discussions provide updates on the infrastructure replacement programs and capital projects at the natural gas distribution utilities at December 31, 2020. These programs are risk-based and designed to update and replace cast iron, bare steel, and mid-vintage plastic materials or expand Southern Company Gas’ distribution systems to improve reliability and meet operational flexibility and growth.

Utility	Program	Recovery	Expenditures in 2020	Expenditures Since Project Inception	Pipe Installed Since Project Inception	Scope of Program	Program Duration	Last Year of Program
			(in millions)		(miles)	(miles)	(years)	
Nicor Gas	Investing in Illinois(*)	Rider	\$389	\$ 2,101	996	1,450	9	2023
Virginia Natural Gas	Steps to Advance Virginia's Energy (SAVE)	Rider	49	293	413	770	13	2024
Total			\$438	\$ 2,394	1,409	2,220		

(*) Includes replacement of pipes, compressors, and transmission mains along with other improvements such as new meters. Scope of program miles is an estimate and subject to change.

Nicor Gas

Illinois legislation allows Nicor Gas to provide more widespread safety and reliability enhancements to its distribution system and stipulates that rate increases to customers as a result of any infrastructure investments shall not exceed a cumulative annual average of 4.0% or, in any given year, 5.5% of base rate revenues. In 2014, the Illinois Commission approved the nine-year regulatory infrastructure program, Investing in Illinois, subject to annual review. In conjunction with the base rate case order issued by the Illinois Commission in 2018, Nicor Gas is recovering program costs incurred prior to December 31, 2017 through base rates. Additionally, the Illinois Commission’s approval of Nicor Gas’ rate case in October 2019 included \$65 million in annual revenues related to the recovery of program costs from January 1, 2018 through September 30, 2019 under the Investing in Illinois program. See “Rate Proceedings” herein for additional information, including additional amounts requested for recovery in the base rate case filed in January 2021. Nicor Gas’ capital expenditures related to qualifying projects under the Investing in Illinois program totaled \$396 million and \$409 million in 2019 and 2018, respectively.

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Virginia Natural Gas

In September 2019, the Virginia Commission approved amendments to and extension of the Steps to Advance Virginia’s Energy (SAVE) program, an accelerated infrastructure replacement program. The extension allows Virginia Natural Gas to continue replacing aging pipeline infrastructure through 2024 and increases its authorized investment under the previously-approved plan from \$35 million to \$40 million in 2019 with additional annual investments of \$50 million in 2020, \$60 million in 2021, \$70 million in each year from 2022 through 2024, and a total potential variance of up to \$5 million allowed for the program, for a maximum total investment over the six-year term (2019 through 2024) of \$365 million.

The SAVE program is subject to annual review by the Virginia Commission. In accordance with the base rate case filed with the Virginia Commission in 2020, Virginia Natural Gas is recovering program costs incurred prior to November 1, 2020 through base rates. Program costs incurred subsequent to November 1, 2020 are currently being recovered through a separate rider and are subject to future base rate case proceedings.

In December 2019, Virginia Natural Gas filed an application with the Virginia Commission for a 24.1-mile header improvement project to improve resiliency and increase the supply of natural gas delivered to energy suppliers, including Virginia Natural Gas. Following Virginia Natural Gas’ notification on November 13, 2020 that it had terminated its agreements with the project’s primary customer, the Virginia Commission issued an order on December 1, 2020 dismissing Virginia Natural Gas’ application for the project. On December 15, 2020, Virginia Natural Gas filed a new application with the Virginia Commission for a 9.5-mile interconnect project to serve its existing transportation customers. The ultimate outcome of this matter cannot be determined at this time.

Atlanta Gas Light

GRAM

In December 2019, the Georgia PSC approved the continuation of GRAM as part of Atlanta Gas Light’s 2019 rate case order. Various infrastructure programs previously authorized by the Georgia PSC, including the Integrated Vintage Plastic Replacement Program to replace aging plastic pipe and the Integrated System Reinforcement Program to upgrade Atlanta Gas Light’s distribution system and LNG facilities in Georgia, continue under GRAM and the recovery of and return on the infrastructure program investments are included in annual base rate adjustments. The amounts to be recovered through rates related to allowed, but not incurred, costs have been recognized in an unrecognized ratemaking amount that is not reflected on the balance sheets. This allowed cost is primarily the equity return on the capital investment under the infrastructure programs in place prior to GRAM. These PRP costs are being recovered through GRAM and base rates until the earlier of the full recovery of the related under recovered amount or December 31, 2025. The under recovered balance at December 31, 2020 was \$113 million, including \$59 million of unrecognized equity return. The Georgia PSC reviews Atlanta Gas Light's performance annually under GRAM. See “Rate Proceedings” and “Unrecognized Ratemaking Amounts” herein for additional information.

Atlanta Gas Light and the staff of the Georgia PSC previously agreed to a variation of the Integrated Customer Growth Program to extend pipeline facilities to serve customers in areas without pipeline access and create new economic development opportunities in Georgia. A separate tariff provides recovery of up to \$15 million annually for strategic economic development projects approved by the Georgia PSC.

Natural Gas Cost Recovery

With the exception of Atlanta Gas Light, the natural gas distribution utilities are authorized by the relevant regulatory agencies in the states in which they serve to use natural gas cost recovery mechanisms that adjust rates to reflect changes in the wholesale cost of natural gas and ensure recovery of all costs prudently incurred in purchasing natural gas for customers. The natural gas distribution utilities defer or accrue the difference between the actual cost of natural gas and the amount of commodity revenue earned in a given period. The deferred or accrued amount is either billed or refunded to customers prospectively through adjustments to the commodity rate. Deferred natural gas costs are reflected as regulatory assets and accrued natural gas costs are reflected as regulatory liabilities. Changes in the billing factor will not have a significant effect on Southern Company’s or Southern Company Gas’ revenues or net income, but will affect cash flows. Since Atlanta Gas Light does not sell natural gas directly to its end-use customers, it does not utilize a traditional natural gas cost recovery mechanism. However, Atlanta Gas Light does maintain natural gas inventory for the Marketers in Georgia and recovers the cost through recovery mechanisms approved by the Georgia PSC. At December 31, 2020 and 2019, the over recovered balances were \$88 million and \$74 million, respectively, which were included in other regulatory liabilities on Southern Company’s and Southern Company Gas' balance sheets.

Rate Proceedings

Nicor Gas

In January 2018, the Illinois Commission approved a \$137 million increase in annual base rate revenues, including \$93 million related to the recovery of investments under the Investing in Illinois program, effective in February 2018, based on a ROE of 9.8%. In May 2018, the Illinois Commission approved Nicor Gas’ rehearing request for revised base rates to incorporate the reduction in the federal income tax rate as a result of the Tax Reform Legislation. The resulting decrease of approximately \$44 million in annual base rate revenues became effective May 5, 2018. The benefits of the Tax Reform Legislation from January 25, 2018 through May 4, 2018 were refunded to customers via bill credits and concluded in the second quarter 2019.

In October 2019, the Illinois Commission approved a \$168 million annual base rate increase effective October 8, 2019. The base rate increase included \$65 million related to the recovery of program costs under the Investing in Illinois program and was based on a ROE of 9.73% and an equity ratio of 54.2%. Additionally, the Illinois Commission approved a volume balancing adjustment, a revenue decoupling mechanism for residential customers that provides a benchmark level of revenue per rate class for recovery.

On January 14, 2021, Nicor Gas filed a general base rate case with the Illinois Commission, requesting a \$293 million increase in annual base rate revenues, including \$94 million related to the recovery of investments under the Investing in Illinois program. The requested increase is based on a projected test year ending December 31, 2022, a ROE of 10.35%, and an equity ratio of 54.5%. The Illinois Commission has an 11-month statutory time limit to rule on the requested increase, after which rate adjustments will be effective. The ultimate outcome of this matter cannot be determined at this time.

Atlanta Gas Light

In 2018, Atlanta Gas Light revised its annual GRAM filing to reflect the impacts of the Tax Reform Legislation and requested a \$16 million rate reduction. In May 2018, the Georgia PSC approved a stipulation for Atlanta Gas Light’s annual base rates to remain at the 2017 level for 2018 and 2019, with customer credits of \$8 million in each of July 2018 and October 2018 to reflect the impacts of the Tax Reform Legislation. The Georgia PSC maintained Atlanta Gas Light’s previously authorized earnings band based on a ROE between 10.55% and 10.95% and increased the allowed equity ratio by 4% to an equity ratio of 55% to address the negative cash flow and credit metric impacts of the Tax Reform Legislation.

In December 2019, the Georgia PSC approved a \$65 million annual base rate increase, effective January 1, 2020, based on a ROE of 10.25% and an equity ratio of 56%. Earnings will be evaluated against a ROE range of 10.05% to 10.45%, with disposition of any earnings above 10.45% to be determined by the Georgia PSC. Additionally, the Georgia PSC approved continuation of the previously authorized inclusion in base rates of the recovery of and return on the infrastructure program investments, including, but not limited to, GRAM adjustments, and a reauthorization and continuation of GRAM until terminated by the Georgia PSC. GRAM filing rate adjustments will be based on the authorized ROE of 10.25%. GRAM adjustments for 2021 may not exceed 5% of 2020 base rates. The 5% limitation does not set a precedent in any future rate proceedings by Atlanta Gas Light.

On July 1, 2020, Atlanta Gas Light filed its 2020 GRAM filing with the Georgia PSC requesting an annual base rate increase of \$37.6 million based on the projected 12-month period beginning January 1, 2021, which did not exceed the 5% limitation established by the Georgia PSC. Rates went into effect on January 1, 2021 in accordance with Atlanta Gas Light’s 2019 rate case order.

On February 16, 2021, the Georgia PSC approved a stipulation between Atlanta Gas Light and the Georgia PSC staff establishing a long-range comprehensive planning process. Under the terms of the stipulation, Atlanta Gas Light will develop and file at least triennially an Integrated Capacity and Delivery Plan (i-CDP). Each i-CDP will include a 10-year forecast of interstate and intrastate capacity asset requirements, including a detailed plan for the first three years consistent with Atlanta Gas Light’s current capacity supply plan, and a 10-year projection of capital budgets and related operations and maintenance spending. Recovery of the related revenue requirements will be included in either subsequent annual GRAM filings or a new System Reinforcement Rider for authorized large pressure improvement and system reliability projects. Atlanta Gas Light will file its first i-CDP later in 2021. The ultimate outcome of this matter cannot be determined at this time.

Virginia Natural Gas

In 2018, the Virginia Commission approved Virginia Natural Gas’ annual information form filing, which was based on the previously authorized ROE range of 9.0% to 10.0%, with a midpoint of 9.5%, and reduced annual base rates by \$14 million effective January 1, 2019 due to lower tax expense as a result of the Tax Reform Legislation, along with customer refunds, via bill credits, for \$14 million related to 2018 tax benefits deferred as a regulatory liability at December 31, 2018. These customer refunds were completed in the first quarter 2019.

On June 1, 2020, Virginia Natural Gas filed a general rate case with the Virginia Commission seeking an increase in annual base revenues of \$49.6 million primarily to recover investments and increased costs associated with infrastructure, technology, and workforce development. The requested increase is based on a projected 12-month test year beginning November 1, 2020, a ROE of 10.35%, and an equity ratio of 54%. Interim rate adjustments became effective November 1, 2020, subject to refund. The ultimate outcome of this matter cannot be determined at this time.

Deferral of Incremental COVID-19 Costs

As discussed under “Utility Regulation and Rate Design,” the natural gas distribution utilities have various regulatory mechanisms to recover bad debt expense, which will mitigate potential increases in bad debt expense as a result of the COVID-19 pandemic.

Atlanta Gas Light

On April 30, 2020, in response to the COVID-19 pandemic, the Georgia PSC approved orders directing Atlanta Gas Light to continue its previous, voluntary suspension of customer disconnections. On June 22, 2020, the Georgia PSC ordered Atlanta Gas Light to resume customer disconnections beginning July 1, 2020, with exceptions for customers still covered by a shelter-in-place order. All suspensions for customer disconnections were lifted in October 2020. The orders provide the Marketers, including SouthStar, with a mechanism to receive credits from Atlanta Gas Light for the base rates it charged to the Marketers of non-paying customers during the suspension. Atlanta Gas Light expects to recover these credits through the annual GRAM revenue true-up process, which would impact rates starting on January 1, 2022. The ultimate outcome of this matter cannot be determined at this time.

Nicor Gas

On March 18, 2020, in response to the COVID-19 pandemic, the Illinois Commission issued an order directing utilities to cease disconnections for non-payment and to suspend the imposition of late payment fees or penalties. On June 18, 2020, the Illinois Commission approved a stipulation pursuant to which Nicor Gas and other utilities in Illinois will provide more flexible credit and collection procedures to assist customers with financial hardship and which authorizes a special purpose rider for recovery of the following COVID-19 pandemic-related impacts: incremental costs directly associated with the COVID-19 pandemic, net of the offset for COVID-19 pandemic-related credits received, foregone late fees, foregone reconnection charges, and the costs associated with a bill payment assistance program. Nicor Gas resumed late payment fees on July 27, 2020 and, on October 1, 2020, began recovery of the COVID-19 pandemic-related impacts through the special purpose rider, which will continue over a 24-month period. In response to an Illinois Commission request, Nicor Gas will continue to voluntarily suspend residential customer disconnections for non-payment through March 31, 2021. At December 31, 2020, Nicor Gas’ related regulatory asset was \$9 million.

Virginia Natural Gas

In response to the COVID-19 pandemic, the Virginia Commission issued orders requiring Virginia Natural Gas to suspend disconnections beginning on March 16, 2020 and also to suspend late payment and reconnection fees beginning on April 9, 2020; these orders expired on October 5, 2020. On November 18, 2020, the Virginia legislature approved the continuation of these orders until the declared state of emergency in Virginia ends. On April 29, 2020, the Virginia Commission authorized Virginia Natural Gas to defer the following COVID-19 pandemic-related costs as a regulatory asset: incremental uncollectible expense incurred, suspended late fees, suspended reconnection charges, carrying costs, and other incremental prudently incurred costs associated with the COVID-19 pandemic. Specific recovery of the amounts deferred in a regulatory asset will be addressed in a future rate proceeding. At December 31, 2020, Virginia Natural Gas’ related regulatory asset was immaterial. The ultimate outcome of this matter cannot be determined at this time.

Unrecognized Ratemaking Amounts

The following table illustrates Southern Company Gas’ authorized ratemaking amounts that are not recognized on its balance sheets. These amounts are primarily composed of an allowed equity rate of return on assets associated with certain regulatory infrastructure programs. These amounts will be recognized as revenues in Southern Company Gas’ financial statements in the periods they are billable to customers, the majority of which will be recovered by 2025.

	December 31, 2020	December 31, 2019
	<i>(in millions)</i>	
Atlanta Gas Light	\$59	\$70
Virginia Natural Gas	10	10
Nicor Gas	3	2
Total	\$72	\$82

3. CONTINGENCIES, COMMITMENTS, AND GUARANTEES

General Litigation Matters

The Registrants are involved in various matters being litigated and regulatory matters. The ultimate outcome of such pending or potential litigation or regulatory matters against each Registrant and any subsidiaries cannot be determined at this time; however, for current proceedings not specifically reported herein, management does not anticipate that the ultimate liabilities, if any, arising from such current proceedings would have a material effect on such Registrant’s financial statements.

The Registrants believe the pending legal challenges discussed below have no merit; however, the ultimate outcome of these matters cannot be determined at this time.

Southern Company

In January 2017, a securities class action complaint was filed in the U.S. District Court for the Northern District of Georgia by Monroe County Employees’ Retirement System on behalf of all persons who purchased shares of Southern Company’s common stock between April 25, 2012 and October 30, 2013, as subsequently amended. The amended complaint named as defendants Southern Company, certain of its current and former officers, and certain former Mississippi Power officers and alleged that the defendants made materially false and misleading statements regarding the Kemper County energy facility in violation of certain provisions under the Securities Exchange Act of 1934, as amended. The complaint sought, among other things, compensatory damages and litigation costs and attorneys’ fees. In 2018, the court issued an order dismissing certain claims against certain officers of Southern Company and Mississippi Power and dismissing the allegations related to a number of the statements that plaintiffs challenged as being false or misleading. In 2018, the court denied the defendants’ motion for reconsideration and also denied a motion to certify the issue for interlocutory appeal. In 2019, the court certified the plaintiffs’ proposed class and entered an order staying all deadlines in the case pending mediation. In the third quarter 2020, the parties reached a settlement and the plaintiffs filed a stipulation of settlement and motion for preliminary approval to resolve the case on a class-wide basis, which the court granted on October 1, 2020. On January 14, 2021, the court granted final approval of the settlement. The settlement amount was paid entirely through existing insurance policies and did not have a material impact on Southern Company’s financial statements. This matter is now concluded.

In February 2017, Jean Vineyard and Judy Mesirov each filed a shareholder derivative lawsuit in the U.S. District Court for the Northern District of Georgia. Each of these lawsuits names as defendants Southern Company, certain of its directors, certain of its current and former officers, and certain former Mississippi Power officers. In 2017, these two shareholder derivative lawsuits were consolidated in the U.S. District Court for the Northern District of Georgia. The complaints allege that the defendants caused Southern Company to make false or misleading statements regarding the Kemper County energy facility cost and schedule. Further, the complaints allege that the defendants were unjustly enriched and caused the waste of corporate assets and also allege that the individual defendants violated their fiduciary duties.

In May 2017, Helen E. Piper Survivor’s Trust filed a shareholder derivative lawsuit in the Superior Court of Gwinnett County, Georgia that names as defendants Southern Company, certain of its directors, certain of its current and former officers, and certain former Mississippi Power officers. The complaint alleges that the individual defendants, among other things, breached their fiduciary duties in connection with schedule delays and cost overruns associated with the construction of the Kemper County energy facility. The complaint further alleges that the individual defendants authorized or failed to correct false and misleading statements regarding the Kemper County energy facility schedule and cost and failed to implement necessary internal controls to prevent harm to Southern Company. In August 2019, the court granted a motion filed by the plaintiff in July 2019 to substitute a new named plaintiff, Martin J. Kobuck, in place of Helen E. Piper Survivor’s Trust.

The plaintiffs in each of these cases seek to recover, on behalf of Southern Company, unspecified actual damages and, on each plaintiff’s own behalf, attorneys’ fees and costs in bringing the lawsuit, as well as certain changes to Southern Company’s corporate governance and internal processes. In 2018, the court in each case entered an order staying each lawsuit until 30 days after the resolution of any dispositive motions or any settlement, whichever is earlier, in the securities class action. In September 2020, the plaintiffs in each case filed a status report noting the settlement of the securities class action and informing the court that the parties had scheduled mediation, which occurred on November 12, 2020. The parties in each case did not reach settlement but continue to explore possible resolution. Each case is stayed while the parties discuss potential resolution.

Georgia Power

In 2011, plaintiffs filed a putative class action against Georgia Power in the Superior Court of Fulton County, Georgia alleging that Georgia Power’s collection in rates of amounts for municipal franchise fees (which fees are paid to municipalities) exceeded the amounts allowed in orders of the Georgia PSC and alleging certain state law claims. This case has been ruled upon and appealed numerous times over the last several years. In one recent appeal, the Georgia Supreme Court remanded the case and noted that the trial court could refer the matter to the Georgia PSC to interpret its tariffs. Following a motion by Georgia Power, in February 2019, the Superior Court of Fulton County ordered the parties to submit petitions to the Georgia PSC for a declaratory ruling and also conditionally certified the proposed class. In March 2019, Georgia Power and the plaintiffs filed petitions with the Georgia PSC seeking confirmation of the proper application of the municipal franchise fee schedule pursuant to the Georgia PSC’s orders. Also in March 2019, Georgia Power appealed the class certification decision to the Georgia Court of Appeals. In October 2019, the Georgia PSC issued an order that found Georgia Power has appropriately implemented the municipal franchise fee schedule. On March 11, 2020, the Georgia Court of Appeals vacated the Superior Court of Fulton County’s February 2019 order granting conditional class certification and remanded the case to the Superior Court of Fulton County for further proceedings. In September 2020, the plaintiffs and Georgia Power each filed motions for summary judgment and the plaintiffs renewed their motion for class certification. The amount of any possible losses cannot be estimated at this time because, among other factors, it is unknown whether a class will be certified, the ultimate composition of any class, and whether any losses would be subject to recovery from any municipalities.

On July 29, 2020, a group of individual plaintiffs filed a complaint in the Superior Court of Fulton County, Georgia against Georgia Power alleging that releases from Plant Scherer have impacted groundwater, surface water, and air, resulting in alleged personal injuries and property damage. The plaintiffs seek an unspecified amount of monetary damages including punitive damages, a medical monitoring fund, and injunctive relief. In September 2020, Georgia Power filed a motion to dismiss. The amount of any possible losses cannot be estimated at this time.

Mississippi Power

In 2018, Ray C. Turnage and 10 other individual plaintiffs filed a putative class action complaint against Mississippi Power and the three then-serving members of the Mississippi PSC in the U.S. District Court for the Southern District of Mississippi. Mississippi Power received Mississippi PSC approval in 2013 to charge a mirror CWIP rate premised upon including in its rate base pre-construction and construction costs for the Kemper IGCC prior to placing the Kemper IGCC into service. The Mississippi Supreme Court reversed that approval and ordered Mississippi Power to refund the amounts paid by customers under the previously-approved mirror CWIP rate. The plaintiffs allege that the initial approval process, and the amount approved, were improper. They also allege that Mississippi Power underpaid customers by up to \$23.5 million in the refund process by applying an incorrect interest rate. The plaintiffs seek to recover, on behalf of themselves and their putative class, actual damages, punitive damages, pre-judgment interest, post-judgment interest, attorney’s fees, and costs. In response to Mississippi Power and the Mississippi PSC each filing a motion to dismiss, the plaintiffs filed an amended complaint in March 2019. The amended complaint included four additional plaintiffs and additional claims for gross negligence, reckless conduct, and intentional wrongdoing. Mississippi Power and the Mississippi PSC each filed a motion to dismiss the amended complaint, which occurred on May 26, 2020 and March 27, 2020, respectively. Also on March 27, 2020, the plaintiffs filed a motion seeking to name the new members of the Mississippi PSC, the Mississippi Development Authority, and Southern Company as additional defendants and add a cause of action against all defendants based on a dormant commerce clause theory under the U.S. Constitution. On July 28, 2020, the plaintiffs filed a motion for leave to file a third amended complaint, which included the same federal claims as the proposed second amended complaint, as well as several additional state law claims based on the allegation that Mississippi Power failed to disclose the annual percentage rate of interest applicable to refunds. On November 10, 2020, the court denied each of the plaintiffs’ pending motions and entered final judgment in favor of Mississippi Power. On January 22, 2021, the court denied further motions by the plaintiffs to vacate the judgment and to file a revised second amended complaint. An adverse outcome in this proceeding could have a material impact on Mississippi Power’s financial statements.

See “Other Matters – Mississippi Power – Kemper County Energy Facility” herein for additional information.

Environmental Remediation

The Southern Company system must comply with environmental laws and regulations governing the handling and disposal of waste and releases of hazardous substances. Under these various laws and regulations, the Southern Company system could incur substantial costs to clean up affected sites. The traditional electric operating companies and the natural gas distribution utilities conduct studies to determine the extent of any required cleanup and have recognized the estimated costs to clean up known impacted sites in the financial statements. A liability for environmental remediation costs is recognized only when a loss is determined to be probable and reasonably estimable and is reduced as expenditures are incurred. The traditional electric operating companies and the natural gas distribution utilities in Illinois and Georgia have each received authority from their respective state PSCs or other applicable state regulatory agencies to recover approved environmental remediation costs through regulatory mechanisms. Any difference between the liabilities accrued and costs recovered

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through rates is deferred as a regulatory asset or liability. These regulatory mechanisms are adjusted annually or as necessary within limits approved by the state PSCs or other applicable state regulatory agencies. At December 31, 2020 and 2019, Alabama Power did not have environmental remediation liabilities and Mississippi Power’s balance was immaterial.

Georgia Power has been designated or identified as a potentially responsible party at sites governed by the Georgia Hazardous Site Response Act and/or by the federal Comprehensive Environmental Response, Compensation, and Liability Act, and assessment and potential cleanup of such sites is expected. For 2020, 2019, and 2018, Georgia Power recovered approximately \$12 million, \$2 million, and \$2 million, respectively, through the ECCR tariff for environmental remediation.

In December 2019, Mississippi Power entered into an agreement with the Mississippi Commission on Environmental Quality related to groundwater conditions arising from the closed ash pond at Plant Watson. Mississippi Power will complete an assessment and remediation consistent with the requirements of the agreement and the CCR Rule. It is anticipated that corrective action will be needed; however, an estimate of remedial costs will not be available until further site assessment is completed. Mississippi Power expects to recover the retail portion of remedial costs through the ECO Plan and the wholesale portion through MRA rates.

Southern Company Gas is subject to environmental remediation liabilities associated with 40 former MGP sites in four different states. Southern Company Gas’ accrued environmental remediation liability at December 31, 2020 and 2019 was based on the estimated cost of environmental investigation and remediation associated with these sites.

At December 31, 2020 and 2019, the environmental remediation liability and the balance of under recovered environmental remediation costs were reflected in the balance sheets as follows:

	Southern Company	Georgia Power	Southern Company Gas
	<i>(in millions)</i>		
December 31, 2020:			
Environmental remediation liability:			
Other current liabilities	\$ 44	\$15	\$ 29
Accrued environmental remediation	216	—	216
Under recovered environmental remediation costs:			
Other regulatory assets, current	\$ 46	\$12	\$ 34
Other regulatory assets, deferred	265	29	236
December 31, 2019:			
Environmental remediation liability:			
Other current liabilities	\$ 51	\$15	\$ 36
Accrued environmental remediation	234	—	233
Under recovered environmental remediation costs:			
Other regulatory assets, current	\$ 49	\$12	\$ 37
Other regulatory assets, deferred	300	40	260

The ultimate outcome of these matters cannot be determined at this time; however, as a result of the regulatory treatment for environmental remediation expenses described above, the final disposition of these matters is not expected to have a material impact on the financial statements of the applicable Registrants.

Nuclear Fuel Disposal Costs

Acting through the DOE and pursuant to the Nuclear Waste Policy Act of 1982, the U.S. government entered into contracts with Alabama Power and Georgia Power that required the DOE to dispose of spent nuclear fuel generated at Plants Farley, Hatch, and Vogtle Units 1 and 2 beginning no later than January 31, 1998. The DOE has yet to commence the performance of its contractual and statutory obligation to dispose of spent nuclear fuel. Consequently, Alabama Power and Georgia Power pursued and continue to pursue legal remedies against the U.S. government for its partial breach of contract.

In 2014, Alabama Power and Georgia Power filed lawsuits against the U.S. government for the costs of continuing to store spent nuclear fuel at Plants Farley, Hatch, and Vogtle Units 1 and 2 for the period from January 1, 2011 through December 31, 2013. The damage period was subsequently extended to December 31, 2014. On June 12, 2019, the Court of Federal Claims granted Alabama Power’s and Georgia Power’s motion for summary judgment on damages not disputed by the U.S. government, awarding those undisputed damages to Alabama Power and Georgia Power. However, those undisputed damages are not collectible and no amounts will be recognized in the financial statements until the court enters final judgment on the remaining damages.

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In 2017, Alabama Power and Georgia Power filed additional lawsuits against the U.S. government in the Court of Federal Claims for the costs of continuing to store spent nuclear fuel at Plants Farley, Hatch, and Vogtle Units 1 and 2 for the period from January 1, 2015 through December 31, 2017. On August 13, 2020, Alabama Power and Georgia Power filed amended complaints in each of the lawsuits adding damages from January 1, 2018 to December 31, 2019 to the claim period.

The outstanding claims for the period January 1, 2011 through December 31, 2019 total \$110 million and \$132 million for Alabama Power and Georgia Power (based on its ownership interests), respectively. Damages will continue to accumulate until the issue is resolved, the U.S. government disposes of Alabama Power’s and Georgia Power’s spent nuclear fuel pursuant to its contractual obligations, or alternative storage is otherwise provided. No amounts have been recognized in the financial statements as of December 31, 2020 for any potential recoveries from the pending lawsuits.

The final outcome of these matters cannot be determined at this time. However, Alabama Power and Georgia Power expect to credit any recoveries for the benefit of customers in accordance with direction from their respective PSC; therefore, no material impact on Southern Company’s, Alabama Power’s, or Georgia Power’s net income is expected.

On-site dry spent fuel storage facilities are operational at all three plants and can be expanded to accommodate spent fuel through the expected life of each plant.

Nuclear Insurance

Under the Price-Anderson Amendments Act (Act), Alabama Power and Georgia Power maintain agreements of indemnity with the NRC that, together with private insurance, cover third-party liability arising from any nuclear incident occurring at the companies’ nuclear power plants. The Act provides funds up to \$13.8 billion for public liability claims that could arise from a single nuclear incident. Each nuclear plant is insured against this liability to a maximum of \$450 million by American Nuclear Insurers (ANI), with the remaining coverage provided by a mandatory program of deferred premiums that could be assessed, after a nuclear incident, against all owners of commercial nuclear reactors. A company could be assessed up to \$138 million per incident for each licensed reactor it operates but not more than an aggregate of \$20 million per incident to be paid in a calendar year for each reactor. Such maximum assessment, excluding any applicable state premium taxes, for Alabama Power and Georgia Power, based on its ownership and buyback interests in all licensed reactors, is \$275 million and \$267 million, respectively, per incident, but not more than an aggregate of \$41 million and \$40 million, respectively, to be paid for each incident in any one year. Both the maximum assessment per reactor and the maximum yearly assessment are adjusted for inflation at least every five years. The next scheduled adjustment is due no later than November 1, 2023. See Note 5 under “Joint Ownership Agreements” for additional information on joint ownership agreements.

Alabama Power and Georgia Power are members of Nuclear Electric Insurance Limited (NEIL), a mutual insurer established to provide property damage insurance in an amount up to \$1.5 billion for members’ operating nuclear generating facilities. Additionally, both companies have NEIL policies that currently provide decontamination, excess property insurance, and premature decommissioning coverage up to \$1.25 billion for nuclear losses and policies providing coverage up to \$750 million for non-nuclear losses in excess of the \$1.5 billion primary coverage.

NEIL also covers the additional costs that would be incurred in obtaining replacement power during a prolonged accidental outage at a member’s nuclear plant. Members can purchase this coverage, subject to a deductible waiting period of up to 26 weeks, with a maximum per occurrence per unit limit of \$490 million. After the deductible period, weekly indemnity payments would be received until either the unit is operational or until the limit is exhausted. Alabama Power and Georgia Power each purchase limits based on the projected full cost of replacement power, subject to ownership limitations, and have each elected a 12-week deductible waiting period for each nuclear plant.

A builders’ risk property insurance policy has been purchased from NEIL for the construction of Plant Vogtle Units 3 and 4. This policy provides the Vogtle Owners up to \$2.75 billion for accidental property damage occurring during construction.

Under each of the NEIL policies, members are subject to assessments each year if losses exceed the accumulated funds available to the insurer. The maximum annual assessments for Alabama Power and Georgia Power as of December 31, 2020 under the NEIL policies would be \$56 million and \$84 million, respectively.

Claims resulting from terrorist acts and cyber events are covered under both the ANI and NEIL policies (subject to normal policy limits). The maximum aggregate that NEIL will pay for all claims resulting from terrorist acts and cyber events in any 12-month period is \$3.2 billion each, plus such additional amounts NEIL can recover through reinsurance, indemnity, or other sources.

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For all on-site property damage insurance policies for commercial nuclear power plants, the NRC requires that the proceeds of such policies shall be dedicated first for the sole purpose of placing the reactor in a safe and stable condition after an accident. Any remaining proceeds are to be applied next toward the costs of decontamination and debris removal operations ordered by the NRC, and any further remaining proceeds are to be paid either to the applicable company or to its debt trustees as may be appropriate under the policies and applicable trust indentures. In the event of a loss, the amount of insurance available might not be adequate to cover property damage and other expenses incurred. Uninsured losses and other expenses, to the extent not recovered from customers, would be borne by Alabama Power or Georgia Power, as applicable, and could have a material effect on Southern Company's, Alabama Power's, and Georgia Power's financial condition and results of operations.

All retrospective assessments, whether generated for liability, property, or replacement power, may be subject to applicable state premium taxes.

Other Matters

Southern Company

As discussed in Note 1 under "Leveraged Leases," a subsidiary of Southern Holdings has four leveraged lease agreements, two domestic and two international. The ability of the lessees to make required payments to the Southern Holdings subsidiary is dependent on the operational performance of the assets.

Since 2017, the financial and operational performance of one of the domestic lessees and the associated generation assets raised significant concerns about the short-term ability of the generation assets to produce cash flows sufficient to support ongoing operations and the lessee's contractual obligations and its ability to make the remaining semi-annual lease payments through the end of the lease term in 2047. In addition, following the expiration of the existing power offtake agreement in 2032, the lessee also is exposed to remarketing risk, which encompasses the price and availability of alternative sources of generation.

In connection with the 2019 annual impairment analysis, Southern Company revised the estimated cash flows to be received under the leveraged lease, which resulted in an impairment charge of \$17 million (\$13 million after tax) recorded in the fourth quarter 2019. During the second quarter 2020, Southern Company received the latest annual forecasts of natural gas prices and considered the significant decline in forecasted prices to be an indicator of potential impairment that required an interim impairment assessment. Accordingly, consistent with prior impairment analyses, Southern Company evaluated the recoverability of the lease receivable and the expected residual value of the generation assets under various natural gas price scenarios to estimate the cash flows expected to be received from remarketing the generation assets following the expiration of the existing PPA and the residual value of the generation assets at the end of the lease. Based on the current forecasts of energy prices in the years following the expiration of the existing PPA, Southern Company concluded that it is no longer probable that any of the associated rental payments will be received, because it is no longer probable the generation assets will be successfully remarketed and continue to operate after that date. During the second quarter 2020, Southern Company revised the estimated cash flows to be received under the leveraged lease to reflect this conclusion, which resulted in a full impairment of the lease investment and a pre-tax charge to earnings of \$154 million (\$74 million after tax).

All required lease payments through December 31, 2020 have been paid in full. If any future lease payments due prior to the expiration of the associated PPA are not paid in full, the Southern Holdings subsidiary may be unable to make its corresponding payment to the holders of the underlying non-recourse debt related to the generation assets. Failure to make the required payment to the debtholders could represent an event of default that would give the debtholders the right to foreclose on, and take ownership of, the generation assets, in effect terminating the lease. As the remaining amount of the lease investment was charged against earnings in the second quarter 2020, termination would not be expected to result in additional charges. Southern Company will continue to monitor the operational performance of the underlying assets and evaluate the ability of the lessee to continue to make the required lease payments and meet its obligations associated with a future closure or retirement of the generation assets and associated properties, including the dry ash landfill.

During the fourth quarter 2020, Southern Company management initiated steps to sell the investment in its other domestic leveraged lease and reclassified the investment as held for sale. In connection with the annual impairment analysis of this investment, Southern Company management concluded that the estimated residual value of the generation assets should be reduced due to significant uncertainty as to whether the related natural gas generation assets will continue to operate at the end of the lease term in 2040 and recorded the resulting impairment charge. An additional charge was recorded to further reduce the related investment in the leveraged lease to its estimated fair value, less costs to sell. The pre-tax charges to earnings in the fourth quarter 2020 totaled \$52 million (\$31 million after tax). See Note 15 under "Assets Held for Sale" for additional information.

The leveraged lease agreements for the two international projects include lessee purchase options related to the leased assets, which consist of nine gas distribution networks and two district heating systems in the Netherlands. The lessee has communicated its intent to exercise the first purchase option in 2022. The purchase options for the remaining ten assets are exercisable on various dates through 2028 with at least one year's notice. The exercise of these purchase options is not expected to result in any gain or loss.

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Mississippi Power

Kemper County Energy Facility

The Kemper County energy facility was designed to utilize IGCC technology with an expected output capacity of 582 MWs and to be fueled by locally mined lignite from a mine owned by Mississippi Power and situated adjacent to the Kemper County energy facility. In 2012, the Mississippi PSC issued an order confirming the CPCN originally approved by the Mississippi PSC in 2010 authorizing the acquisition, construction, and operation of the Kemper County energy facility. Mississippi Power placed the combined cycle and the associated common facilities portion of the Kemper County energy facility in service in 2014 and dedicated them as Plant Ratcliffe in 2018.

In 2017, the Mississippi PSC issued an order directing Mississippi Power to pursue a settlement under which the Kemper County energy facility would be operated as a natural gas plant, rather than an IGCC plant, and address all issues associated with the Kemper County energy facility. Following this order, cost recovery of the gasifier portions was no longer probable and Mississippi Power recorded significant charges to income in 2017.

In 2018, the Mississippi PSC approved a settlement agreement for the Kemper County energy facility, which resolved all cost recovery issues, modified the CPCN to limit the Kemper County energy facility to natural gas combined cycle operation, and reduced retail customer rates by approximately \$26.8 million annually based on a revenue requirement that included no recovery for costs associated with the gasifier portion of the Kemper County energy facility.

In 2018, 2019, and 2020, Mississippi Power recorded charges to income associated with abandonment and related closure costs and ongoing period costs, net of salvage proceeds, for the mine and gasifier-related assets at the Kemper County energy facility. These charges, including related tax impacts, totaled \$37 million pre-tax (\$68 million benefit after tax) in 2018, \$24 million pre-tax and after tax in 2019, and \$4 million pre-tax (\$3 million after tax) in 2020. The pre-tax charges are included in other operations and maintenance expenses on the statements of income.

Dismantlement of the abandoned gasifier-related assets and site restoration activities are expected to be completed by 2026. Additional pre-tax period costs associated with dismantlement and site restoration activities, including related costs for compliance and safety, ARO accretion, and property taxes, net of salvage, are estimated to total \$10 million to \$20 million annually through 2025.

The Mississippi Power Rate Case Settlement Agreement eliminated separate rates associated with the Kemper County energy facility and included these costs in rates for PEP, ECO Plan, and ad valorem taxes, as applicable, effective with the revised rates in 2020. See Note 2 under "Mississippi Power – 2019 Base Rate Case" for additional information.

Lignite Mine and CO₂ Pipeline Facilities

Mississippi Power owns the lignite mine and equipment and mineral reserves located around the Kemper County energy facility site. The mine started commercial operation in 2013. In connection with the Kemper County energy facility construction, Mississippi Power also constructed a pipeline for the transport of captured CO₂.

In 2010, Mississippi Power executed a management fee contract with Liberty Fuels Company, LLC (Liberty Fuels), a wholly-owned subsidiary of The North American Coal Corporation, which developed, constructed, and is responsible for the mining operations through the end of the mine reclamation. As the mining permit holder, Liberty Fuels has a legal obligation to perform mine reclamation and Mississippi Power has a contractual obligation to fund all reclamation activities. As a result of the abandonment of the Kemper IGCC, final mine reclamation began in 2018 and was substantially completed in 2020, with monitoring expected to continue through 2027. See Note 6 for additional information.

In December 2019, Mississippi Power transferred ownership of the CO₂ pipeline to an unrelated gas pipeline company, with no resulting impact on income. In conjunction with the transfer of the CO₂ pipeline, the parties agreed to enter into a 15-year firm transportation agreement, which became effective in December 2020, upon the conversion by the pipeline company of the CO₂ pipeline to a natural gas pipeline to be used for the delivery of natural gas to Plant Ratcliffe. The agreement is treated as a finance lease for accounting purposes. See Note 9 for additional information.

Government Grants

In 2010, the DOE, through a cooperative agreement with SCS, agreed to fund \$270 million of the Kemper County energy facility through the grants awarded to the project by the DOE under the Clean Coal Power Initiative Round 2. In 2016, additional DOE grants in the amount of \$137 million were awarded to the Kemper County energy facility. In 2018, Mississippi Power filed with the DOE its request for property closeout certification under the contract related to the \$387 million of total grants received. On September 3, 2020, Mississippi Power and Southern Company executed an agreement with the DOE completing Mississippi Power's request, which enabled Mississippi Power to proceed with full dismantlement of the abandoned gasifier-related assets and site restoration activities. The expected impact

Notes to Financial Statements

of the closeout agreement was accrued in 2019. In connection with the DOE closeout discussions, in April 2019, the Civil Division of the Department of Justice informed Southern Company and Mississippi Power of an investigation related to the grants received. The ultimate outcome of this matter cannot be determined at this time; however, it could have a material impact on Southern Company’s and Mississippi Power’s financial statements.

Plant Daniel

In conjunction with Southern Company’s sale of Gulf Power, NextEra Energy held back \$75 million of the purchase price pending Mississippi Power and Gulf Power negotiating a mutually acceptable revised operating agreement for Plant Daniel. In addition, Mississippi Power and Gulf Power agreed to seek a restructuring of their 50% undivided ownership interests in Plant Daniel such that each of them would, after the restructuring, own 100% of a generating unit. In January 2019, Gulf Power provided notice to Mississippi Power that Gulf Power will retire its share of the generating capacity of Plant Daniel on January 15, 2024. Mississippi Power has the option to purchase Gulf Power’s ownership interest for \$1 on January 15, 2024, provided that Mississippi Power exercises the option no later than 120 days prior to that date. Mississippi Power is assessing the potential operational and economic effects of Gulf Power’s notice. On April 24, 2020, Mississippi Power and Gulf Power amended the terms of their agreement to extend the deadline from May 1, 2020 to August 1, 2020 for Mississippi Power to notify Gulf Power of which generating unit it has selected for 100% ownership. The parties agreed not to select a specific unit by August 1, 2020 and are continuing negotiations on a mutually acceptable revised operating agreement. The impacts of operating the units on an individual basis continue to be evaluated by Mississippi Power and any transfer of ownership would be subject to approval by the FERC and the Mississippi PSC. The ultimate outcome of this matter cannot be determined at this time. See Note 15 under “Southern Company” for information regarding the sale of Gulf Power.

Southern Company Gas

PennEast Pipeline Project

In 2014, Southern Company Gas entered into a partnership in which it holds a 20% ownership interest in the PennEast Pipeline, an interstate pipeline company formed to develop and operate an approximate 118-mile natural gas pipeline between New Jersey and Pennsylvania. The expected initial transportation capacity of 1.0 Bcf per day is under long-term contracts, mainly with public utilities and other market-serving entities, such as electric generation companies, in New Jersey, Pennsylvania, and New York.

Expected project costs related to the PennEast Pipeline for Southern Company Gas total approximately \$300 million, excluding financing costs. In 2018, the PennEast Pipeline received initial FERC approval. Work continues with state and federal agencies to obtain the required permits to begin construction. On February 20, 2020, the FERC approved a two-year extension for PennEast Pipeline to complete the project by January 19, 2022.

On January 30, 2020, PennEast Pipeline filed an amendment with the FERC to construct the pipeline project in two phases. The first phase would consist of 68 miles of pipe, constructed entirely within Pennsylvania, which is expected to be completed in late 2022. The second phase would include the remaining route in Pennsylvania and New Jersey and is targeted for completion in 2024. FERC approval of the amended plan is required prior to beginning the first phase.

In September 2019, an appellate court ruled that the PennEast Pipeline does not have federal eminent domain authority over lands in which a state has property rights interests. On February 18, 2020, PennEast Pipeline filed a petition for a writ of certiorari to seek U.S. Supreme Court review of the appellate court decision, which the U.S. Supreme Court granted on February 3, 2021.

The ultimate outcome of these matters cannot be determined at this time; however, any work delays, whether caused by judicial or regulatory action, abnormal weather, or other conditions, may result in additional cost or schedule modifications or, ultimately, in project cancellation, any of which could result in impairment of Southern Company Gas’ PennEast Pipeline investment and could have a significant impact on Southern Company’s financial statements and a material impact on Southern Company Gas’ financial statements. Southern Company Gas evaluated its \$91 million investment and determined there was no impairment as of December 31, 2020.

See Note 7 under “Southern Company Gas” for additional information.

Natural Gas Storage Facility

In 2019, Southern Company Gas recorded a pre-tax impairment charge of \$91 million (\$69 million after-tax) related to Jefferson Island. On December 1, 2020, Southern Company Gas completed the sale of this facility. See Note 15 under “Southern Company Gas – Sale of Natural Gas Storage Facility” for additional information.

Notes to Financial Statements

Commitments

To supply a portion of the fuel requirements of the Southern Company system’s electric generating plants, the Southern Company system has entered into various long-term commitments not recognized on the balance sheets for the procurement and delivery of fossil fuel and, for Alabama Power and Georgia Power, nuclear fuel. The majority of the Registrants’ fuel expense for the periods presented was purchased under long-term commitments. Each Registrant expects that a substantial amount of its future fuel needs will continue to be purchased under long-term commitments.

Georgia Power has commitments, in the form of capacity purchases, regarding a portion of a 5% interest in the original cost of Plant Vogtle Units 1 and 2 owned by MEAG Power that are in effect until the later of the retirement of the plant or the latest stated maturity date of MEAG Power’s bonds issued to finance such ownership interest. The payments for capacity are required whether or not any capacity is available. Portions of the capacity payments made to MEAG Power for its Plant Vogtle Units 1 and 2 investment relate to costs in excess of Georgia Power’s allowed investment for ratemaking purposes. The present value of these portions at the time of the disallowance was written off. Generally, the cost of such capacity is included in purchased power in Southern Company’s statements of income and in purchased power, non-affiliates in Georgia Power’s statements of income. Georgia Power’s capacity payments related to this commitment totaled \$5 million, \$6 million, and \$8 million in 2020, 2019, and 2018, respectively. At December 31, 2020, Georgia Power’s estimated long-term obligations related to this commitment totaled \$49 million, consisting of \$5 million for 2021, \$4 million for 2022, \$3 million annually for 2023 through 2025, and \$31 million thereafter.

See Note 9 for information regarding PPAs accounted for as leases.

Southern Company Gas has commitments for pipeline charges, storage capacity, and gas supply, including charges recoverable through natural gas cost recovery mechanisms or, alternatively, billed to marketers selling retail natural gas, as well as demand charges associated with Southern Company Gas’ wholesale gas services. Gas supply commitments include amounts for gas commodity purchases associated with Southern Company Gas’ gas marketing services of 31 million mmBtu at floating gas prices calculated using forward natural gas prices at December 31, 2020 and valued at \$72 million. Southern Company Gas provides guarantees to certain gas suppliers for certain of its subsidiaries in support of payment obligations. Southern Company Gas’ expected future contractual obligations for pipeline charges, storage capacity, and gas supply that are not recognized on the balance sheets at December 31, 2020 were as follows:

	Pipeline Charges, Storage Capacity, and Gas Supply
	(in millions)
2021	\$ 719
2022	529
2023	441
2024	311
2025	285
Thereafter	1,035
Total	\$3,320

As a 50% equity investor in SNG, Southern Company Gas is required to make additional capital contributions as necessary pursuant to the terms of its operating agreement with SNG. SNG has \$300 million of debt maturing in June 2021 that it anticipates refinancing. If SNG is unable to refinance or otherwise satisfy this debt obligation, Southern Company Gas has committed to fund up to \$150 million as a contingent capital contribution. See Note 7 under “Southern Company Gas” for additional information.

Guarantees

SCS may enter into various types of wholesale energy and natural gas contracts acting as an agent for the traditional electric operating companies and Southern Power. Under these agreements, each of the traditional electric operating companies and Southern Power may be jointly and severally liable. Accordingly, Southern Company has entered into keep-well agreements with each of the traditional electric operating companies to ensure they will not subsidize or be responsible for any costs, losses, liabilities, or damages resulting from the inclusion of Southern Power as a contracting party under these agreements.

Alabama Power has guaranteed a \$100 million principal amount long-term bank loan entered into by SEGCO in 2018. Georgia Power has agreed to reimburse Alabama Power for the portion of such obligation corresponding to Georgia Power’s proportionate ownership of SEGCO’s stock if Alabama Power is called upon to make such payment under its guarantee. At December 31, 2020, the capitalization of SEGCO consisted of \$85 million of equity and \$100 million of long-term debt that matures in November 2021, on which the annual interest requirement is derived from a variable rate index. In addition, SEGCO had short-term debt outstanding of \$25 million. See Note 7 under “SEGCO” for additional information.

As discussed in Note 9, Alabama Power and Georgia Power have entered into certain residual value guarantees related to railcar leases.

Notes to Financial Statements

4. REVENUE FROM CONTRACTS WITH CUSTOMERS

The Registrants generate revenues from a variety of sources, some of which are not accounted for as revenue from contracts with customers, such as leases, derivatives, and certain cost recovery mechanisms. See Note 1 under “Revenues” for additional information on the revenue policies of the Registrants. See Notes 9 and 14 for additional information on revenue accounted for under lease and derivative accounting guidance, respectively.

The following table disaggregates revenue from contracts with customers for the periods presented:

	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Power	Southern Company Gas
2020	(in millions)					
Operating revenues						
Retail electric revenues						
Residential	\$ 6,113	\$ 2,377	\$ 3,476	\$ 260	\$ —	\$ —
Commercial	4,699	1,512	2,933	254	—	—
Industrial	2,775	1,293	1,197	285	—	—
Other	90	21	60	9	—	—
Total retail electric revenues	13,677	5,203	7,666	808	—	—
Natural gas distribution revenues						
Residential	1,338	—	—	—	—	1,338
Commercial	340	—	—	—	—	340
Transportation	971	—	—	—	—	971
Industrial	30	—	—	—	—	30
Other	209	—	—	—	—	209
Total natural gas distribution revenues	2,888	—	—	—	—	2,888
Wholesale electric revenues						
PPA energy revenues	735	133	42	9	570	—
PPA capacity revenues	454	108	50	3	296	—
Non-PPA revenues	210	43	10	311	239	—
Total wholesale electric revenues	1,399	284	102	323	1,105	—
Other natural gas revenues						
Wholesale gas services	1,727	—	—	—	—	1,727
Gas marketing services	391	—	—	—	—	391
Other natural gas revenues	33	—	—	—	—	33
Total natural gas revenues	2,151	—	—	—	—	2,151
Other revenues	982	159	447	26	14	—
Total revenue from contracts with customers	21,097	5,646	8,215	1,157	1,119	5,039
Other revenue sources ^(a)	3,764	184	94	15	614	2,881
Other adjustments ^(b)	(4,486)	—	—	—	—	(4,486)
Total operating revenues	\$20,375	\$ 5,830	\$8,309	\$1,172	\$1,733	\$ 3,434

Notes to Financial Statements

	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Power	Southern Company Gas
2019	(in millions)					
Operating revenues						
Retail electric revenues						
Residential	\$ 6,164	\$2,509	\$3,377	\$ 278	\$ —	\$ —
Commercial	5,065	1,677	3,097	291	—	—
Industrial	3,126	1,460	1,360	306	—	—
Other	90	25	54	11	—	—
Total retail electric revenues	14,445	5,671	7,888	886	—	—
Natural gas distribution revenues						
Residential	1,413	—	—	—	—	1,413
Commercial	389	—	—	—	—	389
Transportation	907	—	—	—	—	907
Industrial	35	—	—	—	—	35
Other	245	—	—	—	—	245
Total natural gas distribution revenues	2,989	—	—	—	—	2,989
Wholesale electric revenues						
PPA energy revenues	833	145	60	11	648	—
PPA capacity revenues	453	102	54	3	322	—
Non-PPA revenues	232	81	9	352	238	—
Total wholesale electric revenues	1,518	328	123	366	1,208	—
Other natural gas revenues						
Gas pipeline investments	32	—	—	—	—	32
Wholesale gas services	2,095	—	—	—	—	2,095
Gas marketing services	440	—	—	—	—	440
Other natural gas revenues	42	—	—	—	—	42
Total other natural gas revenues	2,609	—	—	—	—	2,609
Other revenues	1,035	153	407	19	12	—
Total revenue from contracts with customers	22,596	6,152	8,418	1,271	1,220	5,598
Other revenue sources ^(a)	4,266	(27)	(10)	(7)	718	3,637
Other adjustments ^(b)	(5,443)	—	—	—	—	(5,443)
Total operating revenues	\$21,419	\$6,125	\$8,408	\$1,264	\$1,938	\$ 3,792

Notes to Financial Statements

	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Power	Southern Company Gas
2018	(in millions)					
Operating revenues						
Retail electric revenues						
Residential	\$ 6,586	\$2,285	\$3,295	\$ 277	\$ —	\$ —
Commercial	5,255	1,541	3,025	290	—	—
Industrial	3,152	1,364	1,321	326	—	—
Other	94	25	56	9	—	—
Total retail electric revenues	15,087	5,215	7,697	902	—	—
Natural gas distribution revenues						
Residential	1,525	—	—	—	—	1,525
Commercial	436	—	—	—	—	436
Transportation	944	—	—	—	—	944
Industrial	40	—	—	—	—	40
Other	230	—	—	—	—	230
Total natural gas distribution revenues	3,175	—	—	—	—	3,175
Wholesale electric revenues						
PPA energy revenues	950	158	81	15	727	—
PPA capacity revenues	498	101	53	6	394	—
Non-PPA revenues	263	119	24	329	230	—
Total wholesale electric revenues	1,711	378	158	350	1,351	—
Other natural gas revenues						
Gas pipeline investments	32	—	—	—	—	32
Wholesale gas services	3,083	—	—	—	—	3,083
Gas marketing services	571	—	—	—	—	571
Other natural gas revenues	53	—	—	—	—	53
Total other natural gas revenues	3,739	—	—	—	—	3,739
Other revenues	1,529	210	236	22	13	—
Total revenue from contracts with customers	25,241	5,803	8,091	1,274	1,364	6,914
Other revenue sources ^(a)	5,108	229	329	(9)	841	3,849
Other adjustments ^(b)	(6,854)	—	—	—	—	(6,854)
Total operating revenues	\$23,495	\$6,032	\$8,420	\$1,265	\$2,205	\$ 3,909

- (a) Other revenue sources relate to revenues from customers accounted for as derivatives and leases, alternative revenue programs at Southern Company Gas, and cost recovery mechanisms and revenues that meet other scope exceptions for revenues from contracts with customers at the traditional electric operating companies.
- (b) Other adjustments relate to the cost of Southern Company Gas’ energy and risk management activities. Wholesale gas services revenues are presented net of the related costs of those activities on the statement of income. See Note 16 under “Southern Company Gas” for additional information on the components of wholesale gas services’ operating revenues.

Notes to Financial Statements

Contract Balances

The following table reflects the closing balances of receivables, contract assets, and contract liabilities related to revenues from contracts with customers at December 31, 2020 and 2019:

	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Power	Southern Company Gas
	(in millions)					
Accounts Receivables						
As of December 31, 2020	\$2,614	\$632	\$806	\$77	\$112	\$788
As of December 31, 2019	2,413	586	688	79	97	749
Contract Assets						
As of December 31, 2020	\$ 158	\$ 2	\$ 71	\$ —	\$ —	\$ —
As of December 31, 2019	117	—	69	—	—	—
Contract Liabilities						
As of December 31, 2020	\$ 61	\$ 6	\$ 27	\$ 1	\$ 1	\$ 1
As of December 31, 2019	52	10	13	—	1	1

As of December 31, 2020 and 2019, Georgia Power had contract assets primarily related to unregulated service agreements, where payment is contingent on project completion, and fixed retail customer bill programs, where the payment is contingent upon Georgia Power's continued performance and the customer's continued participation in the program over a one-year contract term. Contract liabilities for Georgia Power relate to cash collections recognized in advance of revenue for certain unregulated service agreements. Alabama Power had contract liabilities for outstanding performance obligations primarily related to pole attachment and extended service agreements. Southern Company's unregulated distributed generation business had contract assets of \$81 million and \$40 million at December 31, 2020 and 2019, respectively, and contract liabilities of \$27 million and \$28 million at December 31, 2020 and 2019, respectively, for outstanding performance obligations.

The following table reflects revenue from contracts with customers recognized in 2020 and 2019 included in the contract liability at December 31, 2019 and December 31, 2018, respectively, for the applicable Registrants:

	Southern Company	Alabama Power	Georgia Power	Southern Power	Southern Company Gas
	(in millions)				
Revenue Recognized					
2020	\$33	\$10	\$8	\$ 1	\$1
2019	30	11	6	11	2

Remaining Performance Obligations

The traditional electric operating companies and Southern Power have long-term contracts with customers in which revenues are recognized as performance obligations are satisfied over the contract term. These contracts primarily relate to PPAs whereby the traditional electric operating companies and Southern Power provide electricity and generation capacity to a customer. The revenue recognized for the delivery of electricity is variable; however, certain PPAs include a fixed payment for fixed generation capacity over the term of the contract. Southern Company's unregulated distributed generation business also has partially satisfied performance obligations related to certain fixed price contracts. Revenues from contracts with customers related to these performance obligations remaining at December 31, 2020 are expected to be recognized as follows:

	2021	2022	2023	2024	2025	Thereafter
	(in millions)					
Southern Company	\$ 547	\$395	\$338	\$ 326	\$ 306	\$ 2,634
Alabama Power	33	31	24	7	5	—
Georgia Power	75	46	35	24	21	42
Southern Power	285	287	280	296	280	2,610

Revenue expected to be recognized for performance obligations remaining at December 31, 2020 was immaterial for Mississippi Power.

Notes to Financial Statements

5. PROPERTY, PLANT, AND EQUIPMENT

Property, plant, and equipment is stated at original cost or fair value at acquisition, as appropriate, less any regulatory disallowances and impairments. Original cost may include: materials; labor; minor items of property; appropriate administrative and general costs; payroll-related costs such as taxes, pensions, and other benefits; and the interest capitalized and/or cost of equity funds used during construction.

The Registrants’ property, plant, and equipment in service consisted of the following at December 31, 2020 and 2019:

At December 31, 2020:	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Power	Southern Company Gas
(in millions)						
Electric utilities:						
Generation	\$ 52,179	\$16,201	\$18,675	\$2,819	\$13,872	\$ —
Transmission	12,879	5,033	6,951	856	—	—
Distribution	20,958	8,248	11,622	1,088	—	—
General/other	5,072	2,334	2,434	248	32	—
Electric utilities’ plant in service	91,088	31,816	39,682	5,011	13,904	—
Southern Company Gas:						
Natural gas distribution utilities transportation and distribution	14,610	—	—	—	—	14,610
Storage facilities	1,752	—	—	—	—	1,752
Other	1,249	—	—	—	—	1,249
Southern Company Gas plant in service	17,611	—	—	—	—	17,611
Other plant in service	1,817	—	—	—	—	—
Total plant in service	\$110,516	\$31,816	\$39,682	\$5,011	\$13,904	\$17,611

At December 31, 2019:	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Power	Southern Company Gas
(in millions)						
Electric utilities:						
Generation	\$ 50,329	\$15,329	\$18,341	\$2,786	\$13,241	\$ —
Transmission	12,157	4,719	6,590	808	—	—
Distribution	19,846	7,798	11,024	1,024	—	—
General/other	4,650	2,177	2,182	239	29	—
Electric utilities’ plant in service	86,982	30,023	38,137	4,857	13,270	—
Southern Company Gas:						
Natural gas distribution utilities transportation and distribution	13,518	—	—	—	—	13,518
Storage facilities	1,634	—	—	—	—	1,634
Other	1,192	—	—	—	—	1,192
Southern Company Gas plant in service	16,344	—	—	—	—	16,344
Other plant in service	1,788	—	—	—	—	—
Total plant in service	\$105,114	\$30,023	\$38,137	\$4,857	\$13,270	\$16,344

The cost of replacements of property, exclusive of minor items of property, is capitalized. The cost of maintenance, repairs, and replacement of minor items of property is charged to other operations and maintenance expenses as incurred or performed with the exception of nuclear refueling costs and certain maintenance costs including those described below.

In accordance with orders from their respective state PSCs, Alabama Power and Georgia Power defer nuclear refueling outage operations and maintenance expenses to a regulatory asset when the charges are incurred. Alabama Power amortizes the costs over a subsequent 18-month period with Plant Farley’s fall outage cost amortization beginning in January of the following year and spring outage cost amortization beginning in July of the same year. Georgia Power amortizes its costs over each unit’s operating cycle, or 18 months for Plant Vogtle Units 1 and 2 and 24 months for Plant Hatch Units 1 and 2. Georgia Power’s amortization period begins the month the refueling outage starts.

Notes to Financial Statements

A portion of Mississippi Power’s railway track maintenance costs is charged to fuel stock and recovered through Mississippi Power’s fuel clause.

The portion of Southern Company Gas’ non-working gas used to maintain the structural integrity of natural gas storage facilities that is considered to be non-recoverable is depreciated, while the recoverable or retained portion is not depreciated.

See Note 9 for information on finance lease right-of-use (ROU) assets, net, which are included in property, plant, and equipment.

The Registrants have deferred certain implementation costs related to cloud hosting arrangements. Once a hosted software is placed into service, the related deferred costs are amortized on a straight-line basis over the remaining expected hosting arrangement term, including any renewal options that are reasonably certain of exercise. The amortization is reflected with the associated cloud hosting fees, which are generally reflected in other operations and maintenance expenses on the Registrants’ statements of income. At December 31, 2020, deferred cloud implementation costs, which are generally included in other deferred charges and assets on the Registrants’ balance sheets, are as follows:

	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Power	Southern Company Gas
(in millions)						
At December 31, 2020:						
Deferred cloud implementation costs	\$162	\$38	\$58	\$7	\$9	\$17

Depreciation and Amortization

The traditional electric operating companies’ and Southern Company Gas’ depreciation of the original cost of utility plant in service is provided primarily by using composite straight-line rates. The approximate rates for 2020, 2019, and 2018 are as follows:

	2020	2019	2018
Alabama Power	2.6%	3.1%	3.0%
Georgia Power	3.0%	2.6%	2.6%
Mississippi Power	3.7%	3.7%	4.2%
Southern Company Gas	2.8%	2.9%	2.9%

Depreciation studies are conducted periodically to update the composite rates. These studies are filed with the respective state PSC and/ or other applicable state and federal regulatory agencies for the traditional electric operating companies and the natural gas distribution utilities. During 2020, Georgia Power, Mississippi Power, and Atlanta Gas Light revised their depreciation rates in accordance with base rate case approvals by their respective PSCs. The revised rates were effective January 1, 2020 for Georgia Power and Atlanta Gas Light and April 1, 2020 for Mississippi Power. See Note 2 for additional information.

When property, plant, and equipment subject to composite depreciation is retired or otherwise disposed of in the normal course of business, its original cost, together with the cost of removal, less salvage, is charged to accumulated depreciation. For other property dispositions, the applicable cost and accumulated depreciation are removed from the balance sheet accounts, and a gain or loss is recognized. Minor items of property included in the original cost of the asset are retired when the related property unit is retired.

At December 31, 2020 and 2019, accumulated depreciation for Southern Company and Southern Company Gas consisted of utility plant in service totaling \$31.6 billion and \$30.0 billion, respectively, for Southern Company and \$4.6 billion and \$4.5 billion, respectively, for Southern Company Gas, as well as other plant in service totaling \$817 million and \$732 million, respectively, for Southern Company and \$195 million and \$155 million, respectively, for Southern Company Gas. Other plant in service includes the non-utility assets of Southern Company Gas, as well as, for Southern Company, certain other non-utility subsidiaries. Depreciation of the original cost of other plant in service is provided primarily on a straight-line basis over estimated useful lives. Useful lives for Southern Company Gas’s non-utility assets range from five to 12 years for transportation equipment, 30 to 75 years for storage facilities, and up to 75 years for other assets. Useful lives for the assets of Southern Company’s other non-utility subsidiaries range up to 37 years.

Notes to Financial Statements

Southern Power

Southern Power applies component depreciation, where depreciation is computed principally by the straight-line method over the estimated useful life of the asset. Certain of Southern Power’s generation assets related to natural gas-fired facilities are depreciated on a units-of-production basis, using hours or starts, to better match outage and maintenance costs to the usage of, and revenues from, these assets. The primary assets in Southern Power’s property, plant, and equipment are generating facilities, which generally have estimated useful lives as follows:

Southern Power Generating Facility	Useful life
Natural gas	Up to 50 years ^(*)
Solar	Up to 35 years
Wind	Up to 30 years

(*) Effective January 1, 2020, Southern Power revised the depreciable lives of its natural gas generating facilities from up to 45 years to up to 50 years. This revision resulted in an immaterial decrease in depreciation for 2020.

When Southern Power’s depreciable property, plant, and equipment is retired, or otherwise disposed of in the normal course of business, the applicable cost and accumulated depreciation is removed and a gain or loss is recognized in the statements of income. Southern Power reviews its estimated useful lives and salvage values on an ongoing basis. The results of these reviews could result in changes which could have a material impact on Southern Power’s net income.

Joint Ownership Agreements

At December 31, 2020, the Registrants’ percentage ownership and investment (exclusive of nuclear fuel) in jointly-owned facilities in commercial operation were as follows:

Facility (Type)	Percent Ownership	Plant in Service	Accumulated Depreciation	CWIP
<i>(in millions)</i>				
Alabama Power				
Greene County (natural gas) Units 1 and 2	60.0% ^(a)	\$ 189	\$ 76	\$ 2
Plant Miller (coal) Units 1 and 2	91.8 ^(b)	2,107	650	24
Georgia Power				
Plant Hatch (nuclear)	50.1% ^(c)	\$1,352	\$ 624	\$37
Plant Vogtle (nuclear) Units 1 and 2	45.7 ^(c)	3,592	2,221	55
Plant Scherer (coal) Units 1 and 2	8.4 ^(c)	279	98	1
Plant Scherer (coal) Unit 3	75.0 ^(c)	1,320	520	4
Plant Wansley (coal)	53.5 ^(c)	1,068	418	10
Rocky Mountain (pumped storage)	25.4 ^(d)	183	144	1
Mississippi Power				
Greene County (natural gas) Units 1 and 2	40.0% ^(a)	\$ 122	\$ 54	\$ 1
Plant Daniel (coal) Units 1 and 2	50.0 ^(e)	775	238	15
Southern Company Gas				
Dalton Pipeline (natural gas pipeline)	50.0% ^(f)	\$ 271	\$ 15	\$ —

- (a) Jointly owned by Alabama Power and Mississippi Power and operated and maintained by Alabama Power.
- (b) Jointly owned with PowerSouth and operated and maintained by Alabama Power.
- (c) Georgia Power owns undivided interests in Plants Hatch, Vogtle Units 1 and 2, Scherer, and Wansley in varying amounts jointly with one or more of the following entities: OPC, MEAG Power, Dalton, Florida Power & Light Company, JEA, and Gulf Power. Georgia Power has been contracted to operate and maintain the plants as agent for the co-owners and is jointly and severally liable for third party claims related to these plants.
- (d) Jointly owned with OPC, which is the operator of the plant.
- (e) Jointly owned by Gulf Power and Mississippi Power. In accordance with the operating agreement, Mississippi Power acts as Gulf Power’s agent with respect to the operation and maintenance of these units. See Note 3 under “Other Matters – Mississippi Power – Plant Daniel” for information regarding a commitment between Mississippi Power and Gulf Power to seek a restructuring of their 50% undivided ownership interests in Plant Daniel.
- (f) Jointly owned with The Williams Companies, Inc., the Dalton Pipeline is a 115-mile natural gas pipeline that serves as an extension of the Transcontinental Gas Pipe Line Company, LLC pipeline system into northwest Georgia. Southern Company Gas leases its 50% undivided ownership for approximately \$26 million annually through 2042. The lessee is responsible for maintaining the pipeline during the lease term and for providing service to transportation customers under its FERC-regulated tariff.

Notes to Financial Statements

Georgia Power also owns 45.7% of Plant Vogtle Units 3 and 4, which are currently under construction and had a CWIP balance of \$7.3 billion at December 31, 2020, excluding estimated probable losses recorded in 2018 and 2020. See Note 2 under “Georgia Power – Nuclear Construction” for additional information.

The Registrants’ proportionate share of their jointly-owned facility operating expenses is included in the corresponding operating expenses in the statements of income and each Registrant is responsible for providing its own financing.

Assets Subject to Lien

In 2018, the Mississippi PSC approved executed agreements between Mississippi Power and its largest retail customer, Chevron Products Company (Chevron), for Mississippi Power to continue providing retail service to the Chevron refinery in Pascagoula, Mississippi through 2038. The agreements grant Chevron a security interest in the co-generation assets owned by Mississippi Power, with a lease receivable balance of \$138 million at December 31, 2020, located at the refinery that is exercisable upon the occurrence of (i) certain bankruptcy events or (ii) other events of default coupled with specific reductions in steam output at the facility and a downgrade of Mississippi Power’s credit rating to below investment grade by two of the three rating agencies.

See Note 8 under “Long-term Debt” for information regarding debt secured by certain assets of Georgia Power, Mississippi Power, and Southern Company Gas.

6. ASSET RETIREMENT OBLIGATIONS

AROs are computed as the present value of the estimated costs for an asset’s future retirement and are recorded in the period in which the liability is incurred. The estimated costs are capitalized as part of the related long-lived asset and depreciated over the asset’s useful life. In the absence of quoted market prices, AROs are estimated using present value techniques in which estimates of future cash outlays associated with the asset retirements are discounted using a credit-adjusted risk-free rate. Estimates of the timing and amounts of future cash outlays are based on projections of when and how the assets will be retired and the cost of future removal activities. Each traditional electric operating company and natural gas distribution utility has received accounting guidance from its state PSC or applicable state regulatory agency allowing the continued accrual or recovery of other retirement costs for long-lived assets that it does not have a legal obligation to retire. Accordingly, the accumulated removal costs for these obligations are reflected in the balance sheets as regulatory liabilities and amounts to be recovered are reflected in the balance sheets as regulatory assets.

The ARO liabilities for the traditional electric operating companies primarily relate to facilities that are subject to the CCR Rule and the related state rules, principally ash ponds. In addition, Alabama Power and Georgia Power have retirement obligations related to the decommissioning of nuclear facilities (Alabama Power’s Plant Farley and Georgia Power’s ownership interests in Plant Hatch and Plant Vogtle Units 1 and 2). See “Nuclear Decommissioning” herein for additional information. Other significant AROs include various landfill sites and asbestos removal for Alabama Power, Georgia Power, and Mississippi Power and gypsum cells and mine reclamation for Mississippi Power. The ARO liability for Southern Power primarily relates to its solar and wind facilities, which are located on long-term land leases requiring the restoration of land at the end of the lease.

The traditional electric operating companies and Southern Company Gas also have identified other retirement obligations, such as obligations related to certain electric transmission and distribution facilities, certain asbestos-containing material within long-term assets not subject to ongoing repair and maintenance activities, certain wireless communication towers, the disposal of polychlorinated biphenyls in certain transformers, leasehold improvements, equipment on customer property, and property associated with the Southern Company system’s rail lines and natural gas pipelines. However, liabilities for the removal of these assets have not been recorded because the settlement timing for certain retirement obligations related to these assets is indeterminable and, therefore, the fair value of the retirement obligations cannot be reasonably estimated. A liability for these retirement obligations will be recognized when sufficient information becomes available to support a reasonable estimation of the ARO.

Southern Company and the traditional electric operating companies will continue to recognize in their respective statements of income allowed removal costs in accordance with regulatory treatment. Any differences between costs recognized in accordance with accounting standards related to asset retirement and environmental obligations and those reflected in rates are recognized as either a regulatory asset or liability in the balance sheets as ordered by the various state PSCs.

Notes to Financial Statements

Details of the AROs included in the balance sheets are as follows:

	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Power ^(*)
	<i>(in millions)</i>				
Balance at December 31, 2018	\$ 9,394	\$3,210	\$ 5,829	\$ 160	\$84
Liabilities incurred	37	—	35	1	1
Liabilities settled	(328)	(127)	(151)	(35)	—
Accretion	402	145	243	7	4
Cash flow revisions	281	312	(172)	57	—
Balance at December 31, 2019	\$ 9,786	\$3,540	\$ 5,784	\$ 190	\$89
Liabilities incurred	19	—	10	—	9
Liabilities settled	(442)	(219)	(185)	(22)	—
Accretion	409	152	238	8	4
Cash flow revisions	912	501	418	—	(7)
Balance at December 31, 2020	\$10,684	\$3,974	\$ 6,265	\$ 176	\$95

(*) Included in other deferred credits and liabilities on Southern Power’s consolidated balance sheets.

During 2019, Alabama Power recorded increases totaling approximately \$312 million to its AROs primarily related to the CCR Rule and the related state rule based on management’s completion of closure designs during the second and third quarters 2019 under the planned closure-in-place methodology for all but one of its ash pond facilities. During 2019, Mississippi Power recorded an increase of approximately \$57 million to its AROs related to the CCR Rule, primarily associated with the ash pond facility at Plant Greene County, which is jointly owned with Alabama Power. During 2020, Alabama Power recorded increases totaling approximately \$501 million to its AROs related to the CCR Rule and the related state rule primarily as a result of management’s completion of the closure design for the remaining ash pond and the addition of a water treatment system to the design of another ash pond. The additional estimated costs to close these ash ponds under the planned closure-in-place methodology primarily relate to inputs from contractor bids, design revisions, and changes in the expected volume of ash handling.

During the second half of 2019, Georgia Power completed an assessment of its plans to close the ash ponds at all of its generating plants in compliance with the CCR Rule and the related state rule. Cost estimates were revised to reflect further refined costs for closure plans and updates to the timing of future cash outlays. As a result, in December 2019, Georgia Power recorded a decrease of approximately \$174 million to its AROs related to the CCR Rule and the related state rule. During the third quarter 2020, Georgia Power further refined the related cost estimates, including updates to long-term post-closure care requirements, market pricing, and timing of future cash outlays. As a result, in September 2020, Georgia Power recorded an increase of approximately \$411 million to its AROs related to the CCR Rule and the related state rule.

The cost estimates for AROs related to the disposal of CCR are based on information at December 31, 2020 using various assumptions related to closure and post-closure costs, timing of future cash outlays, inflation and discount rates, and the potential methods for complying with the CCR Rule and the related state rules. The traditional electric operating companies have periodically updated, and expect to continue periodically updating, their related cost estimates and ARO liabilities for each CCR unit as additional information related to these assumptions becomes available. Some of these updates have been, and future updates may be, material. Additionally, the closure designs and plans in the States of Alabama and Georgia are subject to approval by environmental regulatory agencies. Absent continued recovery of ARO costs through regulated rates, results of operations, cash flows, and financial condition for Southern Company and the traditional electric operating companies could be materially impacted. See Note 2 under “Georgia Power – Rate Plans” for additional information. The ultimate outcome of these matters cannot be determined at this time.

Nuclear Decommissioning

The NRC requires licensees of commercial nuclear power reactors to establish a plan for providing reasonable assurance of funds for future decommissioning. Alabama Power and Georgia Power have external trust funds (Funds) to comply with the NRC’s regulations. Use of the Funds is restricted to nuclear decommissioning activities. The Funds are managed and invested in accordance with applicable requirements of various regulatory bodies, including the NRC, the FERC, and state PSCs, as well as the IRS. While Alabama Power and Georgia Power are allowed to prescribe an overall investment policy to the Funds’ managers, neither Southern Company nor its subsidiaries or affiliates are allowed to engage in the day-to-day management of the Funds or to mandate individual investment decisions. Day-to-day management

Notes to Financial Statements

of the investments in the Funds is delegated to unrelated third-party managers with oversight by the management of Alabama Power and Georgia Power. The Funds’ managers are authorized, within certain investment guidelines, to actively buy and sell securities at their own discretion in order to maximize the return on the Funds’ investments. The Funds are invested in a tax-efficient manner in a diversified mix of equity and fixed income securities and are reported as trading securities.

Alabama Power and Georgia Power record the investment securities held in the Funds at fair value, as disclosed in Note 13, as management believes that fair value best represents the nature of the Funds. Gains and losses, whether realized or unrealized, are recorded in the regulatory liability for AROs in the balance sheets and are not included in net income or OCI. Fair value adjustments and realized gains and losses are determined on a specific identification basis.

The Funds at Georgia Power participate in a securities lending program through the managers of the Funds. Under this program, Georgia Power’s Funds’ investment securities are loaned to institutional investors for a fee. Securities loaned are fully collateralized by cash, letters of credit, and/or securities issued or guaranteed by the U.S. government or its agencies or instrumentalities. At December 31, 2020 and 2019, approximately \$44 million and \$28 million, respectively, of the fair market value of Georgia Power’s Funds’ securities were on loan and pledged to creditors under the Funds’ managers’ securities lending program. The fair value of the collateral received was approximately \$45 million and \$29 million at December 31, 2020 and 2019, respectively, and can only be sold by the borrower upon the return of the loaned securities. The collateral received is treated as a non-cash item in the statements of cash flows.

Investment securities in the Funds for December 31, 2020 and 2019 were as follows:

	Southern Company	Alabama Power	Georgia Power
	<i>(in millions)</i>		
At December 31, 2020:			
Equity securities	\$ 1,339	\$ 842	\$ 497
Debt securities	851	231	620
Other securities	111	83	28
Total investment securities in the Funds	\$ 2,301	\$1,156	\$1,145

At December 31, 2019:			
Equity securities	\$ 1,159	\$ 743	\$ 416
Debt securities	798	218	580
Other securities	77	60	17
Total investment securities in the Funds	\$ 2,034	\$1,021	\$1,013

These amounts exclude receivables related to investment income and pending investment sales and payables related to pending investment purchases. For Southern Company and Georgia Power, these amounts include Georgia Power’s investment securities pledged to creditors and collateral received and excludes payables related to Georgia Power’s securities lending program.

The fair value increases (decreases) of the Funds, including unrealized gains (losses) and reinvested interest and dividends and excluding the Funds’ expenses, for 2020, 2019, and 2018 are shown in the table below.

	Southern Company	Alabama Power	Georgia Power
	<i>(in millions)</i>		
Fair value increases (decreases)			
2020	\$ 280	\$142	\$138
2019	344	194	150
2018	(67)	(38)	(29)

Unrealized gains (losses)			
At December 31, 2020	\$ 220	\$121	\$ 99
At December 31, 2019	259	149	110
At December 31, 2018	(183)	(96)	(87)

The investment securities held in the Funds continue to be managed with a long-term focus. Accordingly, all purchases and sales within the Funds are presented separately in the statements of cash flows as investing cash flows, consistent with the nature of the securities and purpose for which the securities were acquired.

Notes to Financial Statements

For Alabama Power, approximately \$15 million and \$16 million at December 31, 2020 and 2019, respectively, previously recorded in internal reserves is being transferred into the Funds through 2040 as approved by the Alabama PSC. The NRC’s minimum external funding requirements are based on a generic estimate of the cost to decommission only the radioactive portions of a nuclear unit based on the size and type of reactor. Alabama Power and Georgia Power have filed plans with the NRC designed to ensure that, over time, the deposits and earnings of the Funds will provide the minimum funding amounts prescribed by the NRC.

At December 31, 2020 and 2019, the accumulated provisions for the external decommissioning trust funds were as follows:

	2020	2019
	<i>(in millions)</i>	
Alabama Power		
Plant Farley	\$1,156	\$1,021
Georgia Power		
Plant Hatch	\$ 716	\$ 634
Plant Vogtle Units 1 and 2	429	379
Total	\$1,145	\$1,013

Site study cost is the estimate to decommission a specific facility as of the site study year. The decommissioning cost estimates are based on prompt dismantlement and removal of the plant from service. The actual decommissioning costs may vary from these estimates because of changes in the assumed date of decommissioning, changes in NRC requirements, or changes in the assumptions used in making these estimates. The estimated costs of decommissioning at December 31, 2020 based on the most current studies, which were each performed in 2018, were as follows:

	Plant Farley	Plant Hatch ^(*)	Plant Vogtle Units 1 and 2 ^(*)
Decommissioning periods:			
Beginning year	2037	2034	2047
Completion year	2076	2075	2079
	<i>(in millions)</i>		
Site study costs:			
Radiated structures	\$1,234	\$734	\$601
Spent fuel management	387	172	162
Non-radiated structures	99	56	79
Total site study costs	\$1,720	\$962	\$842

(*) Based on Georgia Power’s ownership interests.

For ratemaking purposes, Alabama Power’s decommissioning costs are based on the site study and Georgia Power’s decommissioning costs are based on the NRC generic estimate to decommission the radioactive portion of the facilities and the site study estimate for spent fuel management as of 2018. Significant assumptions used to determine these costs for ratemaking were an estimated inflation rate of 4.5% and 2.75% for Alabama Power and Georgia Power, respectively, and an estimated trust earnings rate of 7.0% and 4.75% for Alabama Power and Georgia Power, respectively.

Amounts previously contributed to the Funds for Plant Farley are currently projected to be adequate to meet the decommissioning obligations. Alabama Power will continue to provide site-specific estimates of the decommissioning costs and related projections of funds in the external trust to the Alabama PSC and, if necessary, would seek the Alabama PSC’s approval to address any changes in a manner consistent with NRC and other applicable requirements.

Effective January 1, 2020, in connection with the 2019 ARP, Georgia Power’s annual decommissioning cost for ratemaking is a total of \$4 million for Plant Hatch and Plant Vogtle Units 1 and 2. Georgia Power’s annual decommissioning cost for ratemaking in 2019 totaled \$5 million.

Notes to Financial Statements

7. CONSOLIDATED ENTITIES AND EQUITY METHOD INVESTMENTS

The Registrants may hold ownership interests in a number of business ventures with varying ownership structures. Partnership interests and other variable interests are evaluated to determine if each entity is a VIE. If a venture is a VIE for which a Registrant is the primary beneficiary, the assets, liabilities, and results of operations of the entity are consolidated. The Registrants reassess the conclusion as to whether an entity is a VIE upon certain occurrences, which are deemed reconsideration events.

For entities that are not determined to be VIEs, the Registrants evaluate whether they have control or significant influence over the investee to determine the appropriate consolidation and presentation. Generally, entities under the control of a Registrant are consolidated, and entities over which a Registrant can exert significant influence, but which a Registrant does not control, are accounted for under the equity method of accounting.

Investments accounted for under the equity method are recorded within equity investments in unconsolidated subsidiaries in the balance sheets and, for Southern Company and Southern Company Gas, the equity income is recorded within earnings from equity method investments in the statements of income. See “SEGCO” and “Southern Company Gas” herein for additional information.

SEGCO

Alabama Power and Georgia Power own equally all of the outstanding capital stock of SEGCO, which owns electric generating units with a total rated capacity of 1,020 MWs, as well as associated transmission facilities. Alabama Power and Georgia Power account for SEGCO using the equity method; Southern Company consolidates SEGCO. The capacity of these units is sold equally to Alabama Power and Georgia Power. Alabama Power and Georgia Power make payments sufficient to provide for the operating expenses, taxes, interest expense, and a ROE. The share of purchased power included in purchased power, affiliates in the statements of income totaled \$67 million in 2020, \$93 million in 2019, and \$102 million in 2018 for Alabama Power and \$69 million in 2020, \$95 million in 2019, and \$105 million in 2018 for Georgia Power.

SEGCO paid dividends of \$12 million in 2020, \$14 million in 2019, and \$18 million in 2018, one half of which were paid to each of Alabama Power and Georgia Power. In addition, Alabama Power and Georgia Power each recognize 50% of SEGCO’s net income.

Alabama Power, which owns and operates a generating unit adjacent to the SEGCO generating units, has a joint ownership agreement with SEGCO for the ownership of an associated gas pipeline. Alabama Power owns 14% of the pipeline with the remaining 86% owned by SEGCO.

See Note 3 under “Guarantees” for additional information regarding guarantees of Alabama Power and Georgia Power related to SEGCO.

Southern Power

Variable Interest Entities

Southern Power has certain subsidiaries that are determined to be VIEs. Southern Power is considered the primary beneficiary of these VIEs because it controls the most significant activities of the VIEs, including operating and maintaining the respective assets, and has the obligation to absorb expected losses of these VIEs to the extent of its equity interests.

SP Solar and SP Wind

In 2018, Southern Power sold a noncontrolling 33% limited partnership interest in SP Solar to Global Atlantic Financial Group Limited (Global Atlantic). See Note 15 under “Southern Power” for additional information. A wholly-owned subsidiary of Southern Power is the general partner and holds a 1% ownership interest in SP Solar and another wholly-owned subsidiary of Southern Power owns the remaining 66% ownership in SP Solar. SP Solar qualifies as a VIE since the arrangement is structured as a limited partnership and the 33% limited partner does not have substantive kick-out rights against the general partner.

At December 31, 2020 and 2019, SP Solar had total assets of \$6.1 billion and \$6.4 billion, respectively, total liabilities of \$387 million and \$381 million, respectively, and noncontrolling interests of \$1.1 billion. Cash distributions from SP Solar are allocated 67% to Southern Power and 33% to Global Atlantic in accordance with their partnership interest percentage. Under the terms of the limited partnership agreement, distributions without limited partner consent are limited to available cash and SP Solar is obligated to distribute all such available cash to its partners each quarter. Available cash includes all cash generated in the quarter subject to the maintenance of appropriate operating reserves.

In 2018, Southern Power sold a noncontrolling tax-equity interest in SP Wind to three financial investors. SP Wind owns eight operating wind farms. See Note 15 under “Southern Power” for additional information. Southern Power owns 100% of the Class B membership interests and the three financial investors own 100% of the Class A membership interests. SP Wind qualifies as a VIE since the structure of the arrangement is similar to a limited partnership and the Class A members do not have substantive kick-out rights against Southern Power.

Notes to Financial Statements

At December 31, 2020 and 2019, SP Wind had total assets of \$2.4 billion and \$2.5 billion, respectively, total liabilities of \$138 million and \$128 million, respectively, and noncontrolling interests of \$43 million and \$45 million, respectively. Under the terms of the limited liability agreement, distributions without Class A member consent are limited to available cash and SP Wind is obligated to distribute all such available cash to its members each quarter. Available cash includes all cash generated in the quarter subject to the maintenance of appropriate operating reserves. Cash distributions from SP Wind are generally allocated 60% to Southern Power and 40% to the three financial investors in accordance with the limited liability agreement.

Southern Power consolidates both SP Solar and SP Wind, as the primary beneficiary, since it controls the most significant activities of each entity, including operating and maintaining their assets. Certain transfers and sales of the assets in the VIEs are subject to partner consent and the liabilities are non-recourse to the general credit of Southern Power. Liabilities consist of customary working capital items and do not include any long-term debt.

Other Variable Interest Entities

Southern Power has other consolidated VIEs that relate to certain subsidiaries that have either sold noncontrolling interests to tax-equity investors or acquired less than a 100% interest from facility developers. These entities are considered VIEs because the arrangements are structured similar to a limited partnership and the noncontrolling members do not have substantive kick-out rights.

At December 31, 2020 and 2019, the other VIEs had total assets of \$1.1 billion, total liabilities of \$110 million and \$104 million, respectively, and noncontrolling interests of \$454 million and \$409 million, respectively. Under the terms of the partnership agreements, distributions of all available cash are required each month or quarter and additional distributions require partner consent.

Equity Method Investments

At December 31, 2020 and 2019, Southern Power had equity method investments in wind and battery storage projects totaling \$19 million and \$28 million, respectively.

Southern Company Gas

Equity Method Investments

The carrying amounts of Southern Company Gas’ equity method investments at December 31, 2020 and 2019 and related income from those investments for the years ended December 31, 2020, 2019, and 2018 were as follows:

Investment Balance	2020	2019 ^(a)
	<i>(in millions)</i>	
SNG ^(b)	\$1,167	\$1,137
PennEast Pipeline ^(c)	91	82
Other	32	32
Total	\$1,290	\$1,251

(a) Excludes investments in Atlantic Coast Pipeline and Pivotal JAX LNG classified as held for sale at December 31, 2019. See Note 15 under “Assets Held for Sale” for additional information.

(b) Increase primarily relates to a capital contribution, partially offset by the continued amortization of deferred tax assets established upon acquisition.

(c) See Note 3 under “Other Matters – Southern Company Gas” for additional information.

Earnings from Equity Method Investments	2020	2019	2018
	<i>(in millions)</i>		
SNG	\$129	\$141	\$131
Atlantic Coast Pipeline ^{(a)(b)}	3	13	7
PennEast Pipeline ^(a)	7	6	5
Other ^(c)	2	(3)	5
Total	\$141	\$157	\$148

(a) Earnings primarily result from AFUDC equity recorded by the project entity.

(b) On March 24, 2020, Southern Company Gas completed the sale of its interest in Atlantic Coast Pipeline. See Note 15 under “Southern Company Gas” for additional information.

(c) In May 2019, Southern Company Gas sold its investment in Triton, a cargo container leasing company that was aggregated into Southern Company Gas’ all other segment. On March 24, 2020, Southern Company Gas completed the sale of its interest in Pivotal LNG. See Note 15 under “Southern Company Gas” for additional information.

Notes to Financial Statements

8. FINANCING

Long-term Debt

Details of long-term debt at December 31, 2020 and 2019 are provided in the following table:

	At December 31, 2020		Balance Outstanding at December 31,	
	Maturity	Weighted Average Interest Rate	2020	2019
<i>(in millions)</i>				
Southern Company				
Senior notes ^(a)	2021–2050	3.78%	\$30,850	\$30,023
Junior subordinated notes	2024–2080	4.30%	7,295	5,295
FFB loans ^(b)	2021–2044	2.92%	4,618	3,843
Pollution control revenue bonds ^(c)	2021–2053	1.11%	2,675	2,963
First mortgage bonds ^(d)	2023–2060	3.71%	1,900	1,575
Other revenue bonds ^(e)	2021–2040	6.45%	320	320
Debt payable to affiliated trusts ^(f)	2042	3.33%	206	206
Medium-term notes	2021–2027	7.88%	160	160
Other long-term debt	2021–2023	0.83%	370	145
Finance lease obligations ^(g)			231	226
Unamortized fair value adjustment			393	430
Unamortized debt premium (discount), net			(201)	(152)
Unamortized debt issuance expenses			(237)	(247)
Total long-term debt			48,580	44,787
Less: Amount due within one year			3,507	2,989
Total long-term debt excluding amount due within one year			\$45,073	\$41,798

Alabama Power

Senior notes	2021–2049	4.03%	\$ 7,625	\$ 7,275
Pollution control revenue bonds ^(c)	2021–2038	0.53%	1,060	1,060
Debt payable to affiliated trusts ^(f)	2042	3.33%	206	206
Other long-term debt	2021	1.20%	45	45
Finance lease obligations ^(g)			5	4
Unamortized debt premium (discount), net			(16)	(14)
Unamortized debt issuance expenses			(56)	(55)
Total long-term debt			8,869	8,521
Less: Amount due within one year			311	251
Total long-term debt excluding amount due within one year			\$ 8,558	\$ 8,270

Georgia Power

Senior notes	2021–2050	3.59%	\$ 6,400	\$ 5,850
Junior subordinated notes	2077	5.00%	270	270
FFB loans ^(b)	2021–2044	2.92%	4,618	3,843
Pollution control revenue bonds ^(c)	2025–2053	1.47%	1,538	1,821
Other long-term debt	2021	0.65%	125	—
Finance lease obligations ^(g)			145	156
Unamortized debt premium (discount), net			(12)	(7)
Unamortized debt issuance expenses			(114)	(117)
Total long-term debt			12,970	11,816
Less: Amount due within one year			542	1,025
Total long-term debt excluding amount due within one year			\$12,428	\$10,791

Notes to Financial Statements

	At December 31, 2020		Balance Outstanding at December 31,	
	Maturity	Weighted Average Interest Rate	2020	2019
Mississippi Power				
Senior notes	2028–2042	4.23%	\$ 900	\$ 1,175
Pollution control revenue bonds ^(c)	2025–2028	1.86%	76	83
Other revenue bonds ^(e)	2021–2040	6.45%	320	320
Other long-term debt	2021–2023	1.00%	100	—
Finance lease obligations ^(g)			19	—
Unamortized debt premium (discount), net			11	19
Unamortized debt issuance expenses			(7)	(8)
Total long-term debt			1,419	1,589
Less: Amount due within one year			406	281
Total long-term debt excluding amount due within one year			\$ 1,013	\$ 1,308

Southern Power				
Senior notes ^(a)	2021–2046	3.96%	\$ 3,714	\$ 4,425
Unamortized debt premium (discount), net			(6)	(8)
Unamortized debt issuance expenses			(16)	(19)
Total long-term debt			3,692	4,398
Less: Amount due within one year			299	824
Total long-term debt excluding amount due within one year			\$ 3,393	\$ 3,574

Southern Company Gas				
Senior notes	2021–2047	4.01%	\$ 4,200	\$ 3,700
First mortgage bonds ^(d)	2023–2060	3.71%	1,900	1,575
Medium-term notes	2021–2027	7.88%	160	160
Unamortized fair value adjustment			393	430
Unamortized debt premium (discount), net			(27)	(20)
Total long-term debt			6,626	5,845
Less: Amount due within one year			333	—
Total long-term debt excluding amount due within one year			\$ 6,293	\$ 5,845

- (a) Includes a fair value gain (loss) of \$109 million and \$(5) million at December 31, 2020 and 2019, respectively, related to Southern Power’s foreign currency hedge on its €1.1 billion senior notes.
- (b) Secured by a first priority lien on (i) Georgia Power’s 45.7% undivided ownership interest in Plant Vogtle Units 3 and 4 (primarily the units under construction, the related real property, and any nuclear fuel loaded in the reactor core) and (ii) Georgia Power’s rights and obligations under the principal contracts relating to Plant Vogtle Units 3 and 4. See “DOE Loan Guarantee Borrowings” for additional information.
- (c) Pollution control revenue bond obligations represent loans to the traditional electric operating companies from public authorities of funds derived from sales by such authorities of revenue bonds issued to finance pollution control and solid waste disposal facilities. In some cases, the pollution control revenue bond obligations represent obligations under installment sales agreements with respect to facilities constructed with the proceeds of revenue bonds issued by public authorities. The traditional electric operating companies are required to make payments sufficient for the authorities to meet principal and interest requirements of such bonds. Proceeds from certain issuances are restricted until qualifying expenditures are incurred.
- (d) Secured by substantially all of Nicor Gas’ properties.
- (e) At December 31, 2020 and 2019, Mississippi Power had \$270 million aggregate principal amount outstanding of Mississippi Business Finance Corporation Taxable Revenue Bonds, 7.13% Series 1999A due October 20, 2021, which are secured by Plant Daniel Units 3 and 4 and certain related personal property. Mississippi Power assumed the obligations in 2011 in connection with its election under its operating lease of Plant Daniel Units 3 and 4 to purchase the assets and recorded the bonds at fair value. At December 31, 2020 and 2019, Mississippi Power also had \$50 million of tax-exempt revenue bond obligations outstanding representing loans to Mississippi Power through the Mississippi Business Finance Corporation issued to finance a portion of the costs of constructing the Kemper County energy facility.
- (f) Alabama Power has formed a wholly-owned trust subsidiary for the purpose of issuing preferred securities. The proceeds of the related equity investments and preferred security sales were loaned back to Alabama Power through the issuance of junior subordinated notes, which constitute substantially all of the assets of this trust. Alabama Power considers that the mechanisms and obligations relating to the preferred securities issued for its benefit, taken together, constitute a full and unconditional guarantee by it of the trust’s payment obligations with respect to these securities. See Note 1 under “Variable Interest Entities” for additional information on the accounting treatment for this trust and the related securities.
- (g) Secured by the underlying lease ROU asset. See Note 9 for additional information.

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Maturities of long-term debt for the next five years are as follows:

	Southern Company ^(a)	Alabama Power	Georgia Power ^(b)	Mississippi Power ^(c)	Southern Power ^(d)	Southern Company Gas
	<i>(in millions)</i>					
2021	\$3,506	\$311	\$542	\$ 406	\$ 300	\$330
2022	3,707	751	488	16	677	46
2023	3,131	301	889	1	290	400
2024	509	22	491	1	—	—
2025	1,191	250	138	12	500	300

- (a) Amount for 2022 includes junior subordinated notes totaling \$1.725 billion at the parent entity with final maturity dates in 2024 and 2027 (one half in each year); however, in connection with related stock purchase contracts, Southern Company has agreed to remarket the notes in 2022. See “Equity Units” herein for additional information. Also see notes (b), (c), and (d) below.
- (b) Amounts include principal amortization related to the FFB borrowings; however, the final maturity date is February 20, 2044. See “DOE Loan Guarantee Borrowings” herein for additional information.
- (c) Amount for 2021 includes \$50 million and \$25 million of long-term debt with final maturity dates in 2040 and 2023, respectively, that Mississippi Power intends to repay in 2021.
- (d) Southern Power’s 2022 maturity represents euro-denominated debt at the U.S. dollar denominated hedge settlement amount.

DOE Loan Guarantee Borrowings

Pursuant to the loan guarantee program established under Title XVII of the Energy Policy Act of 2005 (Title XVII Loan Guarantee Program), Georgia Power and the DOE entered into a loan guarantee agreement in 2014 and the Amended and Restated Loan Guarantee Agreement in March 2019. Under the Amended and Restated Loan Guarantee Agreement, the DOE agreed to guarantee the obligations of Georgia Power under the FFB Credit Facilities. Under the FFB Credit Facilities, Georgia Power may make term loan borrowings through the FFB in an amount up to approximately \$5.130 billion, provided that total aggregate borrowings under the FFB Credit Facilities may not exceed 70% of (i) Eligible Project Costs minus (ii) approximately \$1.492 billion (reflecting the amounts received by Georgia Power under the Guarantee Settlement Agreement less the related customer refunds).

In June and December 2020, Georgia Power made borrowings under the FFB Credit Facilities in an aggregate principal amount of \$519 million and \$329 million, respectively, at an interest rate of 1.652% and 1.737%, respectively, through the final maturity date of February 20, 2044. During 2020, Georgia Power made principal amortization payments of \$73 million under the FFB Credit Facilities. At December 31, 2020 and 2019, Georgia Power had \$4.6 billion and \$3.8 billion of borrowings outstanding under the FFB Credit Facilities, respectively.

All borrowings under the FFB Credit Facilities are full recourse to Georgia Power, and Georgia Power is obligated to reimburse the DOE for any payments the DOE is required to make to the FFB under its guarantee. Georgia Power’s reimbursement obligations to the DOE are full recourse and secured by a first priority lien on (i) Georgia Power’s 45.7% undivided ownership interest in Plant Vogtle Units 3 and 4 (primarily the units under construction, the related real property, and any nuclear fuel loaded in the reactor core) and (ii) Georgia Power’s rights and obligations under the principal contracts relating to Plant Vogtle Units 3 and 4. There are no restrictions on Georgia Power’s ability to grant liens on other property.

In addition to the conditions described above, future advances are subject to satisfaction of customary conditions, as well as certification of compliance with the requirements of the Title XVII Loan Guarantee Program, including accuracy of project-related representations and warranties, delivery of updated project-related information, and evidence of compliance with the prevailing wage requirements of the Davis-Bacon Act of 1931, as amended, and certification from the DOE’s consulting engineer that proceeds of the advances are used to reimburse Eligible Project Costs.

Upon satisfaction of all conditions described above, advances may be requested on a quarterly basis through 2023. The final maturity date for each advance under the FFB Credit Facilities is February 20, 2044. Interest is payable quarterly and principal payments began on February 20, 2020. Borrowings under the FFB Credit Facilities will bear interest at the applicable U.S. Treasury rate plus a spread equal to 0.375%.

Under the Amended and Restated Loan Guarantee Agreement, Georgia Power is subject to customary borrower affirmative and negative covenants and events of default. In addition, Georgia Power is subject to project-related reporting requirements and other project-specific covenants and events of default.

In the event certain mandatory prepayment events occur, the FFB’s commitment to make further advances under the FFB Credit Facilities will terminate and Georgia Power will be required to prepay the outstanding principal amount of all borrowings under the FFB Credit Facilities over a period of five years (with level principal amortization). Among other things, these mandatory prepayment events include (i) the termination of the Vogtle Services Agreement or rejection of the Vogtle Services Agreement in any Westinghouse bankruptcy if Georgia Power does not maintain access to intellectual property rights under the related intellectual property licenses; (ii) termination of the Bechtel Agreement, unless the Vogtle Owners enter into a replacement agreement; (iii) cancellation of Plant Vogtle Units 3 and 4 by

Notes to Financial Statements

the Georgia PSC or by Georgia Power; (iv) failure of the holders of 90% of the ownership interests in Plant Vogtle Units 3 and 4 to vote to continue construction following certain schedule extensions; (v) cost disallowances by the Georgia PSC that could have a material adverse effect on completion of Plant Vogtle Units 3 and 4 or Georgia Power’s ability to repay the outstanding borrowings under the FFB Credit Facilities; or (vi) loss of or failure to receive necessary regulatory approvals. Under certain circumstances, insurance proceeds and any proceeds from an event of taking must be applied to immediately prepay outstanding borrowings under the FFB Credit Facilities. Georgia Power also may voluntarily prepay outstanding borrowings under the FFB Credit Facilities. Under the FFB Credit Facilities, any prepayment (whether mandatory or optional) will be made with a make-whole premium or discount, as applicable.

In connection with any cancellation of Plant Vogtle Units 3 and 4, the DOE may elect to continue construction of Plant Vogtle Units 3 and 4. In such an event, the DOE will have the right to assume Georgia Power’s rights and obligations under the principal agreements relating to Plant Vogtle Units 3 and 4 and to acquire all or a portion of Georgia Power’s ownership interest in Plant Vogtle Units 3 and 4.

Secured Debt

Each of Southern Company’s subsidiaries is organized as a legal entity, separate and apart from Southern Company and its other subsidiaries. There are no agreements or other arrangements among the Southern Company system companies under which the assets of one company have been pledged or otherwise made available to satisfy obligations of Southern Company or any of its other subsidiaries.

As discussed under “Long-term Debt” herein, the Registrants had secured debt outstanding at December 31, 2020 and 2019. Each Registrant’s senior notes, junior subordinated notes, pollution control and other revenue bond obligations, bank term loans, credit facility borrowings, and notes payable are effectively subordinated to all secured debt of each respective Registrant.

Equity Units

In August 2019, Southern Company issued 34.5 million 2019 Series A Equity Units (Equity Units), initially in the form of corporate units (Corporate Units), at a stated amount of \$50 per Corporate Unit, for a total stated amount of \$1.725 billion. Net proceeds from the issuance were approximately \$1.682 billion. The proceeds were used to repay short-term indebtedness and for other general corporate purposes, including investments in Southern Company’s subsidiaries.

Each Corporate Unit is comprised of (i) a 1/40 undivided beneficial ownership interest in \$1,000 principal amount of Southern Company’s Series 2019A Remarketable Junior Subordinated Notes (Series 2019A RSNs) due 2024, (ii) a 1/40 undivided beneficial ownership interest in \$1,000 principal amount of Southern Company’s Series 2019B Remarketable Junior Subordinated Notes (together with the Series 2019A RSNs, the RSNs) due 2027, and (iii) a stock purchase contract, which obligates the holder to purchase from Southern Company, no later than August 1, 2022, a certain number of shares of Southern Company’s common stock for \$50 in cash (Stock Purchase Contract). Southern Company has agreed to remarket the RSNs in 2022, at which time each interest rate on the RSNs will reset at the applicable market rate. Holders may choose to either remarket their RSNs, receive the proceeds, and use those funds to settle the related Stock Purchase Contract or retain the RSNs and use other funds to settle the related Stock Purchase Contract. If the remarketing is unsuccessful, holders will have the right to put their RSNs to Southern Company at a price equal to the principal amount. The Corporate Units carry an annual distribution rate of 6.75% of the stated amount, which is comprised of a quarterly interest payment on the RSNs of 2.70% per year and a quarterly purchase contract adjustment payment of 4.05% per year.

Each Stock Purchase Contract obligates the holder to purchase, and Southern Company to sell, for \$50 a number of shares of Southern Company common stock determined based on the applicable market value (as determined under the related Stock Purchase Contract) in accordance with the conversion ratios set forth below (subject to anti-dilution adjustments):

- If the applicable market value is equal to or greater than \$68.64, 0.7284 shares.
- If the applicable market value is less than \$68.64 but greater than \$57.20, a number of shares equal to \$50 divided by the applicable market value.
- If the applicable market value is less than or equal to \$57.20, 0.8741 shares.

A holder’s ownership interest in the RSNs is pledged to Southern Company to secure the holder’s obligation under the related Stock Purchase Contract. If a holder of a Stock Purchase Contract chooses at any time to have its RSNs released from the pledge, such holder’s obligation under such Stock Purchase Contract must be secured by a U.S. Treasury security equal to the aggregate principal amount of the RSNs. At the time of issuance, the RSNs were recorded on Southern Company’s consolidated balance sheet as long-term debt and the present value of the contract adjustment payments of \$198 million was recorded as a liability, representing the obligation to make contract adjustment payments, with an offsetting reduction to paid-in capital. The liability balance at December 31, 2020 was \$119 million, of which \$67 million was classified as current. The difference between the face value and present value of the contract adjustment payments is being accreted to interest expense on the consolidated statements of income over the three-year period ending in 2022. The liability recorded for the contract adjustment payments is considered non-cash and excluded from the consolidated statements of cash flows. To settle the Stock Purchase Contracts, Southern Company will be required to issue a maximum of 30.2 million shares of common stock (subject to anti-dilution adjustments and a make-whole adjustment if certain fundamental changes occur).

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Bank Credit Arrangements

At December 31, 2020, committed credit arrangements with banks were as follows:

Company	Expires				Total	Unused	Due within One Year
	2021	2022	2023	2024			
(in millions)							
Southern Company parent	\$ —	\$ —	\$ —	\$2,000	\$2,000	\$1,999	\$ —
Alabama Power	3	525	—	800	1,328	1,328	3
Georgia Power	—	—	—	1,750	1,750	1,728	—
Mississippi Power	—	150	125	—	275	250	—
Southern Power ^(a)	—	—	—	600	600	591	—
Southern Company Gas ^(b)	—	—	—	1,750	1,750	1,745	—
SEGCO	30	—	—	—	30	30	30
Southern Company	\$33	\$675	\$125	\$6,900	\$7,733	\$7,671	\$33

- (a) Does not include Southern Power Company’s \$75 million and \$60 million continuing letter of credit facilities for standby letters of credit expiring in 2023, of which \$5 million and \$11 million, respectively, was unused at December 31, 2020. In December 2020, Southern Power amended its \$120 million letter of credit facility, which, among other things, extended the expiration date from 2021 to 2023 and reduced the amount to \$75 million. Southern Power’s subsidiaries are not parties to its bank credit arrangements or letter of credit facilities.
- (b) Southern Company Gas, as the parent entity, guarantees the obligations of Southern Company Gas Capital, which is the borrower of \$1.25 billion of this arrangement. Southern Company Gas’ committed credit arrangement also includes \$500 million for which Nicor Gas is the borrower and which is restricted for working capital needs of Nicor Gas. Pursuant to this multi-year credit arrangement, the allocations between Southern Company Gas Capital and Nicor Gas may be adjusted. See “Structural Considerations” herein for additional information.

The bank credit arrangements require payment of commitment fees based on the unused portion of the commitments. Commitment fees average less than 1/4 of 1% for the Registrants and Nicor Gas. Subject to applicable market conditions, Southern Company and its subsidiaries expect to renew or replace their bank credit arrangements as needed, prior to expiration. In connection therewith, Southern Company and its subsidiaries may extend the maturity dates and/or increase or decrease the lending commitments thereunder.

These bank credit arrangements, as well as the term loan arrangements of the Registrants and SEGCO, contain covenants that limit debt levels and contain cross-acceleration or, in the case of Southern Power, cross-default provisions to other indebtedness (including guarantee obligations) that are restricted only to the indebtedness of the individual company. Such cross-default provisions to other indebtedness would trigger an event of default if Southern Power defaulted on indebtedness or guarantee obligations over a specified threshold. Such cross-acceleration provisions to other indebtedness would trigger an event of default if the applicable borrower defaulted on indebtedness, the payment of which was then accelerated. Southern Company’s, Southern Company Gas’, and Nicor Gas’ credit arrangements contain covenants that limit debt levels to 70% of total capitalization, as defined in the agreements, and the other subsidiaries’ bank credit arrangements contain covenants that limit debt levels to 65% of total capitalization, as defined in the agreements. For purposes of these definitions, debt excludes the long-term debt payable to affiliated trusts and, in certain arrangements, other hybrid securities. Additionally, for Southern Company and Southern Power, for purposes of these definitions, debt excludes any project debt incurred by certain subsidiaries of Southern Power to the extent such debt is non-recourse to Southern Power and capitalization excludes the capital stock or other equity attributable to such subsidiaries. At December 31, 2020, the Registrants, Nicor Gas, and SEGCO were in compliance with all such covenants. None of the bank credit arrangements contain material adverse change clauses at the time of borrowings.

A portion of the unused credit with banks is allocated to provide liquidity support to the revenue bonds of the traditional electric operating companies and the commercial paper programs of the Registrants and Nicor Gas. The amount of variable rate revenue bonds of the traditional electric operating companies outstanding requiring liquidity support at December 31, 2020 was approximately \$1.4 billion (comprised of approximately \$854 million at Alabama Power, \$550 million at Georgia Power, and \$34 million at Mississippi Power). In addition, at December 31, 2020, Georgia Power and Mississippi Power had approximately \$174 million and \$50 million, respectively, of fixed rate revenue bonds outstanding that are required to be remarketed within the next 12 months.

At December 31, 2020 and 2019, Southern Power had \$105 million and \$104 million, respectively, of cash collateral posted related to PPA requirements, which is included in other deferred charges and assets on Southern Power’s consolidated balance sheets.

Notes Payable

The Registrants, Nicor Gas, and SEGCO make short-term borrowings primarily through commercial paper programs that have the liquidity support of the committed bank credit arrangements described above under “Bank Credit Arrangements.” Southern Power’s subsidiaries are not parties or obligors to its commercial paper program. Southern Company Gas maintains commercial paper programs at Southern

Notes to Financial Statements

Company Gas Capital and at Nicor Gas. Nicor Gas’ commercial paper program supports working capital needs at Nicor Gas as Nicor Gas is not permitted to make money pool loans to affiliates. All of Southern Company Gas’ other subsidiaries benefit from Southern Company Gas Capital’s commercial paper program. See “Structural Considerations” herein for additional information.

In addition, Southern Company and certain of its subsidiaries have entered into various bank term loan agreements. Unless otherwise stated, the proceeds of these loans were used to repay existing indebtedness and for general corporate purposes, including working capital and, for the subsidiaries, their continuous construction programs.

Commercial paper and short-term bank term loans are included in notes payable in the balance sheets. Details of short-term borrowings for the applicable Registrants were as follows:

	Notes Payable at December 31, 2020		Notes Payable at December 31, 2019	
	Amount Outstanding	Weighted Average Interest Rate	Amount Outstanding	Weighted Average Interest Rate
	<i>(in millions)</i>		<i>(in millions)</i>	
Southern Company				
Commercial paper	\$609	0.3%	\$1,705	2.1%
Short-term bank debt	—	—%	350	2.3%
Total	\$609	0.3%	\$2,055	2.1%
Georgia Power				
Commercial paper	\$ 60	0.3%	\$ 115	2.1%
Short-term bank debt	—	—%	250	2.2%
Total	\$ 60	0.3%	\$ 365	2.2%
Mississippi Power				
Commercial paper	\$ 25	0.4%	\$ —	—%
Southern Power				
Commercial paper	\$175	0.3%	\$ 449	2.1%
Short-term bank debt	—	—%	100	2.6%
Total	\$175	0.3%	\$ 549	2.2%
Southern Company Gas				
Commercial paper:				
Southern Company Gas Capital	\$220	0.3%	\$ 372	2.1%
Nicor Gas	104	0.2%	278	1.8%
Total	\$324	0.2%	\$ 650	2.0%

See “Bank Credit Arrangements” herein for information on bank term loan covenants that limit debt levels and cross-acceleration or cross-default provisions.

Outstanding Classes of Capital Stock

Southern Company

Common Stock

Stock Issued

During 2020, Southern Company issued approximately 3.3 million shares of common stock through employee equity compensation plans and received proceeds of approximately \$74 million.

See “Equity Units” herein for additional information.

Shares Reserved

At December 31, 2020, a total of 88 million shares were reserved for issuance pursuant to the Southern Investment Plan, employee savings plans, the Outside Directors Stock Plan, the Omnibus Incentive Compensation Plan (which includes stock options and performance share units as discussed in Note 12), and an at-the-market program. Of the total 88 million shares reserved, 6.8 million shares are available for awards under the Omnibus Incentive Compensation Plan at December 31, 2020.

Notes to Financial Statements

Diluted Earnings Per Share

For Southern Company, the only differences in computing basic and diluted earnings per share (EPS) are attributable to awards outstanding under stock-based compensation plans and the Equity Units. Earnings per share dilution resulting from stock-based compensation plans and the Equity Units issuance is determined using the treasury stock method. Shares used to compute diluted EPS were as follows:

	Average Common Stock Shares		
	2020	2019	2018
		<i>(in millions)</i>	
As reported shares	1,058	1,046	1,020
Effect of stock-based compensation	7	8	5
Diluted shares	1,065	1,054	1,025

In all years presented, an immaterial number of stock-based compensation awards was not included in the diluted EPS calculation because the awards were anti-dilutive.

The Equity Units were excluded from the calculation of diluted EPS for 2020 and 2019 as the dilutive stock price threshold was not met.

Redeemable Preferred Stock of Subsidiaries

As discussed further under “Alabama Power” herein, the preferred stock of Alabama Power is presented as “Redeemable Preferred Stock of Subsidiaries” on Southern Company’s balance sheets in a manner consistent with temporary equity under applicable accounting standards.

In 2018, Mississippi Power completed the redemption of all outstanding shares and depository shares of its redeemable preferred stock totaling \$33 million, as described further under “Mississippi Power” herein.

Alabama Power

Alabama Power has preferred stock, Class A preferred stock, and common stock outstanding. Alabama Power also has authorized preference stock, none of which is outstanding. Alabama Power’s preferred stock and Class A preferred stock, without preference between classes, rank senior to Alabama Power’s common stock with respect to payment of dividends and voluntary and involuntary dissolution. The preferred stock and Class A preferred stock of Alabama Power contain a feature that allows the holders to elect a majority of Alabama Power’s board of directors if preferred dividends are not paid for four consecutive quarters. Because such a potential redemption-triggering event is not solely within the control of Alabama Power, the preferred stock and Class A preferred stock is presented as “Redeemable Preferred Stock” on Alabama Power’s balance sheets in a manner consistent with temporary equity under applicable accounting standards.

Alabama Power’s preferred stock is subject to redemption at a price equal to the par value plus a premium. Alabama Power’s Class A preferred stock is subject to redemption at a price equal to the stated capital. All series of Alabama Power’s preferred stock currently are subject to redemption at the option of Alabama Power. The Class A preferred stock is subject to redemption on or after October 1, 2022, or following the occurrence of a rating agency event. Information for each outstanding series is in the table below:

Preferred Stock	Par Value/Stated Capital Per Share	Shares Outstanding	Redemption Price Per Share
4.92% Preferred Stock	\$100	80,000	\$103.23
4.72% Preferred Stock	\$100	50,000	\$102.18
4.64% Preferred Stock	\$100	60,000	\$103.14
4.60% Preferred Stock	\$100	100,000	\$104.20
4.52% Preferred Stock	\$100	50,000	\$102.93
4.20% Preferred Stock	\$100	135,115	\$105.00
5.00% Class A Preferred Stock	\$ 25	10,000,000	\$ 25.00 ^(*)

(*) \$25.50 if prior to October 1, 2022

Georgia Power

Georgia Power has preferred stock, Class A preferred stock, preference stock, and common stock authorized, but only common stock outstanding as of December 31, 2020 and 2019.

Mississippi Power

Mississippi Power has preferred stock and common stock authorized, but only common stock outstanding as of December 31, 2020 and 2019. In 2018, Mississippi Power completed the redemption of all outstanding shares and depository shares of its Preferred Stock.

Notes to Financial Statements

Dividend Restrictions

The income of Southern Company is derived primarily from equity in earnings of its subsidiaries. At December 31, 2020, consolidated retained earnings included \$5.6 billion of undistributed retained earnings of the subsidiaries.

The traditional electric operating companies and Southern Power can only pay dividends to Southern Company out of retained earnings or paid-in-capital.

See Note 7 under “Southern Power” for information regarding the distribution requirements for certain Southern Power subsidiaries.

By regulation, Nicor Gas is restricted, to the extent of its retained earnings balance, in the amount it can dividend or loan to affiliates and is not permitted to make money pool loans to affiliates. At December 31, 2020, the amount of Southern Company Gas’ subsidiary retained earnings restricted for dividend payment totaled \$1.1 billion.

Structural Considerations

Since Southern Company and Southern Company Gas are holding companies, the right of Southern Company and Southern Company Gas and, hence, the right of creditors of Southern Company or Southern Company Gas to participate in any distribution of the assets of any respective subsidiary of Southern Company or Southern Company Gas, whether upon liquidation, reorganization or otherwise, is subject to prior claims of creditors and preferred stockholders of such subsidiary.

Southern Company Gas’ 100%-owned subsidiary, Southern Company Gas Capital, was established to provide for certain of Southern Company Gas’ ongoing financing needs through a commercial paper program, the issuance of various debt, hybrid securities, and other financing arrangements. Southern Company Gas fully and unconditionally guarantees all debt issued by Southern Company Gas Capital. Nicor Gas is not permitted by regulation to make loans to affiliates or utilize Southern Company Gas Capital for its financing needs.

Southern Power Company’s senior notes, bank term loan, commercial paper, and bank credit arrangement are unsecured senior indebtedness, which rank equally with all other unsecured and unsubordinated debt of Southern Power Company. Southern Power’s subsidiaries are not issuers, borrowers, or obligors, as applicable, under any of these unsecured senior debt arrangements, which are effectively subordinated to any future secured debt of Southern Power Company and any potential claims of creditors of Southern Power’s subsidiaries.

9. LEASES

On January 1, 2019, the Registrants adopted the provisions of FASB ASC Topic 842 (as amended), *Leases* (ASC 842), which require lessees to recognize leases with a term of greater than 12 months on the balance sheet as lease obligations, representing the discounted future fixed payments due, along with ROU assets that will be amortized over the term of each lease.

The Registrants elected the transition methodology provided by ASC 842, whereby the applicable requirements were applied on a prospective basis as of the adoption date of January 1, 2019, without restating prior periods. The Registrants also elected the package of practical expedients provided by ASC 842 that allows prior determinations of whether existing contracts are, or contain, leases and the classification of existing leases to continue without reassessment. Additionally, the Registrants applied the use-of-hindsight practical expedient in determining lease terms as of the date of adoption and elected the practical expedient that allows existing land easements not previously accounted for as leases not to be reassessed.

Notes to Financial Statements

Lessee

As lessee, the Registrants lease certain electric generating units (including renewable energy facilities), real estate/land, communication towers, railcars, and other equipment and vehicles. The major categories of lease obligations are as follows:

	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Power	Southern Company Gas
<i>(in millions)</i>						
As of December 31, 2020						
Electric generating units	\$ 941	\$146	\$1,368	\$ —	\$ —	\$ —
Real estate/land	815	4	53	2	451	61
Communication towers	158	2	3	—	—	20
Railcars	42	16	23	3	—	—
Other	127	7	5	23	—	1
Total	\$2,083	\$175	\$1,452	\$28	\$451	\$82

As of December 31, 2019						
Electric generating units	\$ 990	\$125	\$1,487	\$ —	\$ —	\$ —
Real estate/land	782	4	54	2	398	74
Communication towers	154	2	3	—	—	18
Railcars	51	21	26	3	—	—
Other	93	8	12	1	—	—
Total	\$2,070	\$160	\$1,582	\$ 6	\$398	\$92

Real estate/land leases primarily consist of commercial real estate leases at Southern Company, Georgia Power, and Southern Company Gas and various land leases primarily associated with renewable energy facilities at Southern Power. The commercial real estate leases have remaining terms of up to 24 years while the land leases have remaining terms of up to 46 years, including renewal periods.

Communication towers are leased for the installation of equipment to provide cellular phone service to customers and to support the automated meter infrastructure programs at the traditional electric operating companies and Nicor Gas. Communication tower leases have original terms of up to 10 years with options to renew for periods up to 20 years.

Renewal options exist in many of the leases. Except as otherwise noted, the expected term used in calculating the lease obligation generally reflects only the noncancelable period of the lease as it is not considered reasonably certain that the lease will be extended. Land leases associated with renewable energy facilities at Southern Power and communication tower leases for automated meter infrastructure at Southern Company Gas include renewal periods reasonably certain of exercise resulting in an expected lease term at least equal to the expected life of the renewable energy facilities and the automated meter infrastructure, respectively.

Contracts that Contain a Lease

While not specifically structured as a lease, some of the PPAs at Alabama Power and Georgia Power are deemed to represent a lease of the underlying electric generating units when the terms of the PPA convey the right to control the use of the underlying assets. Amounts recorded for leases of electric generating units are generally based on the amount of scheduled capacity payments due over the remaining term of the PPA, which varies between three and 17 years. Georgia Power has several PPAs with Southern Power that Georgia Power accounts for as leases with a lease obligation of \$575 million and \$624 million at December 31, 2020 and 2019, respectively. The amount paid for energy under these affiliate PPAs reflects a price that would be paid in an arm’s-length transaction as reviewed and approved by the Georgia PSC.

Short-term Leases

Leases with an initial term of 12 months or less are not recorded on the balance sheet; the Registrants generally recognize lease expense for these leases on a straight-line basis over the lease term.

Residual Value Guarantees

Residual value guarantees exist primarily in railcar leases at Alabama Power and Georgia Power and the amounts probable of being paid under those guarantees are included in the lease payments. All such amounts are immaterial as of December 31, 2020 and 2019.

Lease and Nonlease Components

For all asset categories, with the exception of electric generating units, gas pipelines, and real estate leases, the Registrants combine lease payments and any nonlease components, such as asset maintenance, for purposes of calculating the lease obligation and the right-of-use asset.

Notes to Financial Statements

Balance sheet amounts recorded for operating and finance leases are as follows:

	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Power	Southern Company Gas
<i>(in millions)</i>						
As of December 31, 2020						
Operating Leases						
Operating lease ROU assets, net	\$1,802	\$151	\$1,308	\$ 9	\$415	\$81
Operating lease obligations – current	\$ 241	\$ 51	\$ 151	\$ 2	\$ 25	\$15
Operating lease obligations – non-current	1,611	119	1,156	7	426	67
Total operating lease obligations	\$1,852	\$170	\$1,307	\$ 9	\$451	\$82
Finance Leases						
Finance lease ROU assets, net	\$ 218	\$ 5	\$ 115	\$19	\$ —	\$ —
Finance lease obligations – current	\$ 17	\$ 1	\$ 9	\$ 1	\$ —	\$ —
Finance lease obligations – non-current	214	4	136	18	—	—
Total finance lease obligations	\$ 231	\$ 5	\$ 145	\$19	\$ —	\$ —

As of December 31, 2019						
Operating Leases						
Operating lease ROU assets, net	\$1,800	\$132	\$1,428	\$ 6	\$369	\$93
Operating lease obligations – current	\$ 229	\$ 49	\$ 144	\$ 2	\$ 22	\$14
Operating lease obligations – non-current	1,615	107	1,282	4	376	78
Total operating lease obligations	\$1,844	\$156	\$1,426	\$ 6	\$398	\$92
Finance Leases						
Finance lease ROU assets, net	\$ 216	\$ 4	\$ 130	\$ —	\$ —	\$ —
Finance lease obligations – current	\$ 21	\$ 1	\$ 11	\$ —	\$ —	\$ —
Finance lease obligations – non-current	205	3	145	—	—	—
Total finance lease obligations	\$ 226	\$ 4	\$ 156	\$ —	\$ —	\$ —

If not presented separately on the Registrants’ balance sheets, amounts related to leases are presented as follows: operating lease ROU assets, net are included in “other deferred charges and assets”; operating lease obligations are included in “other current liabilities” and “other deferred credits and liabilities,” as applicable; finance lease ROU assets, net are included in “plant in service”; and finance lease obligations are included in “securities due within one year” and “long-term debt,” as applicable.

Notes to Financial Statements

Lease costs for 2020 and 2019, which includes both amounts recognized as operations and maintenance expense and amounts capitalized as part of the cost of another asset, are as follows:

	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Power	Southern Company Gas
<i>(in millions)</i>						
2020						
Lease cost						
Operating lease cost	\$309	\$55	\$ 212	\$ 3	\$29	\$19
Finance lease cost:						
Amortization of ROU assets	26	1	15	—	—	—
Interest on lease obligations	11	—	16	—	—	—
Total finance lease cost	37	1	31	—	—	—
Short-term lease costs	39	11	26	—	—	—
Variable lease cost	91	4	76	—	7	—
Sublease income	—	(1)	—	—	—	—
Total lease cost	\$476	\$70	\$345	\$ 3	\$36	\$19

2019						
Lease cost						
Operating lease cost	\$310	\$54	\$ 206	\$ 3	\$28	\$18
Finance lease cost:						
Amortization of ROU assets	28	1	15	—	—	—
Interest on lease obligations	12	—	18	—	—	—
Total finance lease cost	40	1	33	—	—	—
Short-term lease costs	48	19	22	—	—	—
Variable lease cost	105	6	85	—	7	—
Sublease income	—	(1)	—	—	—	—
Total lease cost	\$503	\$79	\$346	\$ 3	\$35	\$18

Georgia Power has variable lease payments that are based on the amount of energy produced by certain renewable generating facilities subject to PPAs, including \$39 million and \$42 million in 2020 and 2019, respectively, from finance leases which are included in purchased power on Georgia Power’s statements of income, \$20 million of which was included in purchased power, affiliates in both 2020 and 2019.

Rent expense and PPA capacity expense related to leases for 2018, prior to the adoption of ASC 842, were as follows:

	Southern Company ^{(a)(b)(c)}	Alabama Power	Georgia Power ^(a)	Mississippi Power ^(b)	Southern Power ^(c)	Southern Company Gas
<i>(in millions)</i>						
2018:						
Rent expense	\$192	\$23	\$ 34	\$ 4	\$31	\$15
PPA capacity expense	231	44	206	—	—	—

- (a) Georgia Power’s energy-only solar PPAs accounted for as leases contained contingent rent expense of \$72 million, of which \$29 million related to solar PPAs with Southern Power.
- (b) Mississippi Power’s energy-only solar PPAs accounted for as operating leases contained contingent rent expense of \$10 million.
- (c) Rent expense includes contingent rent expense related to Southern Power’s land leases based on wind production and escalation in the Consumer Price Index for All Urban Consumers.

Notes to Financial Statements

Other information with respect to cash and noncash activities related to leases, as well as weighted-average lease terms and discount rates, is as follows:

	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Power	Southern Company Gas
<i>(in millions)</i>						
2020						
Other information						
Cash paid for amounts included in the measurements of lease obligations:						
Operating cash flows from operating leases	\$310	\$55	\$215	\$ 3	\$28	\$18
Operating cash flows from finance leases	9	—	18	—	—	—
Financing cash flows from finance leases	22	1	11	—	—	—
ROU assets obtained in exchange for new operating lease obligations	227	63	32	—	51	4
ROU assets obtained in exchange for new finance lease obligations	10	2	—	—	—	—
2019						
Other information						
Cash paid for amounts included in the measurements of lease obligations:						
Operating cash flows from operating leases	\$323	\$54	\$210	\$ 3	\$27	\$18
Operating cash flows from finance leases	10	—	19	—	—	—
Financing cash flows from finance leases	32	1	13	—	—	—
ROU assets obtained in exchange for new operating lease obligations	118	7	21	—	2	19
ROU assets obtained in exchange for new finance lease obligations	35	2	24	—	—	—

	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Power	Southern Company Gas
As of December 31, 2020						
Weighted-average remaining lease term in years:						
Operating leases	14.5	7.8	9.4	6.5	32.1	9.8
Finance leases	18.2	9.7	9.5	14.9	N/A	N/A
Weighted-average discount rate:						
Operating leases	4.44%	4.14%	4.37%	3.26%	5.45%	3.67%
Finance leases	4.79%	3.20%	10.81%	2.74%	N/A	N/A

As of December 31, 2019						
Weighted-average remaining lease term in years:						
Operating leases	14.2	3.1	10.2	7.0	32.8	9.9
Finance leases	18.8	12.1	10.5	N/A	N/A	N/A
Weighted-average discount rate:						
Operating leases	4.53%	3.33%	4.46%	4.02%	5.66%	3.7%
Finance leases	5.04%	3.60%	10.76%	N/A	N/A	N/A

Notes to Financial Statements

Maturities of lease liabilities are as follows:

	As of December 31, 2020					
	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Power	Southern Company Gas
<i>(in millions)</i>						
Maturity Analysis						
Operating leases:						
2021	\$ 300	\$ 57	\$ 205	\$ 2	\$ 30	\$ 18
2022	287	58	202	4	25	14
2023	230	9	200	1	27	12
2024	187	6	164	1	27	11
2025	165	6	137	—	27	10
Thereafter	1,546	74	701	2	873	35
Total	2,715	210	1,609	10	1,009	100
Less: Present value discount	863	40	302	1	558	18
Operating lease obligations	\$1,852	\$170	\$1,307	\$ 9	\$ 451	\$ 82
Finance leases:						
2021	\$ 28	\$ 1	\$ 24	\$ 2	\$ —	\$ —
2022	25	1	25	1	—	—
2023	22	1	25	2	—	—
2024	19	1	25	1	—	—
2025	16	—	25	2	—	—
Thereafter	246	1	109	15	—	—
Total	356	5	233	23	—	—
Less: Present value discount	125	—	88	4	—	—
Finance lease obligations	\$ 231	\$ 5	\$ 145	\$19	\$ —	\$ —

Payments made under PPAs at Georgia Power for energy generated from certain renewable energy facilities accounted for as operating and finance leases are considered variable lease costs and are therefore not reflected in the above maturity analysis.

As of December 31, 2020, Southern Power has additional leases that have not yet commenced, as detailed in the following table:

	Southern Power
Lease category	Land
Expected commencement date	2021
Longest lease term expiration	30 years
Estimated total obligations <i>(in millions)</i>	\$12

Lessor

The Registrants are each considered lessors in various arrangements that have been determined to contain a lease due to the customer’s ability to control the use of the underlying asset owned by the applicable Registrant. For the traditional electric operating companies, these arrangements consist of outdoor lighting contracts accounted for as operating leases with initial terms of up to seven years, after which the contracts renew on a month-to-month basis at the customer’s option. For Mississippi Power, these arrangements also include a tolling arrangement related to an electric generating unit accounted for as a sales-type lease with a remaining term of 18 years. For Southern Power, these arrangements consist of PPAs related to electric generating units, including renewable energy facilities, accounted for as operating leases with remaining terms of up to 26 years. Southern Company Gas is the lessor in operating leases related to gas pipelines with remaining terms of up to 22 years. For Southern Company, these arrangements also include PPAs related to fuel cells accounted for as operating leases with remaining terms of up to 14 years.

Notes to Financial Statements

Lease income for 2020 and 2019 is as follows:

	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Power	Southern Company Gas
(in millions)						
2020						
Lease income – interest income on sales-type leases	\$ 16	\$ —	\$ —	\$12	\$ —	\$ —
Lease income – operating leases	208	45	58	2	87	35
Variable lease income	419	—	—	—	449	—
Total lease income	\$643	\$45	\$58	\$14	\$536	\$35
2019						
Lease income – interest income on sales-type leases	\$ 9	\$ —	\$ —	\$ 9	\$ —	\$ —
Lease income – operating leases	273	24	71	—	160	35
Variable lease income	403	—	—	—	434	—
Total lease income	\$685	\$24	\$71	\$ 9	\$594	\$35

Lease payments received under tolling arrangements and PPAs consist of either scheduled payments or variable payments based on the amount of energy produced by the underlying electric generating units. Lease income for Alabama Power and Southern Power is included in wholesale revenues. Scheduled payments to be received under outdoor lighting contracts, tolling arrangements, and PPAs accounted for as leases are presented in the following maturity analyses.

No profit or loss was recognized by Mississippi Power upon commencement of a tolling arrangement accounted for as a sales-type lease during the first quarter 2019. Mississippi Power completed construction of additional leased assets under the lease during 2020 and, upon completion, the book value of \$26 million was transferred from CWIP to lease receivables, of which \$24 million and \$2 million is included in other property and investments and other accounts and notes receivable, respectively, at December 31, 2020. The transfer represented a non-cash investing transaction for purposes of the statements of cash flows. Construction of additional leased assets is ongoing and will be transferred to a lease receivable as completed. The undiscounted cash flows to be received by Mississippi Power for in-service leased assets under the lease are as follows:

	At December 31, 2020
(in millions)	
2021	\$ 20
2022	19
2023	19
2024	18
2025	17
Thereafter	162
Total undiscounted cash flows	\$255
Lease receivable(*)	138
Difference between undiscounted cash flows and discounted cash flows	\$117

(*) Included in other current assets and other property and investments on the balance sheets.

The undiscounted cash flows to be received under operating leases and contracts accounted for as operating leases (adjusted for intercompany eliminations) are as follows:

	At December 31, 2020				
	Southern Company	Alabama Power	Georgia Power	Southern Power	Southern Company Gas
(in millions)					
2021	\$ 207	\$ 83	\$19	\$ 86	\$ 35
2022	187	76	8	87	35
2023	138	32	2	88	34
2024	106	4	—	90	33
2025	99	3	—	74	28
Thereafter	978	23	—	313	435
Total	\$1,715	\$221	\$29	\$738	\$600

Notes to Financial Statements

Southern Power receives payments for renewable energy under PPAs accounted for as operating leases that are considered contingent rents and are therefore not reflected in the table above. Alabama Power and Southern Power allocate revenue to the nonlease components of PPAs based on the stand-alone selling price of capacity and energy. The undiscounted cash flows to be received under outdoor lighting contracts accounted for as operating leases at Mississippi Power are immaterial.

10. INCOME TAXES

Southern Company files a consolidated federal income tax return and the Registrants file various state income tax returns, some of which are combined or unitary. Under a joint consolidated income tax allocation agreement, each Southern Company subsidiary’s current and deferred tax expense is computed on a stand-alone basis and each subsidiary is allocated an amount of tax similar to that which would be paid if it filed a separate income tax return. In accordance with IRS regulations, each company is jointly and severally liable for the federal tax liability.

Federal Tax Reform Legislation

Following the enactment of the Tax Reform Legislation, the SEC staff issued Staff Accounting Bulletin 118 – “Income Tax Accounting Implications of the Tax Cuts and Jobs Act” (SAB 118), which provided for a measurement period of up to one year from the enactment date to complete accounting under GAAP for the tax effects of the legislation. Following the 2017 tax return filing in the fourth quarter 2018, each of the Registrants considered the measurement of impacts from the Tax Reform Legislation on deferred income tax assets and liabilities, primarily due to the impact of the reduction of the corporate income tax rate, to be complete as of December 31, 2018.

Current and Deferred Income Taxes

Details of income tax provisions are as follows:

	2020					
	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Power	Southern Company Gas
(in millions)						
Federal —						
Current	\$ 199	\$198	\$ 365	\$ 18	\$(303)	\$ 82
Deferred	70	44	(224)	(14)	299	53
	269	242	141	4	(4)	135
State —						
Current	100	61	60	—	(4)	35
Deferred	24	34	(49)	10	11	3
	124	95	11	10	7	38
Total	\$ 393	\$337	\$ 152	\$ 14	\$ 3	\$ 173

	2019					
	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Power	Southern Company Gas
(in millions)						
Federal —						
Current	\$ 156	\$ 61	\$264	\$ (6)	\$(717)	\$(120)
Deferred	1,237	125	180	26	647	195
	1,393	186	444	20	(70)	75
State —						
Current	275	12	6	(1)	1	37
Deferred	130	72	22	11	13	18
	405	84	28	10	14	55
Total	\$1,798	\$270	\$472	\$ 30	\$(56)	\$ 130

Notes to Financial Statements

	2018					
	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Power	Southern Company Gas
	(in millions)					
Federal —						
Current	\$ 167	\$ 91	\$ 393	\$(567)	\$ 85	\$334
Deferred	231	123	(249)	575	(154)	33
	398	214	144	8	(69)	367
State —						
Current	188	26	81	(10)	(9)	131
Deferred	(137)	51	(11)	(100)	(86)	(34)
	51	77	70	(110)	(95)	97
Total	\$ 449	\$291	\$ 214	\$(102)	\$(164)	\$464

Southern Company’s and Southern Power’s ITCs and PTCs generated in the current tax year and carried forward from prior tax years that cannot be utilized in the current tax year are reclassified from current to deferred taxes in federal income tax expense in the tables above. Southern Power’s ITCs and PTCs reclassified in this manner include \$5 million for 2020, \$51 million for 2019, and \$128 million for 2018. Southern Power received \$340 million, \$734 million, and \$5 million of cash related to federal ITCs under renewable energy initiatives in 2020, 2019, and 2018, respectively. See “Deferred Tax Assets and Liabilities” and “Tax Credit Carryforwards” herein for additional information.

In accordance with regulatory requirements, deferred federal ITCs for the traditional electric operating companies are deferred and amortized over the average life of the related property, with such amortization normally applied as a credit to reduce depreciation and amortization in the statements of income. Southern Power’s and the natural gas distribution utilities’ deferred federal ITCs, as well as certain state ITCs for Nicor Gas, are deferred and amortized to income tax expense over the life of the respective asset. ITCs amortized in 2020, 2019, and 2018 were immaterial for the traditional electric operating companies and Southern Company Gas and were as follows for Southern Company and Southern Power:

	Southern Company	Southern Power
	(in millions)	
2020	\$ 84	\$ 59
2019	181	151
2018	87	58

When Southern Power recognizes tax credits, the tax basis of the asset is reduced by 50% of the ITCs received, resulting in a net deferred tax asset. Southern Power has elected to recognize the tax benefit of this basis difference as a reduction to income tax expense in the year in which the plant reaches commercial operation. The tax benefit of the related basis differences reduced income tax expense by \$5 million and \$1 million in 2019 and 2018, respectively.

State ITCs and other state credits, which are recognized in the period in which the credits are generated, reduced Georgia Power’s income tax expense by \$67 million in 2020, \$51 million in 2019, and \$21 million in 2018.

Southern Power’s federal and state PTCs, which are recognized in the period in which the credits are generated, reduced Southern Power’s income tax expense by \$15 million in 2020, \$12 million in 2019, and \$141 million in 2018.

Legal Entity Reorganizations

In 2018, Southern Power completed the final stage of a legal entity reorganization of various direct and indirect subsidiaries that own and operate substantially all of its solar facilities, including certain subsidiaries owned in partnership with various third parties, and also completed a legal entity reorganization of eight operating wind facilities under a new holding company, SP Wind. The reorganizations resulted in net state tax benefits related to certain changes in apportionment rates totaling approximately \$65 million, which were recorded in 2018.

Effective Tax Rate

Southern Company's effective tax rate is typically lower than the statutory rate due to employee stock plans' dividend deduction, non-taxable AFUDC equity at the traditional electric operating companies, flowback of excess deferred income taxes at the regulated utilities, and federal income tax benefits from ITCs and PTCs primarily at Southern Power.

Notes to Financial Statements

A reconciliation of the federal statutory income tax rate to the effective income tax rate is as follows:

	2020					
	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Power	Southern Company Gas
Federal statutory rate	21.0%	21.0%	21.0%	21.0%	21.0%	21.0%
State income tax, net of federal deduction	2.8	5.0	0.5	4.8	2.7	4.0
Employee stock plans' dividend deduction	(0.7)	—	—	—	—	—
Non-deductible book depreciation	0.7	0.6	0.8	0.5	—	—
Flowback of excess deferred income taxes	(8.8)	(3.1)	(12.0)	(18.5)	—	(2.7)
AFUDC-Equity	(0.8)	(0.6)	(1.1)	(0.1)	—	—
Federal PTCs	—	—	—	—	(2.5)	—
Amortization of ITC	(1.6)	(0.1)	(0.1)	(0.1)	(22.1)	(0.1)
Noncontrolling interests	—	—	—	—	3.1	—
Leveraged lease impairments	(1.6)	—	—	—	—	—
Other	0.2	(0.3)	(0.3)	0.9	(0.9)	0.5
Effective income tax (benefit) rate	11.2%	22.5%	8.8%	8.5%	1.3%	22.7%

	2019					
	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Power	Southern Company Gas
Federal statutory rate	21.0%	21.0%	21.0%	21.0%	21.0%	21.0%
State income tax, net of federal deduction	4.9	4.9	1.0	4.3	4.0	6.1
Employee stock plans' dividend deduction	(0.4)	—	—	—	—	—
Non-deductible book depreciation	0.3	0.6	0.5	0.4	—	—
Flowback of excess deferred income taxes	(2.1)	(5.3)	—	(12.6)	—	(6.0)
AFUDC-Equity	(0.4)	(0.8)	(0.6)	(0.1)	—	—
ITC basis difference	(0.1)	—	—	—	(1.9)	—
Amortization of ITC	(0.8)	(0.1)	(0.1)	(0.1)	(16.1)	(0.1)
Tax impact from sale of subsidiaries	5.1	—	—	—	(27.6)	(1.4)
Noncontrolling interests	—	—	—	—	0.8	—
Other	—	(0.4)	(0.3)	4.9	(0.6)	(1.4)
Effective income tax (benefit) rate	27.5%	19.9%	21.5%	17.8%	(20.4)%	18.2%

	2018					
	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Power	Southern Company Gas
Federal statutory rate	21.0%	21.0%	21.0%	21.0%	21.0%	21.0%
State income tax, net of federal deduction	1.8	5.0	5.5	(65.1)	(90.8)	9.2
Employee stock plans' dividend deduction	(1.0)	—	—	—	—	—
Non-deductible book depreciation	0.8	0.6	1.2	0.7	—	—
Flowback of excess deferred income taxes	(4.0)	(1.8)	—	(4.1)	—	(3.0)
AFUDC-Equity	(1.0)	(1.0)	(1.4)	—	—	—
ITC basis difference	(0.6)	—	—	—	(0.2)	—
Federal PTCs	(4.7)	—	—	—	(156.6)	—
Amortization of ITC	(2.0)	(0.1)	(0.2)	(0.2)	(55.4)	(0.1)
Tax impact from sale of subsidiaries	8.6	—	—	—	—	28.5
Tax Reform Legislation	(1.4)	—	(4.9)	(26.3)	96.1	(0.4)
Noncontrolling interests	(0.4)	—	—	—	(14.9)	—
Other	(0.8)	(0.1)	0.1	(1.4)	2.0	0.3
Effective income tax (benefit) rate	16.3%	23.6%	21.3%	(75.4)%	(198.8)%	55.5%

Notes to Financial Statements

Deferred Tax Assets and Liabilities

The tax effects of temporary differences between the carrying amounts of assets and liabilities in the financial statements of the Registrants and their respective tax bases, which give rise to deferred tax assets and liabilities, are as follows:

December 31, 2020						
	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Power	Southern Company Gas
(in millions)						
Deferred tax liabilities —						
Accelerated depreciation	\$ 8,950	\$2,453	\$3,228	\$ 319	\$1,389	\$ 1,349
Property basis differences	1,999	1,010	689	148	—	135
Federal effect of net state deferred tax assets	—	—	—	25	—	—
Leveraged lease basis differences	142	—	—	—	—	—
Employee benefit obligations	739	250	362	39	12	26
Premium on reacquired debt	78	12	66	—	—	—
Regulatory assets –						
Storm damage reserves	80	—	80	—	—	—
Employee benefit obligations	1,313	348	438	62	—	45
Remaining book value of retired assets	270	123	141	6	—	—
AROs	1,969	764	1,165	40	—	—
AROs	804	328	429	—	—	—
Other	437	128	82	66	12	138
Total deferred income tax liabilities	16,781	5,416	6,680	705	1,413	1,693
Deferred tax assets —						
Federal effect of net state deferred tax						
liabilities	284	151	59	—	26	70
State effect of federal deferred taxes	126	126	—	—	—	—
Employee benefit obligations	1,511	369	522	80	6	100
Other property basis differences	223	—	72	—	134	—
ITC and PTC carryforward	1,853	12	539	—	1,110	—
Long-term debt fair value adjustment	86	—	—	—	—	86
Other partnership basis difference	166	—	—	—	166	—
Other comprehensive losses	128	7	17	—	25	—
AROs	2,773	1,092	1,594	40	—	—
Estimated loss on plants under construction	369	—	369	—	—	—
Other deferred state tax attributes	357	—	9	250	68	10
Regulatory liability associated with the						
Tax Reform Legislation (not subject to						
normalization)	338	243	76	19	—	—
Other	660	143	186	39	52	166
Total deferred income tax assets	8,874	2,143	3,443	428	1,587	432
Valuation allowance	(136)	—	(35)	(41)	(35)	(4)
Net deferred income tax assets	8,738	2,143	3,408	387	1,552	428
Net deferred income taxes (assets)/liabilities	\$ 8,043	\$3,273	\$3,272	\$ 318	\$ (139)	\$ 1,265
Recognized in the balance sheets:						
Accumulated deferred income taxes – assets	\$ (132)	\$ —	\$ —	\$ (129)	\$ (262)	\$ —
Accumulated deferred income taxes – liabilities	\$ 8,175	\$3,273	\$3,272	\$ 447	\$ 123	\$ 1,265

Notes to Financial Statements

December 31, 2019						
	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Power	Southern Company Gas
(in millions)						
Deferred tax liabilities —						
Accelerated depreciation	\$ 8,711	\$2,402	\$3,058	\$ 315	\$1,422	\$ 1,288
Property basis differences	1,843	912	643	143	—	133
Federal effect of net state deferred tax assets	—	—	—	24	—	—
Leveraged lease basis differences	236	—	—	—	—	—
Employee benefit obligations	704	242	351	38	12	12
Premium on reacquired debt	83	13	70	—	—	—
Regulatory assets –						
Storm damage reserves	109	—	109	—	—	—
Employee benefit obligations	1,174	311	403	55	—	45
Remaining book value of retired assets	341	174	159	8	—	—
AROs	1,723	613	1,066	44	—	—
AROs	814	360	405	—	—	—
Other	523	134	81	68	11	198
Total deferred income tax liabilities	16,261	5,161	6,345	695	1,445	1,676
Deferred tax assets —						
Federal effect of net state deferred tax						
liabilities	277	162	63	—	24	56
Employee benefit obligations	1,385	334	488	72	5	111
Other property basis differences	230	—	65	—	146	—
ITC and PTC carryforward	2,098	11	435	—	1,445	—
Long-term debt fair value adjustment	97	—	—	—	—	97
Other partnership basis difference	169	—	—	—	169	—
Other comprehensive losses	112	8	18	—	10	—
AROs	2,537	973	1,471	44	—	—
Estimated loss on plants under construction	283	—	283	—	—	—
Other deferred state tax attributes	402	—	13	251	72	8
Regulatory liability associated with the						
Tax Reform Legislation (not subject to						
normalization)	401	240	133	28	—	—
Other	689	173	154	56	46	190
Total deferred income tax assets	8,680	1,901	3,123	451	1,917	462
Valuation allowance	(137)	—	(35)	(41)	(36)	(5)
Net deferred income tax assets	8,543	1,901	3,088	410	1,881	457
Net deferred income taxes (assets)/liabilities	\$ 7,718	\$3,260	\$3,257	\$ 285	\$ (436)	\$ 1,219
Recognized in the balance sheets:						
Accumulated deferred income taxes – assets	\$ (170)	\$ —	\$ —	\$ (139)	\$ (551)	\$ —
Accumulated deferred income taxes – liabilities	\$ 7,888	\$3,260	\$3,257	\$ 424	\$ 115	\$ 1,219

The traditional electric operating companies and the natural gas distribution utilities have tax-related regulatory assets (deferred income tax charges) and regulatory liabilities (deferred income tax credits). The regulatory assets are primarily attributable to tax benefits flowed through to customers in prior years, deferred taxes previously recognized at rates lower than the current enacted tax law, and taxes applicable to capitalized interest. The regulatory liabilities are primarily attributable to deferred taxes previously recognized at rates higher than the current enacted tax law and to unamortized ITCs. See Note 2 for each Registrant’s related balances at December 31, 2020 and 2019.

Notes to Financial Statements

Tax Credit Carryforwards

Federal ITC/PTC carryforwards at December 31, 2020 were as follows:

	Southern Company	Alabama Power	Georgia Power	Southern Power
		<i>(in millions)</i>		
Federal ITC/PTC carryforwards	\$1,428	\$ 12	\$ 114	\$1,110
Tax Year in which federal ITC/PTC carryforwards begin expiring	2031	2032	2031	2035
Year by which federal ITC/PTC carryforwards are expected to be utilized	2024	2023	2023	2024

The estimated tax credit utilization reflects the various sale transactions described in Note 15 and could be further delayed by numerous factors, including the acquisition of additional renewable projects, the purchase of rights to additional PTCs of Plant Vogtle Units 3 and 4 pursuant to certain joint ownership agreements, potential impacts of the COVID-19 pandemic, and changes in taxable income projections. See Note 2 under “Georgia Power – Nuclear Construction” for additional information on Plant Vogtle Units 3 and 4.

At December 31, 2020, Georgia Power also had approximately \$343 million in net state investment and other net state tax credit carryforwards for the State of Georgia that will expire between tax years 2021 and 2030 and are not expected to be fully utilized. Georgia Power has a net state valuation allowance of \$28 million associated with these carryforwards.

The ultimate outcome of these matters cannot be determined at this time.

Net Operating Loss Carryforwards

At December 31, 2020, the net state income tax benefit of state and local NOL carryforwards for Southern Company’s subsidiaries were as follows:

Company/Jurisdiction	Approximate Net State Income Tax Benefit of NOL Carryforwards	Tax Year NOL Begins Expiring
	<i>(in millions)</i>	
Mississippi Power		
Mississippi	\$200	2031
Southern Power		
Oklahoma	39	2035
Florida	11	2034
South Carolina	2	2036
Other states	1	Various
Southern Power Total	\$ 53	
Other(*)		
New York	11	2035
New York City	14	2035
Other states	21	Various
Southern Company Total	\$299	

(*) Represents other Southern Company subsidiaries. Alabama Power, Georgia Power, and Southern Company Gas did not have material state or local NOL carryforwards at December 31, 2020.

State NOLs for Mississippi, Oklahoma, and Florida are not expected to be fully utilized prior to expiration. At December 31, 2020, Mississippi Power had a net state valuation allowance of \$32 million for the Mississippi NOL and Southern Power had net state valuation allowances of \$16 million for the Oklahoma NOL and \$11 million for the Florida NOL.

The ultimate outcome of these matters cannot be determined at this time.

Notes to Financial Statements

Unrecognized Tax Benefits

Changes in unrecognized tax benefits for the periods presented were as follows:

	Southern Company
	<i>(in millions)</i>
Unrecognized tax benefits at December 31, 2017	\$ 18
Tax position changes – decrease from prior periods	(18)
Unrecognized tax benefits at December 31, 2018 and 2019	\$ —
Tax positions changes – increase from prior periods	44
Unrecognized tax benefits at December 31, 2020	\$ 44

The unrecognized tax positions increase from prior periods for 2020 and the balance of unrecognized tax benefits at December 31, 2020 relate to a 2019 state tax filing position to exclude certain gains from 2019 dispositions from taxation in a certain unitary state. If accepted by the state, this position would decrease Southern Company’s annual effective tax rate. The ultimate outcome of this unrecognized tax benefit is dependent on completion of the related state audit, which is not expected to be resolved within the next 12 months.

All of the Registrants classify interest on tax uncertainties as interest expense. Accrued interest for all tax positions was immaterial for all years presented. None of the Registrants accrued any penalties on uncertain tax positions.

The IRS has finalized its audits of Southern Company’s consolidated federal income tax returns through 2019. Southern Company is a participant in the Compliance Assurance Process of the IRS. The audits for the Registrants’ state income tax returns have either been concluded, or the statute of limitations has expired, for years prior to 2015.

11. RETIREMENT BENEFITS

The Southern Company system has a qualified defined benefit, trustee pension plan covering substantially all employees, with the exception of PowerSecure employees. The qualified pension plan is funded in accordance with requirements of the Employee Retirement Income Security Act of 1974, as amended (ERISA). No contributions to the qualified pension plan were made for the year ended December 31, 2020 and no mandatory contributions to the qualified pension plan are anticipated for the year ending December 31, 2021. The Southern Company system also provides certain non-qualified defined benefits for a select group of management and highly compensated employees, which are funded on a cash basis. In addition, the Southern Company system provides certain medical care and life insurance benefits for retired employees through other postretirement benefit plans. The traditional electric operating companies fund other postretirement trusts to the extent required by their respective regulatory commissions. Southern Company Gas has a separate unfunded supplemental retirement health care plan that provides medical care and life insurance benefits to employees of discontinued businesses. For the year ending December 31, 2021, no contributions to any other postretirement trusts are expected.

On January 1, 2019, Southern Company completed the sale of Gulf Power to NextEra Energy. See Note 15 under “Southern Company” for additional information. All amounts presented in this note reflect the benefit plan obligations and related plan assets for the Southern Company system’s pension and other postretirement benefit plans, including the amounts attributable to Gulf Power prior to January 1, 2019.

Notes to Financial Statements

Actuarial Assumptions

The weighted average rates assumed in the actuarial calculations used to determine both the net periodic costs for the pension and other postretirement benefit plans for the following year and the benefit obligations as of the measurement date are presented below.

Assumptions used to determine net periodic costs:	2020					
	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Power	Southern Company Gas
Pension plans						
Discount rate – benefit obligations	3.41%	3.44%	3.40%	3.41%	3.52%	3.39%
Discount rate – interest costs	2.99	3.01	2.96	2.99	3.18	2.99
Discount rate – service costs	3.66	3.69	3.67	3.67	3.70	3.53
Expected long-term return on plan assets	8.25	8.25	8.25	8.25	8.25	8.25
Annual salary increase	4.73	4.73	4.73	4.73	4.73	4.73
Other postretirement benefit plans						
Discount rate – benefit obligations	3.24%	3.28%	3.22%	3.22%	3.39%	3.19%
Discount rate – interest costs	2.80	2.84	2.79	2.76	2.97	2.71
Discount rate – service costs	3.57	3.61	3.57	3.57	3.57	3.52
Expected long-term return on plan assets	7.25	7.36	7.05	7.07	—	6.69
Annual salary increase	4.73	4.73	4.73	4.73	4.73	4.73

Assumptions used to determine net periodic costs:	2019					
	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Power	Southern Company Gas
Pension plans						
Discount rate – benefit obligations	4.49%	4.51%	4.48%	4.49%	4.65%	4.47%
Discount rate – interest costs	4.12	4.14	4.10	4.12	4.35	4.11
Discount rate – service costs	4.70	4.73	4.72	4.73	4.75	4.57
Expected long-term return on plan assets	7.75	7.75	7.75	7.75	7.75	7.75
Annual salary increase	4.34	4.46	4.46	4.46	4.46	3.07
Other postretirement benefit plans						
Discount rate – benefit obligations	4.37%	4.40%	4.36%	4.35%	4.50%	4.32%
Discount rate – interest costs	3.98	4.01	3.97	3.95	4.14	3.91
Discount rate – service costs	4.63	4.67	4.64	4.64	4.65	4.56
Expected long-term return on plan assets	6.86	6.76	6.85	6.79	—	6.49
Annual salary increase	4.34	4.46	4.46	4.46	4.46	3.07

Assumptions used to determine net periodic costs:	2018					
	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Power	Southern Company Gas
Pension plans						
Discount rate – benefit obligations	3.80%	3.81%	3.79%	3.80%	3.94%	3.74%
Discount rate – interest costs	3.45	3.45	3.42	3.46	3.69	3.41
Discount rate – service costs	3.98	4.00	3.99	3.99	4.01	3.84
Expected long-term return on plan assets	7.95	7.95	7.95	7.95	7.95	7.95
Annual salary increase	4.34	4.46	4.46	4.46	4.46	3.07
Other postretirement benefit plans						
Discount rate – benefit obligations	3.68%	3.71%	3.68%	3.68%	3.81%	3.62%
Discount rate – interest costs	3.29	3.31	3.29	3.29	3.47	3.21
Discount rate – service costs	3.91	3.93	3.91	3.91	3.93	3.82
Expected long-term return on plan assets	6.83	6.83	6.80	6.99	—	5.89
Annual salary increase	4.34	4.46	4.46	4.46	4.46	3.07

Notes to Financial Statements

Assumptions used to determine benefit obligations:	2020					
	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Power	Southern Company Gas
Pension plans						
Discount rate	2.81%	2.85%	2.79%	2.80%	2.99%	2.75%
Annual salary increase	4.80	4.80	4.80	4.80	4.80	4.80
Other postretirement benefit plans						
Discount rate	2.56%	2.63%	2.52%	2.53%	2.78%	2.46%
Annual salary increase	4.80	4.80	4.80	4.80	4.80	4.80

Assumptions used to determine benefit obligations:	2019					
	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Power	Southern Company Gas
Pension plans						
Discount rate	3.41%	3.44%	3.40%	3.41%	3.52%	3.39%
Annual salary increase	4.73	4.73	4.73	4.73	4.73	4.73
Other postretirement benefit plans						
Discount rate	3.24%	3.28%	3.22%	3.22%	3.39%	3.19%
Annual salary increase	4.73	4.73	4.73	4.73	4.73	4.73

The Registrants estimate the expected rate of return on pension plan and other postretirement benefit plan assets using a financial model to project the expected return on each current investment portfolio. The analysis projects an expected rate of return on each of the different asset classes in order to arrive at the expected return on the entire portfolio relying on each trust’s target asset allocation and reasonable capital market assumptions. The financial model is based on four key inputs: anticipated returns by asset class (based in part on historical returns), each trust’s target asset allocation, an anticipated inflation rate, and the projected impact of a periodic rebalancing of each trust’s portfolio. Prior to 2020, the Registrants set the expected rate of return assumption using asset return modeling based on geometric returns that reflect the compound average returns for dependent annual periods. Beginning in 2020, the Registrants set the expected rate of return assumption using an arithmetic mean which represents the expected simple average return to be earned by the pension plan assets over any one year. The Registrants believe the use of the arithmetic mean is more compatible with the expected rate of return’s function of estimating a single year’s investment return.

An additional assumption used in measuring the accumulated other postretirement benefit obligations (APBO) was a weighted average medical care cost trend rate. The weighted average medical care cost trend rates used in measuring the APBO for the Registrants at December 31, 2020 were as follows:

	Initial Cost Trend Rate	Ultimate Cost Trend Rate	Year That Ultimate Rate is Reached
Pre-65	6.00%	4.50%	2027
Post-65 medical	5.00	4.50	2027
Post-65 prescription	6.25	4.50	2028

Pension Plans

The total accumulated benefit obligation for the pension plans at December 31, 2020 and 2019 was as follows:

	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Power	Southern Company Gas
<i>(in millions)</i>						
December 31, 2020	\$14,922	\$3,414	\$4,657	\$683	\$175	\$1,072
December 31, 2019	13,391	3,053	4,222	615	151	963

Actuarial losses of \$1.7 billion and \$2.3 billion were recorded in the remeasurement of the Southern Company system pension plans at December 31, 2020 and 2019, respectively, primarily due to decreases of 60 and 108 basis points, respectively, in the overall discount rate used to calculate the benefit obligation as a result of lower market interest rates.

Notes to Financial Statements

Changes in the projected benefit obligations and the fair value of plan assets during the plan years ended December 31, 2020 and 2019 were as follows:

	2020					Southern Company Gas
	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Power	
	(in millions)					
Change in benefit obligation						
Benefit obligation at beginning of year	\$14,788	\$3,404	\$4,610	\$ 671	\$185	\$1,067
Service cost	376	89	96	15	8	33
Interest cost	432	100	133	20	6	31
Benefits paid	(629)	(132)	(202)	(27)	(6)	(69)
Actuarial (gain) loss	1,679	393	490	75	24	127
Balance at end of year	16,646	3,854	5,127	754	217	1,189
Change in plan assets						
Fair value of plan assets at beginning of year	14,057	3,357	4,442	641	169	1,050
Actual return (loss) on plan assets	1,881	450	594	85	22	139
Employer contributions	58	9	10	2	1	3
Benefits paid	(629)	(132)	(202)	(27)	(6)	(69)
Fair value of plan assets at end of year	15,367	3,684	4,844	701	186	1,123
Accrued liability	\$ (1,279)	\$ (170)	\$ (283)	\$ (53)	\$ (31)	\$ (66)

	2019					Southern Company Gas
	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Power	
	(in millions)					
Change in benefit obligation						
Benefit obligation at beginning of year	\$12,763	\$2,816	\$3,905	\$557	\$123	\$907
Dispositions	(509)	—	—	—	—	—
Service cost	292	69	74	12	7	25
Interest cost	492	114	156	22	5	36
Benefits paid	(596)	(125)	(194)	(26)	(4)	(64)
Actuarial (gain) loss	2,346	530	669	106	54	163
Balance at end of year	14,788	3,404	4,610	671	185	1,067
Change in plan assets						
Fair value of plan assets at beginning of year	11,611	2,575	3,663	505	123	798
Dispositions	(509)	—	—	—	—	—
Actual return (loss) on plan assets	2,343	524	730	103	43	172
Employer contributions	1,208	383	243	59	7	144
Benefits paid	(596)	(125)	(194)	(26)	(4)	(64)
Fair value of plan assets at end of year	14,057	3,357	4,442	641	169	1,050
Accrued liability	\$ (731)	\$ (47)	\$ (168)	\$ (30)	\$ (16)	\$ (17)

The projected benefit obligations for the qualified and non-qualified pension plans at December 31, 2020 are shown in the following table. All pension plan assets are related to the qualified pension plan.

	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Power	Southern Company Gas
<i>(in millions)</i>						
Projected benefit obligations:						
Qualified pension plan	\$15,818	\$3,719	\$4,977	\$718	\$187	\$1,114
Non-qualified pension plan	828	135	150	36	30	75

Notes to Financial Statements

Amounts recognized in the balance sheets at December 31, 2020 and 2019 related to the Registrants’ pension plans consist of the following:

	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Power	Southern Company Gas
<i>(in millions)</i>						
December 31, 2020:						
Other regulatory assets, deferred ^(*)	\$4,655	\$1,286	\$1,598	\$235	\$—	\$205
Other deferred charges and assets	—	—	—	—	—	70
Other current liabilities	(52)	(9)	(10)	(2)	(2)	(2)
Employee benefit obligations	(1,227)	(161)	(273)	(51)	(29)	(134)
Other regulatory liabilities, deferred	(34)	—	—	—	—	—
AOCI	245	—	—	—	60	1
December 31, 2019:						
Prepaid pension costs	\$2	\$71	\$—	\$2	\$10	\$—
Other regulatory assets, deferred ^(*)	4,072	1,130	1,416	204	—	172
Other deferred charges and assets	—	—	—	—	—	82
Other current liabilities	(54)	(8)	(11)	(2)	(2)	(2)
Employee benefit obligations	(679)	(110)	(157)	(30)	(24)	(97)
Other regulatory liabilities, deferred	(79)	—	—	—	—	—
AOCI	185	—	—	—	46	(14)

(*) Amounts for Southern Company exclude regulatory assets of \$224 million and \$252 million at December 31, 2020 and 2019, respectively, associated with unamortized amounts in Southern Company Gas’ pension plans prior to its acquisition by Southern Company.

Presented below are the amounts included in regulatory assets at December 31, 2020 and 2019 related to the portion of the defined benefit pension plan attributable to Southern Company, the traditional electric operating companies, and Southern Company Gas that had not yet been recognized in net periodic pension cost.

	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Company Gas
<i>(in millions)</i>					
Balance at December 31, 2020					
Regulatory assets:					
Prior service cost	\$11	\$5	\$9	\$2	\$(13)
Net (gain) loss	4,610	1,281	1,589	233	135
Regulatory amortization	—	—	—	—	83
Total regulatory assets ^(*)	\$4,621	\$1,286	\$1,598	\$235	\$205

Balance at December 31, 2019					
Regulatory assets:					
Prior service cost	\$13	\$6	\$10	\$2	\$(15)
Net (gain) loss	3,980	1,124	1,406	201	113
Regulatory amortization	—	—	—	—	74
Total regulatory assets ^(*)	\$3,993	\$1,130	\$1,416	\$203	\$172

(*) Amounts for Southern Company exclude regulatory assets of \$224 million and \$252 million at December 31, 2020 and 2019, respectively, associated with unamortized amounts in Southern Company Gas’ pension plans prior to its acquisition by Southern Company.

Notes to Financial Statements

The changes in the balance of regulatory assets related to the portion of the defined benefit pension plan attributable to Southern Company, the traditional electric operating companies, and Southern Company Gas for the years ended December 31, 2020 and 2019 are presented in the following table:

	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Company Gas
<i>(in millions)</i>					
Regulatory assets (liabilities):^(*)					
Balance at December 31, 2018	\$3,458	\$ 955	\$1,230	\$ 167	\$160
Net (gain) loss	801	213	231	42	30
Dispositions	(144)	—	—	—	—
Reclassification adjustments:					
Amortization of prior service costs	(3)	(1)	(1)	—	2
Amortization of net gain (loss)	(119)	(37)	(44)	(6)	—
Amortization of regulatory assets ^(*)	—	—	—	—	(20)
Total reclassification adjustments	(122)	(38)	(45)	(6)	(18)
Total change	535	175	186	36	12
Balance at December 31, 2019	\$3,993	\$1,130	\$1,416	\$ 203	\$172
Net (gain) loss	884	228	269	45	45
Reclassification adjustments:					
Amortization of prior service costs	(1)	(1)	(1)	—	2
Amortization of net gain (loss)	(255)	(71)	(86)	(13)	(8)
Amortization of regulatory assets ^(*)	—	—	—	—	(6)
Total reclassification adjustments	(256)	(72)	(87)	(13)	(12)
Total change	628	156	182	32	33
Balance at December 31, 2020	\$4,621	\$1,286	\$1,598	\$ 235	\$205

(*) Amounts for Southern Company exclude regulatory assets of \$224 million and \$252 million at December 31, 2020 and 2019, respectively, associated with unamortized amounts in Southern Company Gas’ pension plans prior to its acquisition by Southern Company.

Presented below are the amounts included in AOCI at December 31, 2020 and 2019 related to the portion of the defined benefit pension plan attributable to Southern Company, Southern Power, and Southern Company Gas that had not yet been recognized in net periodic pension cost.

	Southern Company	Southern Power	Southern Company Gas
<i>(in millions)</i>			
Balance at December 31, 2020			
AOCI:			
Prior service cost	\$ (3)	\$ —	\$ (4)
Net (gain) loss	248	60	5
Total AOCI	\$245	\$60	\$ 1
Balance at December 31, 2019			
AOCI:			
Prior service cost	\$ (3)	\$ —	\$ (6)
Net (gain) loss	188	46	(8)
Total AOCI	\$185	\$46	\$(14)

Notes to Financial Statements

The components of OCI related to the portion of the defined benefit pension plan attributable to Southern Company, Southern Power, and Southern Company Gas for the years ended December 31, 2020 and 2019 are presented in the following table:

	Southern Company	Southern Power	Southern Company Gas
<i>(in millions)</i>			
AOCI:			
Balance at December 31, 2018	\$ 97	\$26	\$(44)
Net (gain) loss	88	20	30
Balance at December 31, 2019	\$ 185	\$46	\$(14)
Net (gain) loss	74	16	15
Reclassification adjustments:			
Amortization of prior service costs	—	—	1
Amortization of net gain (loss)	(14)	(2)	(1)
Total reclassification adjustments	(14)	(2)	—
Total change	60	14	15
Balance at December 31, 2020	\$ 245	\$60	\$ 1

Components of net periodic pension cost for the Registrants were as follows:

	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Power	Southern Company Gas
<i>(in millions)</i>						
2020						
Service cost	\$ 376	\$ 89	\$ 96	\$ 15	\$ 8	\$ 33
Interest cost	432	100	133	20	6	31
Expected return on plan assets	(1,100)	(264)	(347)	(51)	(13)	(75)
Recognized net (gain) loss	269	71	86	13	2	6
Net amortization	1	1	1	—	—	15
Prior service cost	—	—	—	—	—	(3)
Net periodic pension cost	\$ (22)	\$ (3)	\$ (31)	\$ (3)	\$ 3	\$ 7
2019						
Service cost	\$ 292	\$ 69	\$ 74	\$ 12	\$ 7	\$ 25
Interest cost	492	114	156	22	5	36
Expected return on plan assets	(885)	(206)	(292)	(40)	(10)	(60)
Recognized net (gain) loss	120	37	44	6	1	2
Net amortization	2	—	1	—	—	14
Prior service cost	—	—	—	—	—	(3)
Net periodic pension cost	\$ 21	\$ 14	\$ (17)	\$ —	\$ 3	\$ 14
2018						
Service cost	\$ 359	\$ 78	\$ 87	\$ 17	\$ 9	\$ 34
Interest cost	464	101	139	20	5	39
Expected return on plan assets	(943)	(207)	(296)	(41)	(10)	(75)
Recognized net (gain) loss	213	54	69	10	1	12
Net amortization	4	1	2	—	—	15
Prior service cost	—	—	—	—	—	(2)
Net periodic pension cost	\$ 97	\$ 27	\$ 1	\$ 6	\$ 5	\$ 23

Notes to Financial Statements

The service cost component of net periodic pension cost is included in operations and maintenance expenses and all other components of net periodic pension cost are included in other income (expense), net in the Registrants’ statements of income.

Net periodic pension cost is the sum of service cost, interest cost, and other costs netted against the expected return on plan assets. The expected return on plan assets is determined by multiplying the expected rate of return on plan assets and the market-related value of plan assets. In determining the market-related value of plan assets, the Registrants have elected to amortize changes in the market value of return-seeking plan assets over five years and to recognize the changes in the market value of liability-hedging plan assets immediately. Given the significant concentration in return-seeking plan assets, the accounting value of plan assets that is used to calculate the expected return on plan assets differs from the current fair value of the plan assets.

Effective January 1, 2020, Southern Company changed its method of calculating the market-related value of the liability-hedging securities included in its pension plan assets. The market-related value is used to determine the expected return on plan assets component of net periodic pension cost. Southern Company previously used the calculated value approach for all plan assets, which smoothed asset returns and deferred gains and losses by amortizing them into the calculation of the market-related value over five years. Southern Company changed to the fair value approach for liability-hedging securities, which includes measuring the market-related value of that portion of the plan assets at fair value for purposes of determining the expected return on plan assets. The remaining asset classes of plan assets will continue to be valued using the calculated value approach. Southern Company considers the fair value approach to be preferable for liability-hedging securities because it results in a current reflection of changes in the value of plan assets in the measurement of net periodic pension cost more consistent with the change in the related obligations. Southern Company determined the effect of this change in accounting method was immaterial to the historical and current financial statements of all Registrants; therefore, the effect of the change was recorded through earnings as a prior period adjustment for the amounts related to the unregulated businesses of Southern Company and Southern Power. Amounts related to the traditional electric operating companies and the natural gas distribution utilities were reflected as adjustments to regulatory assets, consistent with the expected regulatory treatment.

Future benefit payments reflect expected future service and are estimated based on assumptions used to measure the projected benefit obligation for the pension plans. At December 31, 2020, estimated benefit payments were as follows:

	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Power	Southern Company Gas
<i>(in millions)</i>						
Benefit Payments:						
2021	\$ 651	\$141	\$ 208	\$ 29	\$ 6	\$ 66
2022	678	147	215	30	6	66
2023	702	154	222	31	6	66
2024	725	158	229	32	6	65
2025	748	165	235	33	7	65
2026 to 2030	4,024	895	1,244	181	38	330

Notes to Financial Statements

Other Postretirement Benefits

Changes in the APBO and the fair value of the Registrants’ plan assets during the plan years ended December 31, 2020 and 2019 were as follows:

	2020					
	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Power	Southern Company Gas
<i>(in millions)</i>						
Change in benefit obligation						
Benefit obligation at beginning of year	\$1,985	\$462	\$ 742	\$ 87	\$ 11	\$ 250
Service cost	22	6	6	1	1	2
Interest cost	54	13	20	2	—	7
Benefits paid	(126)	(29)	(46)	(6)	—	(17)
Actuarial (gain) loss	7	9	(26)	(3)	—	6
Retiree drug subsidy	6	2	3	—	—	—
Balance at end of year	1,948	463	699	81	12	248
Change in plan assets						
Fair value of plan assets at beginning of year	1,061	413	403	26	—	115
Actual return (loss) on plan assets	145	60	50	3	—	18
Employer contributions	72	12	17	4	—	12
Benefits paid	(120)	(27)	(43)	(6)	—	(17)
Fair value of plan assets at end of year	1,158	458	427	27	—	128
Accrued liability	\$ (790)	\$ (5)	\$(272)	\$(54)	\$(12)	\$(120)

	2019					
	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Power	Southern Company Gas
<i>(in millions)</i>						
Change in benefit obligation						
Benefit obligation at beginning of year	\$1,865	\$403	\$ 675	\$ 81	\$ 9	\$ 244
Dispositions	(69)	—	—	—	—	—
Service cost	18	5	5	1	1	1
Interest cost	69	16	26	3	—	9
Benefits paid	(126)	(27)	(47)	(6)	(1)	(17)
Actuarial (gain) loss	223	63	80	8	2	13
Retiree drug subsidy	5	2	3	—	—	—
Balance at end of year	1,985	462	742	87	11	250
Change in plan assets						
Fair value of plan assets at beginning of year	928	360	344	23	—	98
Dispositions	(18)	—	—	—	—	—
Actual return (loss) on plan assets	189	76	68	4	—	21
Employer contributions	83	2	35	5	1	13
Benefits paid	(121)	(25)	(44)	(6)	(1)	(17)
Fair value of plan assets at end of year	1,061	413	403	26	—	115
Accrued liability	\$ (924)	\$ (49)	\$(339)	\$(61)	\$(11)	\$(135)

Notes to Financial Statements

Amounts recognized in the balance sheets at December 31, 2020 and 2019 related to the Registrants’ other postretirement benefit plans consist of the following:

	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Power	Southern Company Gas
(in millions)						
December 31, 2020:						
Other regulatory assets, deferred ^(a)	\$ 137	\$ —	\$ 47	\$ 5	\$ —	\$ (23)
Other current liabilities	(5)	—	—	—	—	—
Employee benefit obligations ^(b)	(785)	(5)	(272)	(54)	(12)	(120)
Other regulatory liabilities, deferred	(86)	(21)	—	—	—	—
AOCI	8	—	—	—	3	—
December 31, 2019:						
Other regulatory assets, deferred ^(a)	\$ 183	\$ 3	\$ 96	\$ 10	\$ —	\$ (11)
Other current liabilities	(5)	—	—	—	—	—
Employee benefit obligations ^(b)	(919)	(49)	(339)	(61)	(11)	(135)
Other regulatory liabilities, deferred	(62)	(2)	—	—	—	—
AOCI	2	—	—	—	2	(4)

- (a) Amounts for Southern Company exclude regulatory assets of \$47 million and \$50 million at December 31, 2020 and 2019, respectively, associated with unamortized amounts in Southern Company Gas’ other postretirement benefit plans prior to its acquisition by Southern Company.
- (b) Included in other deferred credits and liabilities on Southern Power’s consolidated balance sheets.

Presented below are the amounts included in net regulatory assets (liabilities) at December 31, 2020 and 2019 related to the other postretirement benefit plans of Southern Company, the traditional electric operating companies, and Southern Company Gas that had not yet been recognized in net periodic other postretirement benefit cost.

	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Company Gas
(in millions)					
Balance at December 31, 2020:					
Regulatory assets (liabilities):					
Prior service cost	\$ 12	\$ 3	\$ 5	\$—	\$ 1
Net (gain) loss	39	(24)	42	5	(49)
Regulatory amortization	—	—	—	—	25
Total regulatory assets (liabilities) ^(*)	\$ 51	\$ (21)	\$47	\$ 5	\$(23)
Balance at December 31, 2019:					
Regulatory assets (liabilities):					
Prior service cost	\$ 11	\$ 3	\$ 4	\$—	\$ 1
Net (gain) loss	110	(2)	92	10	(43)
Regulatory amortization	—	—	—	—	31
Total regulatory assets (liabilities) ^(*)	\$121	\$ 1	\$96	\$10	\$(11)

- (*) Amounts for Southern Company exclude regulatory assets of \$47 million and \$50 million at December 31, 2020 and 2019, respectively, associated with unamortized amounts in Southern Company Gas’ other postretirement benefit plans prior to its acquisition by Southern Company.

Notes to Financial Statements

The changes in the balance of net regulatory assets (liabilities) related to the other postretirement benefit plans for the plan years ended December 31, 2020 and 2019 are presented in the following table:

	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Company Gas
(in millions)					
Net regulatory assets (liabilities):^(*)					
Balance at December 31, 2018	\$ 22	\$ (9)	\$ 60	\$ 4	\$ (4)
Net (gain) loss	90	14	37	6	(1)
Dispositions	5	—	—	—	—
Change in prior service costs	5	—	—	—	—
Reclassification adjustments:					
Amortization of prior service costs	(3)	(4)	—	—	—
Amortization of net gain (loss)	2	—	(1)	—	—
Amortization of regulatory assets ^(*)	—	—	—	—	(6)
Total reclassification adjustments	(1)	(4)	(1)	—	(6)
Total change	99	10	36	6	(7)
Balance at December 31, 2019	\$ 121	\$ 1	\$ 96	\$ 10	\$ (11)
Net (gain) loss	(65)	(22)	(47)	(5)	(5)
Reclassification adjustments:					
Amortization of prior service costs	1	—	1	—	—
Amortization of net gain (loss)	(6)	—	(3)	—	—
Amortization of regulatory assets ^(*)	—	—	—	—	(7)
Total reclassification adjustments	(5)	—	(2)	—	(7)
Total change	(70)	(22)	(49)	(5)	(12)
Balance at December 31, 2020	\$ 51	\$ (21)	\$ 47	\$ 5	\$ (23)

- (*) Amounts for Southern Company exclude regulatory assets of \$47 million and \$50 million at December 31, 2020 and 2019, respectively, associated with unamortized amounts in Southern Company Gas’ other postretirement benefit plans prior to its acquisition by Southern Company.

Presented below are the amounts included in AOCI at December 31, 2020 and 2019 related to the other postretirement benefit plans of Southern Company, Southern Power, and Southern Company Gas that had not yet been recognized in net periodic other postretirement benefit cost.

	Southern Company	Southern Power	Southern Company Gas
(in millions)			
Balance at December 31, 2020			
AOCI:			
Prior service cost		\$ 1	\$ 1
Net (gain) loss		3	(1)
Total AOCI		\$ 8	\$ —
Balance at December 31, 2019			
AOCI:			
Prior service cost		\$ 1	\$ 1
Net (gain) loss		1	(5)
Total AOCI		\$ 2	\$ (4)

Notes to Financial Statements

The components of OCI related to the other postretirement benefit plans for the plan years ended December 31, 2020 and 2019 are presented in the following table:

	Southern Company	Southern Power	Southern Company Gas
<i>(in millions)</i>			
AOCI:			
Balance at December 31, 2018	\$ (4)	\$ 1	\$ (4)
Net (gain) loss	5	1	—
Reclassification adjustments:			
Amortization of net gain (loss)	1	—	—
Total change	6	1	—
Balance at December 31, 2019	\$ 2	\$ 2	\$ (4)
Net (gain) loss	2	1	—
Reclassification adjustments:			
Amortization of net gain (loss)	4	—	4
Total change	6	1	4
Balance at December 31, 2020	\$ 8	\$ 3	\$ —

Components of the other postretirement benefit plans' net periodic cost for the Registrants were as follows:

	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Power	Southern Company Gas
<i>(in millions)</i>						
2020						
Service cost	\$ 22	\$ 6	\$ 6	\$ 1	\$ 1	\$ 2
Interest cost	54	13	20	2	—	7
Expected return on plan assets	(72)	(29)	(26)	(1)	—	(10)
Net amortization	1	—	2	—	—	6
Net periodic postretirement benefit cost	\$ 5	\$ (10)	\$ 2	\$ 2	\$ 1	\$ 5
2019						
Service cost	\$ 18	\$ 5	\$ 5	\$ 1	\$ 1	\$ 1
Interest cost	69	16	26	3	—	9
Expected return on plan assets	(65)	(26)	(25)	(2)	—	(7)
Net amortization	—	4	1	—	—	6
Net periodic postretirement benefit cost	\$ 22	\$ (1)	\$ 7	\$ 2	\$ 1	\$ 9
2018						
Service cost	\$ 24	\$ 6	\$ 6	\$ 1	\$ 1	\$ 2
Interest cost	75	17	28	3	—	10
Expected return on plan assets	(69)	(26)	(25)	(2)	—	(7)
Net amortization	21	5	10	1	—	6
Net periodic postretirement benefit cost	\$ 51	\$ 2	\$ 19	\$ 3	\$ 1	\$ 11

Notes to Financial Statements

The service cost component of net periodic postretirement benefit cost is included in operations and maintenance expenses and all other components of net periodic postretirement benefit cost are included in other income (expense), net in the Registrants' statements of income.

The Registrants' future benefit payments, including prescription drug benefits, are provided in the table below. These amounts reflect expected future service and are estimated based on assumptions used to measure the APBO for the other postretirement benefit plans.

	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Power	Southern Company Gas
<i>(in millions)</i>						
Benefit payments:						
2021	\$115	\$ 25	\$ 42	\$ 6	\$—	\$18
2022	113	25	41	5	—	18
2023	111	25	40	5	—	18
2024	110	24	38	4	1	17
2025	113	25	40	5	1	17
2026 to 2030	550	127	199	23	3	76

Benefit Plan Assets

Pension plan and other postretirement benefit plan assets are managed and invested in accordance with all applicable requirements, including ERISA and the Internal Revenue Code. The Registrants' investment policies for both the pension plans and the other postretirement benefit plans cover a diversified mix of assets as described below. Derivative instruments may be used to gain efficient exposure to the various asset classes and as hedging tools. Additionally, the Registrants minimize the risk of large losses primarily through diversification but also monitor and manage other aspects of risk.

The investment strategy for plan assets related to the Southern Company system's qualified pension plan is to be broadly diversified across major asset classes. The asset allocation is established after consideration of various factors that affect the assets and liabilities of the pension plan including, but not limited to, historical and expected returns and interest rates, volatility, correlations of asset classes, the current level of assets and liabilities, and the assumed growth in assets and liabilities. Because a significant portion of the liability of the pension plan is long-term in nature, the assets are invested consistent with long-term investment expectations for return and risk. To manage the actual asset class exposures relative to the target asset allocation, the Southern Company system employs a formal rebalancing program. As additional risk management, external investment managers and service providers are subject to written guidelines to ensure appropriate and prudent investment practices. Management believes the portfolio is well-diversified with no significant concentrations of risk.

Notes to Financial Statements

Investment Strategies and Benefit Plan Asset Fair Values

A description of the major asset classes that the pension and other postretirement benefit plans are comprised of, along with the valuation methods used for fair value measurement, is provided below:

Description	Valuation Methodology
Domestic equity: A mix of large and small capitalization stocks with generally an equal distribution of value and growth attributes, managed both actively and through passive index approaches.	Domestic and international equities such as common stocks, American depositary receipts, and real estate investment trusts that trade on public exchanges are classified as Level 1 investments and are valued at the closing price in the active market. Equity funds with unpublished prices that are comprised of publicly traded securities (such as commingled/pooled funds) are also valued at the closing price in the active market, but are classified as Level 2.
International equity: A mix of large and small capitalization growth and value stocks with developed and emerging markets exposure, managed both actively and through fundamental indexing approaches.	
Fixed income: A mix of domestic and international bonds.	Investments in fixed income securities, including fixed income pooled funds, are generally classified as Level 2 investments and are valued based on prices reported in the market place. Additionally, the value of fixed income securities takes into consideration certain items such as broker quotes, spreads, yield curves, interest rates, and discount rates that apply to the term of a specific instrument.
Trust-owned life insurance (TOLI): Investments of taxable trusts aimed at minimizing the impact of taxes on the portfolio.	Investments in TOLI policies are classified as Level 2 investments and are valued based on the underlying investments held in the policy's separate accounts. The underlying assets are equity and fixed income pooled funds that are comprised of Level 1 and Level 2 securities.
Special situations: Investments in opportunistic strategies with the objective of diversifying and enhancing returns and exploiting short-term inefficiencies, as well as investments in promising new strategies of a longer-term nature.	Investments in real estate, private equity, and special situations are generally classified as Net Asset Value as a Practical Expedient, since the underlying assets typically do not have publicly available observable inputs. The fund manager values the assets using various inputs and techniques depending on the nature of the underlying investments. Techniques may include purchase multiples for comparable transactions, comparable public company trading multiples, discounted cash flow analysis, prevailing market capitalization rates, recent sales of comparable investments, and independent third-party appraisals. The fair value of partnerships is determined by aggregating the value of the underlying assets less liabilities.
Real estate: Investments in traditional private market, equity-oriented investments in real properties (indirectly through pooled funds or partnerships) and in publicly traded real estate securities.	
Private equity: Investments in private partnerships that invest in private or public securities typically through privately-negotiated and/or structured transactions, including leveraged buyouts, venture capital, and distressed debt.	

For purposes of determining the fair value of the pension plan and other postretirement benefit plan assets and the appropriate level designation, management relies on information provided by the plan's trustee. This information is reviewed and evaluated by management with changes made to the trustee information as appropriate. The fair values presented herein exclude cash, receivables related to investment income and pending investment sales, and payables related to pending investment purchases. The Registrants did not have any investments classified as Level 3 at December 31, 2020 or 2019.

Notes to Financial Statements

The fair values, and actual allocations relative to the target allocations, of the Southern Company system's pension plans at December 31, 2020 and 2019 are presented below.

	Fair Value Measurements Using			Total	Target Allocation	Actual Allocation
	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Net Asset Value as a Practical Expedient (NAV)			
At December 31, 2020:						
	(in millions)					
Southern Company						
Assets:						
Equity:					51%	56%
Domestic equity	\$2,852	\$1,247	\$ —	\$ 4,099		
International equity	2,660	1,497	—	4,157		
Fixed income:					23	23
U.S. Treasury, government, and agency bonds	—	951	—	951		
Mortgage- and asset-backed securities	—	9	—	9		
Corporate bonds	—	1,673	—	1,673		
Pooled funds	—	772	—	772		
Cash equivalents and other	356	5	—	361		
Real estate investments	542	—	1,596	2,138	14	13
Special situations	—	—	166	166	3	1
Private equity	—	—	1,104	1,104	9	7
Total	\$6,410	\$6,154	\$2,866	\$15,430	100%	100%

Alabama Power

Assets:						
Equity:					51%	56%
Domestic equity	\$ 685	\$ 299	\$ —	\$ 984		
International equity	638	359	—	997		
Fixed income:					23	23
U.S. Treasury, government, and agency bonds	—	228	—	228		
Mortgage- and asset-backed securities	—	2	—	2		
Corporate bonds	—	401	—	401		
Pooled funds	—	185	—	185		
Cash equivalents and other	85	1	—	86		
Real estate investments	130	—	382	512	14	13
Special situations	—	—	40	40	3	1
Private equity	—	—	264	264	9	7
Total	\$1,538	\$1,475	\$ 686	\$ 3,699	100%	100%

Notes to Financial Statements

At December 31, 2020:	Fair Value Measurements Using			Total	Target Allocation	Actual Allocation
	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Net Asset Value as a Practical Expedient (NAV)			
(in millions)						
Georgia Power						
Assets:						
Equity:					51%	56%
Domestic equity	\$ 899	\$ 393	\$ —	\$ 1,292		
International equity	839	472	—	1,311		
Fixed income:					23	23
U.S. Treasury, government, and agency bonds	—	300	—	300		
Mortgage- and asset-backed securities	—	3	—	3		
Corporate bonds	—	527	—	527		
Pooled funds	—	243	—	243		
Cash equivalents and other	112	1	—	113		
Real estate investments	171	—	503	674	14	13
Special situations	—	—	53	53	3	1
Private equity	—	—	348	348	9	7
Total	\$2,021	\$1,939	\$ 904	\$ 4,864	100%	100%

Mississippi Power						
Assets:						
Equity:					51%	56%
Domestic equity	\$ 131	\$ 57	\$ —	\$ 188		
International equity	122	68	—	190		
Fixed income:					23	23
U.S. Treasury, government, and agency bonds	—	43	—	43		
Corporate bonds	—	76	—	76		
Pooled funds	—	35	—	35		
Cash equivalents and other	16	—	—	16		
Real estate investments	25	—	73	98	14	13
Special situations	—	—	8	8	3	1
Private equity	—	—	50	50	9	7
Total	\$ 294	\$ 279	\$ 131	\$ 704	100%	100%

Southern Power						
Assets:						
Equity:					51%	56%
Domestic equity	\$ 35	\$ 15	\$ —	\$ 50		
International equity	32	19	—	51		
Fixed income:					23	23
U.S. Treasury, government, and agency bonds	—	12	—	12		
Corporate bonds	—	20	—	20		
Pooled funds	—	9	—	9		
Cash equivalents and other	4	—	—	4		
Real estate investments	7	—	19	26	14	13
Special situations	—	—	2	2	3	1
Private equity	—	—	13	13	9	7
Total	\$ 78	\$ 75	\$ 34	\$ 187	100%	100%

Notes to Financial Statements

At December 31, 2020:	Fair Value Measurements Using			Total	Target Allocation	Actual Allocation
	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Net Asset Value as a Practical Expedient (NAV)			
(in millions)						
Southern Company Gas						
Assets:						
Equity:					51%	56%
Domestic equity	\$ 209	\$ 91	\$ —	\$ 300		
International equity	195	109	—	304		
Fixed income:					23	23
U.S. Treasury, government, and agency bonds	—	69	—	69		
Mortgage- and asset-backed securities	—	1	—	1		
Corporate bonds	—	122	—	122		
Pooled funds	—	56	—	56		
Cash equivalents and other	26	—	—	26		
Real estate investments	40	—	117	157	14	13
Special situations	—	—	12	12	3	1
Private equity	—	—	81	81	9	7
Total	\$ 470	\$ 448	\$ 210	\$ 1,128	100%	100%

	Fair Value Measurements Using			Total	Target Allocation	Actual Allocation
	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Net Asset Value as a Practical Expedient (NAV)			
At December 31, 2019:						
	(in millions)					
Southern Company						
Assets:						
Equity:					51%	51%
Domestic equity	\$ 2,220	\$ 898	\$ —	\$ 3,118		
International equity	2,360	1,286	—	3,646		
Fixed income:					23	29
U.S. Treasury, government, and agency bonds	—	965	—	965		
Mortgage- and asset-backed securities	—	9	—	9		
Corporate bonds	—	1,315	—	1,315		
Pooled funds	—	684	—	684		
Cash equivalents and other	1,317	—	—	1,317		
Real estate investments	539	—	1,418	1,957	14	12
Special situations	—	—	155	155	3	1
Private equity	—	—	953	953	9	7
Total	\$ 6,436	\$5,157	\$2,526	\$14,119	100%	100%

Notes to Financial Statements

At December 31, 2019:	Fair Value Measurements Using			Total	Target Allocation	Actual Allocation
	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Net Asset Value as a Practical Expedient (NAV)			
	(in millions)					
Alabama Power						
Assets:						
Equity:					51%	51%
Domestic equity	\$ 530	\$ 214	\$ —	\$ 744		
International equity	564	307	—	871		
Fixed income:					23	29
U.S. Treasury, government, and agency bonds	—	230	—	230		
Mortgage- and asset-backed securities	—	2	—	2		
Corporate bonds	—	314	—	314		
Pooled funds	—	163	—	163		
Cash equivalents and other	315	—	—	315		
Real estate investments	129	—	339	468	14	12
Special situations	—	—	37	37	3	1
Private equity	—	—	228	228	9	7
Total	\$1,538	\$1,230	\$604	\$3,372	100%	100%

Georgia Power						
Assets:						
Equity:					51%	51%
Domestic equity	\$ 701	\$ 284	\$ —	\$ 985		
International equity	746	407	—	1,153		
Fixed income:					23	29
U.S. Treasury, government, and agency bonds	—	305	—	305		
Mortgage- and asset-backed securities	—	3	—	3		
Corporate bonds	—	415	—	415		
Pooled funds	—	216	—	216		
Cash equivalents and other	416	—	—	416		
Real estate investments	170	—	448	618	14	12
Special situations	—	—	49	49	3	1
Private equity	—	—	301	301	9	7
Total	\$2,033	\$1,630	\$798	\$4,461	100%	100%

Mississippi Power						
Assets:						
Equity:					51%	51%
Domestic equity	\$ 101	\$ 41	\$ —	\$ 142		
International equity	108	59	—	167		
Fixed income:					23	29
U.S. Treasury, government, and agency bonds	—	44	—	44		
Corporate bonds	—	60	—	60		
Pooled funds	—	31	—	31		
Cash equivalents and other	60	—	—	60		
Real estate investments	25	—	65	90	14	12
Special situations	—	—	7	7	3	1
Private equity	—	—	43	43	9	7
Total	\$ 294	\$ 235	\$115	\$ 644	100%	100%

Notes to Financial Statements

	Fair Value Measurements Using			Total	Target Allocation	Actual Allocation
	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Net Asset Value as a Practical Expedient (NAV)			
At December 31, 2019:						
	(in millions)					
Southern Power						
Assets:						
Equity:					51%	51%
Domestic equity	\$ 27	\$ 11	\$ —	\$ 38		
International equity	28	16	—	44		
Fixed income:					23	29
U.S. Treasury, government, and agency bonds	—	12	—	12		
Corporate bonds	—	16	—	16		
Pooled funds	—	8	—	8		
Cash equivalents and other	16	—	—	16		
Real estate investments	6	—	17	23	14	12
Special situations	—	—	2	2	3	1
Private equity	—	—	11	11	9	7
Total	\$ 77	\$ 63	\$ 30	\$ 170	100%	100%

Southern Company Gas						
Assets:						
Equity:					51%	51%
Domestic equity	\$166	\$ 67	\$ —	\$ 233		
International equity	176	96	—	272		
Fixed income:					23	29
U.S. Treasury, government, and agency bonds	—	72	—	72		
Mortgage- and asset-backed securities	—	1	—	1		
Corporate bonds	—	98	—	98		
Pooled funds	—	51	—	51		
Cash equivalents and other	98	—	—	98		
Real estate investments	40	—	106	146	14	12
Special situations	—	—	12	12	3	1
Private equity	—	—	71	71	9	7
Total	\$480	\$385	\$189	\$1,054	100%	100%

Notes to Financial Statements

The fair values, and actual allocations relative to the target allocations, of the applicable Registrants’ other postretirement benefit plan assets at December 31, 2020 and 2019 are presented below.

At December 31, 2020:	Fair Value Measurements Using			Total	Target Allocation	Actual Allocation
	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Net Asset Value as a Practical Expedient (NAV)			
(in millions)						
Southern Company						
Assets:						
Equity:					63%	66%
Domestic equity	\$ 113	\$ 98	\$ —	\$ 211		
International equity	71	102	—	173		
Fixed income:					28	27
U.S. Treasury, government, and agency bonds	—	32	—	32		
Corporate bonds	—	44	—	44		
Pooled funds	—	86	—	86		
Cash equivalents and other	15	—	—	15		
Trust-owned life insurance	—	508	—	508		
Real estate investments	15	—	42	57	5	5
Special situations	—	—	4	4	1	—
Private equity	—	—	29	29	3	2
Total	\$ 214	\$870	\$75	\$1,159	100%	100%
Alabama Power						
Assets:						
Equity:					68%	69%
Domestic equity	\$ 26	\$ 11	\$ —	\$ 37		
International equity	23	13	—	36		
Fixed income:					24	25
U.S. Treasury, government, and agency bonds	—	11	—	11		
Corporate bonds	—	14	—	14		
Pooled funds	—	7	—	7		
Cash equivalents and other	5	—	—	5		
Trust-owned life insurance	—	321	—	321		
Real estate investments	5	—	13	18	4	4
Special situations	—	—	1	1	1	—
Private equity	—	—	9	9	3	2
Total	\$ 59	\$377	\$23	\$ 459	100%	100%
Georgia Power						
Assets:						
Equity:					60%	64%
Domestic equity	\$ 58	\$ 10	\$ —	\$ 68		
International equity	21	50	—	71		
Fixed income:					33	30
U.S. Treasury, government, and agency bonds	—	8	—	8		
Corporate bonds	—	13	—	13		
Pooled funds	—	46	—	46		
Cash equivalents and other	5	—	—	5		
Trust-owned life insurance	—	188	—	188		
Real estate investments	5	—	13	18	4	4
Special situations	—	—	1	1	1	—
Private equity	—	—	9	9	2	2
Total	\$ 89	\$315	\$23	\$ 427	100%	100%

Notes to Financial Statements

At December 31, 2020:	Fair Value Measurements Using			Total	Target Allocation	Actual Allocation
	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Net Asset Value as a Practical Expedient (NAV)			
(in millions)						
Mississippi Power						
Assets:						
Equity:					43%	46%
Domestic equity	\$ 4	\$ 2	\$ —	\$ 6		
International equity	4	2	—	6		
Fixed income:					37	36
U.S. Treasury, government, and agency bonds	—	5	—	5		
Corporate bonds	—	2	—	2		
Pooled funds	—	1	—	1		
Cash equivalents and other	1	—	—	1		
Real estate investments	1	—	2	3	11	11
Special situations	—	—	—	—	2	1
Private equity	—	—	2	2	7	6
Total	\$10	\$ 12	\$ 4	\$ 26	100%	100%
Southern Company Gas						
Assets:						
Equity:					72%	76%
Domestic equity	\$ 2	\$ 66	\$ —	\$ 68		
International equity	2	25	—	27		
Fixed income:					26	22
U.S. Treasury, government, and agency bonds	—	1	—	1		
Corporate bonds	—	1	—	1		
Pooled funds	—	25	—	25		
Cash equivalents and other	1	—	—	1		
Real estate investments	—	—	1	1	1	1
Private equity	—	—	1	1	1	1
Total	\$ 5	\$118	\$ 2	\$125	100%	100%

Notes to Financial Statements

Fair Value Measurements Using				Total	Target Allocation	Actual Allocation
Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Net Asset Value as a Practical Expedient (NAV)				
At December 31, 2019:						
(in millions)						

Southern Company

Assets:						
Equity:					63%	64%
Domestic equity	\$ 95	\$ 81	\$—	\$ 176		
International equity	69	80	—	149		
Fixed income:					28	30
U.S. Treasury, government, and agency bonds	—	31	—	31		
Corporate bonds	—	35	—	35		
Pooled funds	—	82	—	82		
Cash equivalents and other	42	—	—	42		
Trust-owned life insurance	—	463	—	463		
Real estate investments	15	—	38	53	5	4
Special situations	—	—	4	4	1	—
Private equity	—	—	25	25	3	2
Total	\$221	\$772	\$67	\$ 1,060	100%	100%

Alabama Power

Assets:						
Equity:					68%	67%
Domestic equity	\$ 26	\$ 8	\$—	\$ 34		
International equity	21	11	—	32		
Fixed income:					24	27
U.S. Treasury, government, and agency bonds	—	10	—	10		
Corporate bonds	—	11	—	11		
Pooled funds	—	6	—	6		
Cash equivalents and other	12	—	—	12		
Trust-owned life insurance	—	281	—	281		
Real estate investments	5	—	12	17	4	4
Special situations	—	—	1	1	1	—
Private equity	—	—	8	8	3	2
Total	\$ 64	\$327	\$21	\$ 412	100%	100%

Georgia Power

Assets:						
Equity:					60%	61%
Domestic equity	\$ 48	\$ 7	\$—	\$ 55		
International equity	25	36	—	61		
Fixed income:					33	34
U.S. Treasury, government, and agency bonds	—	7	—	7		
Corporate bonds	—	11	—	11		
Pooled funds	—	45	—	45		
Cash equivalents and other	16	—	—	16		
Trust-owned life insurance	—	182	—	182		
Real estate investments	5	—	11	16	4	3
Special situations	—	—	1	1	1	—
Private equity	—	—	8	8	2	2
Total	\$ 94	\$288	\$20	\$ 402	100%	100%

Notes to Financial Statements

			Fair Value Measurements Using					
			Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Net Asset Value as a Practical Expedient (NAV)	Total	Target Allocation	Actual Allocation
At December 31, 2019:								
			(in millions)					

Mississippi Power

Assets:						
Equity:					43%	41%
Domestic equity	\$ 3	\$ 1	\$—	\$ 4		
International equity	4	2	—	6		
Fixed income:					37	42
U.S. Treasury, government, and agency bonds	—	6	—	6		
Corporate bonds	—	2	—	2		
Pooled funds	—	1	—	1		
Cash equivalents and other	2	—	—	2		
Real estate investments	1	—	2	3	11	10
Special situations	—	—	—	—	2	1
Private equity	—	—	1	1	7	6
Total	\$10	\$ 12	\$ 3	\$ 25	100%	100%

Southern Company Gas

Assets:						
Equity:					72%	73%
Domestic equity	\$ 2	\$ 58	\$—	\$ 60		
International equity	2	21	—	23		
Fixed income:					26	25
U.S. Treasury, government, and agency bonds	—	1	—	1		
Corporate bonds	—	1	—	1		
Pooled funds	—	25	—	25		
Cash equivalents and other	2	—	—	2		
Real estate investments	—	—	1	1	1	1
Private equity	—	—	1	1	1	1
Total	\$ 6	\$106	\$ 2	\$114	100%	100%

Employee Savings Plan

Southern Company and its subsidiaries also sponsor 401(k) defined contribution plans covering substantially all employees and provide matching contributions up to specified percentages of an employee's eligible pay. Total matching contributions made to the plans for 2020, 2019, and 2018 were as follows:

	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Power	Southern Company Gas
(in millions)						
2020	\$120	\$26	\$29	\$5	\$ 2	\$16
2019	113	25	27	4	2	15
2018	119	24	26	5	3	18

12. STOCK COMPENSATION

Stock-Based Compensation

Stock-based compensation primarily in the form of Southern Company performance share units (PSU) and restricted stock units (RSU) may be granted through the Omnibus Incentive Compensation Plan to Southern Company system employees ranging from line management to executives.

At December 31, 2020, the number of current and former employees participating in stock-based compensation programs for the Registrants was as follows:

	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Power	Southern Company Gas
Number of employees	1,958	263	295	86	46	204

The majority of PSUs and RSUs awarded contain terms where employees become immediately vested in PSUs and RSUs upon retirement. As a result, compensation expense for employees that are retirement eligible at the grant date is recognized immediately, while compensation expense for employees that become retirement eligible during the vesting period is recognized over the period from grant date to the date of retirement eligibility. In addition, the Registrants recognize forfeitures as they occur.

All unvested PSUs and RSUs vest immediately upon a change in control where Southern Company is not the surviving corporation.

Performance Share Units

PSUs granted to employees vest at the end of a three-year performance period. Shares of Southern Company common stock are delivered to employees at the end of the performance period with the number of shares issued ranging from 0% to 200% of the target number of PSUs granted, based on achievement of the performance goals established by the Compensation Committee of the Southern Company Board of Directors.

Southern Company has issued three types of PSUs, each with a unique performance goal. These types of PSUs include total shareholder return (TSR) awards based on the TSR for Southern Company common stock during the three-year performance period as compared to a group of industry peers; ROE awards based on Southern Company's equity-weighted return over the performance period; and EPS awards based on Southern Company's cumulative EPS over the performance period. EPS awards were last granted in 2017.

The fair value of TSR awards is determined as of the grant date using a Monte Carlo simulation model. In determining the fair value of the TSR awards issued to employees, the expected volatility is based on the historical volatility of Southern Company's stock over a period equal to the performance period. The risk-free rate is based on the U.S. Treasury yield curve in effect at the time of grant that covers the performance period of the awards. The following table shows the assumptions used in the pricing model and the weighted average grant-date fair value of TSR awards granted:

Year Ended December 31	2020	2019	2018
Expected volatility	15.4%	15.6%	14.9%
Expected term (<i>in years</i>)	3	3	3
Interest rate	1.4%	2.4%	2.4%
Weighted average grant-date fair value	\$77.65	\$62.71	\$43.75

The Registrants recognize TSR award compensation expense on a straight-line basis over the three-year performance period without remeasurement.

The fair values of EPS awards and ROE awards are based on the closing stock price of Southern Company common stock on the date of the grant. The weighted average grant-date fair value of the ROE awards granted during 2020, 2019, and 2018 was \$68.42, \$49.38, and \$43.49, respectively. Compensation expense for EPS and ROE awards is generally recognized ratably over the three-year performance period adjusted for expected changes in EPS and ROE performance. Total compensation cost recognized for vested EPS awards and ROE awards reflects final performance metrics.

Southern Company had 2.5 million unvested PSUs outstanding at December 31, 2019. In February 2020, the PSUs that vested for the three-year performance period ended December 31, 2019 were converted into 1.8 million shares outstanding at a share price of \$68.59. During 2020, Southern Company granted 1.2 million PSUs and 1.5 million PSUs were vested or forfeited, resulting in 2.2 million unvested PSUs outstanding at December 31, 2020. In February 2021, the PSUs that vested for the three-year performance period ended December 31, 2020 were converted into 2.5 million shares outstanding at a share price of \$60.10.

Total PSU compensation cost, and the related tax benefit recognized in income, for the years ended December 31, 2020, 2019, and 2018 are as follows:

	2020	2019	2018
	<i>(in millions)</i>		
Southern Company			
Compensation cost recognized in income	\$84	\$77	\$91
Tax benefit of compensation cost recognized in income	22	20	24
Southern Company Gas			
Compensation cost recognized in income	\$13	\$14	\$11
Tax benefit of compensation cost recognized in income	4	4	3

Total PSU compensation cost and the related tax benefit recognized in income were immaterial for all periods presented for all other Registrants. The compensation cost related to the grant of Southern Company PSUs to the employees of each Subsidiary Registrant is recognized in each Subsidiary Registrant's financial statements with a corresponding credit to equity representing a capital contribution from Southern Company.

At December 31, 2020, Southern Company's total unrecognized compensation cost related to PSUs was \$32 million and is expected to be recognized over a weighted-average period of approximately 19 months. The total unrecognized compensation cost related to PSUs as of December 31, 2020 was immaterial for all other Registrants.

Restricted Stock Units

The fair value of RSUs is based on the closing stock price of Southern Company common stock on the date of the grant. The weighted average grant-date fair values of RSUs granted during 2020, 2019, and 2018 were \$67.60, \$50.44, and \$43.81, respectively. For most RSU awards, one-third of the RSUs vest each year throughout a three-year service period and compensation cost for RSUs is generally recognized over the corresponding one-, two-, or three-year vesting period. Shares of Southern Company common stock are delivered to employees at the end of each vesting period.

Southern Company had 1.3 million RSUs outstanding at December 31, 2019. During 2020, Southern Company granted 0.5 million RSUs and 0.6 million RSUs were vested or forfeited, resulting in 1.2 million unvested RSUs outstanding at December 31, 2020, including RSUs related to employee retention agreements.

For the years ended December 31, 2020, 2019, and 2018, Southern Company's total compensation cost for RSUs recognized in income was \$29 million, \$28 million, and \$27 million, respectively. The related tax benefit also recognized in income was \$8 million, \$7 million, and \$7 million for the years ended December 31, 2020, 2019, and 2018, respectively. Total unrecognized compensation cost related to RSUs as of December 31, 2020 for Southern Company of \$11 million will be recognized over a weighted-average period of approximately 18 months.

Total RSUs outstanding and total compensation cost and related tax benefit for the RSUs recognized in income for the years ended December 31, 2020, 2019, and 2018, as well as the total unrecognized compensation cost as of December 31, 2020, were immaterial for all other Registrants. The compensation cost related to the grant of Southern Company RSUs to the employees of each Subsidiary Registrant is recognized in such Subsidiary Registrant's financial statements with a corresponding credit to equity representing a capital contribution from Southern Company.

Stock Options

In 2015, Southern Company discontinued granting stock options. As of December 31, 2017, all stock option awards were vested and compensation cost fully recognized. Stock options expire no later than 10 years after the grant date and the latest possible exercise will occur by November 2024. As of December 31, 2020, the weighted average remaining contractual term for the options outstanding and exercisable was approximately two years.

Southern Company's activity in the stock option program for 2020 is summarized below:

	Shares Subject to Option	Weighted Average Exercise Price
	<i>(in millions)</i>	
Outstanding at December 31, 2019	5.9	\$42.52
Exercised	1.6	41.13
Outstanding and Exercisable at December 31, 2020	4.3	\$43.04

Notes to Financial Statements

Southern Company's cash receipts from issuances related to stock options exercised under the share-based payment arrangements for the years ended December 31, 2020, 2019, and 2018 were \$66 million, \$482 million, and \$41 million, respectively.

At December 31, 2020, the aggregate intrinsic value for the options outstanding and exercisable was as follows:

	Southern Company	Alabama Power	Georgia Power	Southern Company Gas
		<i>(in millions)</i>		
Total intrinsic value for outstanding and exercisable options	\$ 78	\$ 8	\$25	\$6

The aggregate intrinsic value for the options outstanding and exercisable was immaterial for Mississippi Power and Southern Power at December 31, 2020.

Total intrinsic value of options exercised, and the related tax benefit, for the years ended December 31, 2020, 2019, and 2018 are presented below:

Year Ended December 31	2020	2019	2018
	(in millions)		
Southern Company			
Intrinsic value of options exercised	\$ 38	\$ 167	\$ 9
Tax benefit of options exercised	9	35	2
Alabama Power			
Intrinsic value of options exercised	\$ 5	\$ 21	\$ 2
Tax benefit of options exercised	1	4	—
Georgia Power			
Intrinsic value of options exercised	\$ 9	\$ 30	\$ 2
Tax benefit of options exercised	2	6	—

Total intrinsic value of options exercised, and the related tax benefit recognized in income, for the years ended December 31, 2020, 2019, and 2018 were immaterial for Mississippi Power, Southern Power, and Southern Company Gas.

13. FAIR VALUE MEASUREMENTS

Fair value measurements are based on inputs of observable and unobservable market data that a market participant would use in pricing the asset or liability. The use of observable inputs is maximized where available and the use of unobservable inputs is minimized for fair value measurement and reflects a three-tier fair value hierarchy that prioritizes inputs to valuation techniques used for fair value measurement.

- Level 1 consists of observable market data in an active market for identical assets or liabilities.
- Level 2 consists of observable market data, other than that included in Level 1, that is either directly or indirectly observable.
- Level 3 consists of unobservable market data. The input may reflect the assumptions of each Registrant of what a market participant would use in pricing an asset or liability. If there is little available market data, then each Registrant's own assumptions are the best available information.

In the case of multiple inputs being used in a fair value measurement, the lowest level input that is significant to the fair value measurement represents the level in the fair value hierarchy in which the fair value measurement is reported.

Net asset value as a practical expedient is the classification used for assets that do not have readily determined fair values. Fund managers value the assets using various inputs and techniques depending on the nature of the underlying investments.

Notes to Financial Statements

At December 31, 2020, assets and liabilities measured at fair value on a recurring basis during the period, together with their associated level of the fair value hierarchy, were as follows:

	Fair Value Measurements Using				
	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Net Asset Value as a Practical Expedient (NAV)	Total
At December 31, 2020:					
	(in millions)				
Southern Company					
Assets:					
Energy-related derivatives ^(a)	\$ 401	\$ 271	\$32	\$ —	\$ 704
Interest rate derivatives	—	20	—	—	20
Foreign currency derivatives	—	87	—	—	87
Investments in trusts: ^{(b)(c)}					
Domestic equity	862	151	—	—	1,013
Foreign equity	85	253	—	—	338
U.S. Treasury and government agency securities	—	284	—	—	284
Municipal bonds	—	85	—	—	85
Pooled funds – fixed income	—	17	—	—	17
Corporate bonds	13	386	—	—	399
Mortgage and asset backed securities	—	83	—	—	83
Private equity	—	—	—	76	76
Cash and cash equivalents	1	—	—	—	1
Other	28	7	—	—	35
Cash equivalents	575	9	—	—	584
Other investments	9	24	—	—	33
Total	\$1,974	\$1,677	\$32	\$76	\$3,759
Liabilities:					
Energy-related derivatives ^(a)	\$ 389	\$ 204	\$ 4	\$ —	\$ 597
Foreign currency derivatives	—	23	—	—	23
Contingent consideration	—	—	17	—	17
Total	\$ 389	\$ 227	\$21	\$ —	\$ 637
Alabama Power					
Assets:					
Energy-related derivatives	\$ —	\$ 12	\$ —	\$ —	\$ 12
Nuclear decommissioning trusts: ^(b)					
Domestic equity	543	141	—	—	684
Foreign equity	85	73	—	—	158
U.S. Treasury and government agency securities	—	21	—	—	21
Municipal bonds	—	1	—	—	1
Corporate bonds	13	167	—	—	180
Mortgage and asset backed securities	—	29	—	—	29
Private equity	—	—	—	76	76
Other	7	—	—	—	7
Cash equivalents	311	9	—	—	320
Other investments	—	24	—	—	24
Total	\$ 959	\$ 477	\$ —	\$76	\$1,512
Liabilities:					
Energy-related derivatives	\$ —	\$ 7	\$ —	\$ —	\$ 7

Notes to Financial Statements

	Fair Value Measurements Using				Total
	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Net Asset Value as a Practical Expedient (NAV)	
At December 31, 2020:					
(in millions)					
Georgia Power					
Assets:					
Energy-related derivatives	\$ —	\$ 15	\$ —	\$ —	\$ 15
Nuclear decommissioning trusts: ^{(b)(c)}					
Domestic equity	319	1	—	—	320
Foreign equity	—	177	—	—	177
U.S. Treasury and government agency securities	—	263	—	—	263
Municipal bonds	—	84	—	—	84
Corporate bonds	—	219	—	—	219
Mortgage and asset backed securities	—	54	—	—	54
Other	21	7	—	—	28
Total	\$340	\$820	\$ —	\$ —	\$1,160
Liabilities:					
Energy-related derivatives	\$ —	\$ 13	\$ —	\$ —	\$ 13
Mississippi Power					
Assets:					
Energy-related derivatives	\$ —	\$ 9	\$ —	\$ —	\$ 9
Cash equivalents	21	—	—	—	21
Total	\$ 21	\$ 9	\$ —	\$ —	\$ 30
Liabilities:					
Energy-related derivatives	\$ —	\$ 9	\$ —	\$ —	\$ 9
Southern Power					
Assets:					
Energy-related derivatives	\$ —	\$ 2	\$ —	\$ —	\$ 2
Foreign currency derivatives	—	87	—	—	87
Total	\$ —	\$ 89	\$ —	\$ —	\$ 89
Liabilities:					
Energy-related derivatives	\$ —	\$ 3	\$ —	\$ —	\$ 3
Foreign currency derivatives	—	23	—	—	23
Contingent consideration	—	—	17	—	17
Total	\$ —	\$ 26	\$17	\$ —	\$ 43
Southern Company Gas					
Assets:					
Energy-related derivatives ^(a)	\$401	\$233	\$32	\$ —	\$ 666
Non-qualified deferred compensation trusts:					
Domestic equity	—	9	—	—	9
Foreign equity	—	3	—	—	3
Pooled funds – fixed income	—	17	—	—	17
Cash equivalents	1	—	—	—	1
Total	\$402	\$262	\$32	\$ —	\$ 696
Liabilities:					
Energy-related derivatives ^{(a)(b)}	\$389	\$172	\$ 4	\$ —	\$ 565

- (a) Excludes \$6 million associated with premiums and certain weather derivatives accounted for based on intrinsic value rather than fair value and cash collateral of \$28 million.
- (b) Excludes receivables related to investment income, pending investment sales, payables related to pending investment purchases, and currencies. See Note 6 under “Nuclear Decommissioning” for additional information.
- (c) Includes investment securities pledged to creditors and collateral received and excludes payables related to the securities lending program. See Note 6 under “Nuclear Decommissioning” for additional information.

Notes to Financial Statements

At December 31, 2019, assets and liabilities measured at fair value on a recurring basis during the period, together with their associated level of the fair value hierarchy, were as follows:

	Fair Value Measurements Using				Total
	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Net Asset Value as a Practical Expedient (NAV)	
At December 31, 2019:					
(in millions)					
Southern Company					
Assets:					
Energy-related derivatives ^(a)	\$ 388	\$ 267	\$22	\$ —	\$ 677
Interest rate derivatives	—	2	—	—	2
Foreign currency derivatives	—	16	—	—	16
Investments in trusts: ^{-(b)(c)}					
Domestic equity	751	135	—	—	886
Foreign equity	68	220	—	—	288
U.S. Treasury and government agency securities	—	307	—	—	307
Municipal bonds	—	85	—	—	85
Pooled funds – fixed income	—	17	—	—	17
Corporate bonds	23	297	—	—	320
Mortgage and asset backed securities	—	87	—	—	87
Private equity	—	—	—	56	56
Cash and cash equivalents	1	—	—	—	1
Other	17	5	—	—	22
Cash equivalents	1,393	2	—	—	1,395
Other investments	9	21	—	—	30
Total	\$ 2,650	\$1,461	\$22	\$56	\$4,189
Liabilities:					
Energy-related derivatives ^(a)	\$ 442	\$ 254	\$ 7	\$ —	\$ 703
Interest rate derivatives	—	24	—	—	24
Foreign currency derivatives	—	24	—	—	24
Contingent consideration	—	—	19	—	19
Total	\$ 442	\$ 302	\$26	\$ —	\$ 770
Alabama Power					
Assets:					
Energy-related derivatives	\$ —	\$ 4	\$ —	\$ —	\$ 4
Nuclear decommissioning trusts: ^(b)					
Domestic equity	488	123	—	—	611
Foreign equity	68	64	—	—	132
U.S. Treasury and government agency securities	—	21	—	—	21
Municipal bonds	—	1	—	—	1
Corporate bonds	23	144	—	—	167
Mortgage and asset backed securities	—	29	—	—	29
Private equity	—	—	—	56	56
Other	3	1	—	—	4
Cash equivalents	691	2	—	—	693
Other investments	—	21	—	—	21
Total	\$1,273	\$ 410	\$ —	\$56	\$1,739
Liabilities:					
Energy-related derivatives	\$ —	\$ 24	\$ —	\$ —	\$ 24

Notes to Financial Statements

	Fair Value Measurements Using				Total
	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Net Asset Value as a Practical Expedient (NAV)	
At December 31, 2019:					
(in millions)					
Georgia Power					
Assets:					
Energy-related derivatives	\$ —	\$ 4	\$—	\$—	\$ 4
Nuclear decommissioning trusts: ^{(b)(c)}					
Domestic equity	263	1	—	—	264
Foreign equity	—	152	—	—	152
U.S. Treasury and government agency securities	—	286	—	—	286
Municipal bonds	—	84	—	—	84
Corporate bonds	—	153	—	—	153
Mortgage and asset backed securities	—	57	—	—	57
Other	13	4	—	—	17
Total	\$276	\$741	\$—	\$—	\$1,017
Liabilities:					
Energy-related derivatives	\$ —	\$ 53	\$—	\$—	\$ 53
Interest rate derivatives	—	17	—	—	17
Total	\$ —	\$ 70	\$—	\$—	\$ 70
Mississippi Power					
Assets:					
Energy-related derivatives	\$ —	\$ 1	\$—	\$—	\$ 1
Cash equivalents	281	—	—	—	281
Total	\$281	\$ 1	\$—	\$—	\$ 282
Liabilities:					
Energy-related derivatives	\$ —	\$ 27	\$—	\$—	\$ 27
Southern Power					
Assets:					
Energy-related derivatives	\$ —	\$ 3	\$—	\$—	\$ 3
Foreign currency derivatives	—	16	—	—	16
Cash equivalents	113	—	—	—	113
Total	\$113	\$ 19	\$—	\$—	\$ 132
Liabilities:					
Energy-related derivatives	\$ —	\$ 3	\$—	\$—	\$ 3
Foreign currency derivatives	—	24	—	—	24
Contingent consideration	—	—	19	—	19
Total	\$ —	\$ 27	\$19	\$—	\$ 46
Southern Company Gas					
Assets:					
Energy-related derivatives ^(a)	\$388	\$255	\$22	\$—	\$ 665
Interest rate derivatives	—	2	—	—	2
Non-qualified deferred compensation trusts:					
Domestic equity	—	11	—	—	11
Foreign equity	—	4	—	—	4
Pooled funds – fixed income	—	17	—	—	17
Cash equivalents	1	—	—	—	1
Cash equivalents	8	—	—	—	8
Total	\$397	\$289	\$22	\$—	\$ 708
Liabilities:					
Energy-related derivatives ^{(a)(b)}	\$442	\$147	\$ 7	\$—	\$ 596

(a) Excludes \$4 million associated with premiums and certain weather derivatives accounted for based on intrinsic value rather than fair value and cash collateral of \$99 million.

(b) Excludes receivables related to investment income, pending investment sales, payables related to pending investment purchases, and currencies. See Note 6 under “Nuclear Decommissioning” for additional information.

(c) Includes investment securities pledged to creditors and collateral received and excludes payables related to the securities lending program. See Note 6 under “Nuclear Decommissioning” for additional information.

Notes to Financial Statements

Valuation Methodologies

The energy-related derivatives primarily consist of exchange-traded and over-the-counter financial products for natural gas and physical power products, including, from time to time, basis swaps. These are standard products used within the energy industry and are valued using the market approach. The inputs used are mainly from observable market sources, such as forward natural gas prices, power prices, implied volatility, and overnight index swap interest rates. Interest rate derivatives are also standard over-the-counter products that are valued using observable market data and assumptions commonly used by market participants. The fair value of interest rate derivatives reflects the net present value of expected payments and receipts under the swap agreement based on the market's expectation of future interest rates. Additional inputs to the net present value calculation may include the contract terms, counterparty credit risk, and occasionally, implied volatility of interest rate options. The fair value of cross-currency swaps reflects the net present value of expected payments and receipts under the swap agreement based on the market's expectation of future foreign currency exchange rates. Additional inputs to the net present value calculation may include the contract terms, counterparty credit risk, and discount rates. The interest rate derivatives and cross-currency swaps are categorized as Level 2 under Fair Value Measurements as these inputs are based on observable data and valuations of similar instruments. See Note 14 for additional information on how these derivatives are used.

For fair value measurements of the investments within the nuclear decommissioning trusts and the non-qualified deferred compensation trusts, external pricing vendors are designated for each asset class with each security specifically assigned a primary pricing source. For investments held within commingled funds, fair value is determined at the end of each business day through the net asset value, which is established by obtaining the underlying securities' individual prices from the primary pricing source. A market price secured from the primary source vendor is then evaluated by management in its valuation of the assets within the trusts. As a general approach, fixed income market pricing vendors gather market data (including indices and market research reports) and integrate relative credit information, observed market movements, and sector news into proprietary pricing models, pricing systems, and mathematical tools. Dealer quotes and other market information, including live trading levels and pricing analysts' judgments, are also obtained when available.

The NRC requires licensees of commissioned nuclear power reactors to establish a plan for providing reasonable assurance of funds for future decommissioning. See Note 6 under “Nuclear Decommissioning” for additional information.

Southern Power has contingent payment obligations related to certain acquisitions whereby it is primarily obligated to make generation-based payments to the seller, which commenced at the commercial operation of the respective facility and continue through 2026. The obligations are categorized as Level 3 under Fair Value Measurements as the fair value is determined using significant unobservable inputs for the forecasted facility generation in MW-hours, as well as other inputs such as a fixed dollar amount per MW-hour, and a discount rate. The fair value of contingent consideration reflects the net present value of expected payments and any periodic change arising from forecasted generation is expected to be immaterial.

“Other investments” include investments traded in the open market that have maturities greater than 90 days, which are categorized as Level 2 under Fair Value Measurements and are comprised of corporate bonds, bank certificates of deposit, treasury bonds, and/or agency bonds.

The fair value measurements of private equity investments held in Alabama Power's nuclear decommissioning trusts that are calculated at net asset value per share (or its equivalent) as a practical expedient totaled \$76 million and \$56 million at December 31, 2020 and 2019, respectively. Unfunded commitments related to the private equity investments totaled \$73 million and \$70 million at December 31, 2020 and 2019, respectively. Private equity investments include high-quality private equity funds across several market sectors and funds that invest in real estate assets. Private equity funds do not have redemption rights. Distributions from these funds will be received as the underlying investments in the funds are liquidated.

Notes to Financial Statements

At December 31, 2020 and 2019, other financial instruments for which the carrying amount did not equal fair value were as follows:

	Southern Company ^(*)	Alabama Power	Georgia Power	Mississippi Power	Southern Power	Southern Company Gas ^(*)
<i>(in millions)</i>						
At December 31, 2020:						
Long-term debt, including securities due within one year:						
Carrying amount	\$48,349	\$ 8,864	\$12,825	\$1,400	\$3,692	\$6,626
Fair value	56,264	10,702	15,198	1,590	4,165	7,973
At December 31, 2019:						
Long-term debt, including securities due within one year:						
Carrying amount	\$44,561	\$ 8,517	\$11,660	\$1,589	\$4,398	\$5,845
Fair value	48,339	9,525	12,680	1,671	4,708	6,509

(*) The long-term debt of Southern Company Gas is recorded at amortized cost, including the fair value adjustments at the effective date of the 2016 merger with Southern Company. Southern Company Gas amortizes the fair value adjustments over the remaining lives of the respective bonds, the latest being through 2043.

The fair values are determined using Level 2 measurements and are based on quoted market prices for the same or similar issues or on the current rates available to the Registrants.

Commodity Contracts with Level 3 Valuation Inputs

As of December 31, 2020, the fair value of Southern Company Gas’ Level 3 physical natural gas forward contracts was \$28 million. Since commodity contracts classified as Level 3 typically include a combination of observable and unobservable components, the changes in fair value may include amounts due in part to observable market factors, or changes to assumptions on the unobservable components. The following table includes transfers to Level 3, which represent the fair value of Southern Company Gas’ commodity derivative contracts that include a significant unobservable component for the first time during the period.

	2020
	<i>(in millions)</i>
Beginning balance	\$ 14
Transfers to Level 3	70
Transfers from Level 3	(34)
Instruments realized or otherwise settled during period	(16)
Changes in fair value	(6)
Ending balance	\$ 28

Changes in fair value of Level 3 instruments represent changes in gains and losses for the periods that are reported on Southern Company Gas’ statements of income in natural gas revenues.

The valuation of certain commodity contracts requires the use of certain unobservable inputs. All forward pricing used in the valuation of such contracts is directly based on third-party market data, such as broker quotes and exchange settlements, when that data is available. If third-party market data is not available, then industry standard methodologies are used to develop inputs that maximize the use of relevant observable inputs and minimize the use of unobservable inputs. Observable inputs, including some forward prices used for determining fair value, reflect the best available market information. Unobservable inputs are updated using industry standard techniques such as extrapolation, combining observable forward inputs supplemented by historical market and other relevant data. Level 3 physical natural gas forward contracts include unobservable forward price inputs (ranging from \$(0.08) to \$0.24 per mmBtu). Forward price increases (decreases) as of December 31, 2020 would have resulted in higher (lower) values on a net basis.

Notes to Financial Statements

14. DERIVATIVES

Southern Company, the traditional electric operating companies, Southern Power, and Southern Company Gas are exposed to market risks, including commodity price risk, interest rate risk, weather risk, and occasionally foreign currency exchange rate risk. To manage the volatility attributable to these exposures, each company nets its exposures, where possible, to take advantage of natural offsets and enters into various derivative transactions for the remaining exposures pursuant to each company’s policies in areas such as counterparty exposure and risk management practices. Southern Company Gas’ wholesale gas operations use various contracts in its commercial activities that generally meet the definition of derivatives. For the traditional electric operating companies, Southern Power, and Southern Company Gas’ other businesses, each company’s policy is that derivatives are to be used primarily for hedging purposes and mandates strict adherence to all applicable risk management policies. Derivative positions are monitored using techniques including, but not limited to, market valuation, value at risk, stress testing, and sensitivity analysis. Derivative instruments are recognized at fair value in the balance sheets as either assets or liabilities and are presented on a net basis. See Note 13 for additional fair value information. In the statements of cash flows, any cash impacts of settled energy-related and interest rate derivatives are recorded as operating activities. Any cash impacts of settled foreign currency derivatives are classified as operating or financing activities to correspond with the classification of the hedged interest or principal, respectively. See Note 1 under “Financial Instruments” for additional information.

Energy-Related Derivatives

The traditional electric operating companies, Southern Power, and Southern Company Gas enter into energy-related derivatives to hedge exposures to electricity, natural gas, and other fuel price changes. However, due to cost-based rate regulations and other various cost recovery mechanisms, the traditional electric operating companies and the natural gas distribution utilities have limited exposure to market volatility in energy-related commodity prices. Each of the traditional electric operating companies and certain of the natural gas distribution utilities of Southern Company Gas manage fuel-hedging programs, implemented per the guidelines of their respective state PSCs or other applicable state regulatory agencies, through the use of financial derivative contracts, which are expected to continue to mitigate price volatility. The traditional electric operating companies (with respect to wholesale generating capacity) and Southern Power have limited exposure to market volatility in energy-related commodity prices because their long-term sales contracts shift substantially all fuel cost responsibility to the purchaser. However, the traditional electric operating companies and Southern Power may be exposed to market volatility in energy-related commodity prices to the extent any uncontracted capacity is used to sell electricity. Southern Company Gas retains exposure to price changes that can, in a volatile energy market, be material and can adversely affect its results of operations.

Southern Company Gas also enters into weather derivative contracts as economic hedges of operating margins in the event of warmer-than-normal weather. Exchange-traded options are carried at fair value, with changes reflected in operating revenues. Non-exchange-traded options are accounted for using the intrinsic value method. Changes in the intrinsic value for non-exchange-traded contracts are reflected in operating revenues.

Energy-related derivative contracts are accounted for under one of three methods:

- *Regulatory Hedges* – Energy-related derivative contracts designated as regulatory hedges relate primarily to the traditional electric operating companies’ and the natural gas distribution utilities’ fuel-hedging programs, where gains and losses are initially recorded as regulatory liabilities and assets, respectively, and then are included in fuel expense as the underlying fuel is used in operations and ultimately recovered through an approved cost recovery mechanism.
- *Cash Flow Hedges* – Gains and losses on energy-related derivatives designated as cash flow hedges (which are mainly used to hedge anticipated purchases and sales) are initially deferred in AOCI before being recognized in the statements of income in the same period and in the same income statement line item as the earnings effect of the hedged transactions.
- *Not Designated* – Gains and losses on energy-related derivative contracts that are not designated or fail to qualify as hedges are recognized in the statements of income as incurred.

Some energy-related derivative contracts require physical delivery as opposed to financial settlement, and this type of derivative is both common and prevalent within the electric and natural gas industries. When an energy-related derivative contract is settled physically, any cumulative unrealized gain or loss is reversed and the contract price is recognized in the respective line item representing the actual price of the underlying goods being delivered.

Notes to Financial Statements

At December 31, 2020, the net volume of energy-related derivative contracts for natural gas positions, together with the longest hedge date over which the respective entity is hedging its exposure to the variability in future cash flows for forecasted transactions and the longest non-hedge date for derivatives not designated as hedges, were as follows:

	Net Purchased mmBtu	Longest Hedge Date	Longest Non-Hedge Date
	(in millions)		
Southern Company ^(*)	835	2024	2031
Alabama Power	78	2024	—
Georgia Power	135	2023	—
Mississippi Power	89	2024	—
Southern Power	10	2022	2021
Southern Company Gas ^(*)	523	2022	2031

(*) Southern Company Gas’ derivative instruments include both long and short natural gas positions. A long position is a contract to purchase natural gas and a short position is a contract to sell natural gas. Southern Company Gas’ volume represents the net of long natural gas positions of 4,421 million mmBtu and short natural gas positions of 3,898 million mmBtu at December 31, 2020, which is also included in Southern Company’s total volume.

At December 31, 2020, the net volume of Southern Power’s energy-related derivative contracts for power to be sold was 1 million MWHs, all of which expire in 2021.

In addition to the volumes discussed above, the traditional electric operating companies and Southern Power enter into physical natural gas supply contracts that provide the option to sell back excess natural gas due to operational constraints. The maximum expected volume of natural gas subject to such a feature is 29 million mmBtu for Southern Company, which includes 7 million mmBtu for Alabama Power, 9 million mmBtu for Georgia Power, 4 million mmBtu for Mississippi Power, and 9 million mmBtu for Southern Power.

For cash flow hedges of energy-related derivatives, the estimated pre-tax gains (losses) expected to be reclassified from AOCI to earnings for the year ending December 31, 2021 are immaterial for all Registrants.

Interest Rate Derivatives

Southern Company and certain subsidiaries may enter into interest rate derivatives to hedge exposure to changes in interest rates. The derivatives employed as hedging instruments are structured to minimize ineffectiveness. Derivatives related to existing variable rate securities or forecasted transactions are accounted for as cash flow hedges where the derivatives’ fair value gains or losses are recorded in OCI and are reclassified into earnings at the same time and presented on the same income statement line item as the earnings effect of the hedged transactions. Derivatives related to existing fixed rate securities are accounted for as fair value hedges, where the derivatives’ fair value gains or losses and hedged items’ fair value gains or losses are both recorded directly to earnings on the same income statement line item. Fair value gains or losses on derivatives that are not designated or fail to qualify as hedges are recognized in the statements of income as incurred.

At December 31, 2020, the following interest rate derivatives were outstanding:

	Notional Amount	Interest Rate Received	Weighted Average Interest Rate Paid	Hedge Maturity Date	Fair Value Gain (Loss) December 31, 2020
	(in millions)				(in millions)
Cash Flow Hedges of Existing Debt					
Mississippi Power	\$ 60	1-month LIBOR	0.58%	December 2021	\$ —
Fair Value Hedges of Existing Debt					
Southern Company parent	1,500	2.35%	1-month LIBOR + 0.87%	July 2021	20
Southern Company	\$1,560				\$ 20

For cash flow hedge interest rate derivatives, the estimated pre-tax gains (losses) expected to be reclassified from AOCI to interest expense for the year ending December 31, 2021 total \$(25) million for Southern Company and are immaterial for all other Registrants. Deferred gains and losses related to interest rate derivatives are expected to be amortized into earnings through 2046 for the Southern Company parent entity, 2035 for Alabama Power, 2044 for Georgia Power, 2028 for Mississippi Power, and 2046 for Southern Company Gas.

Notes to Financial Statements

Foreign Currency Derivatives

Southern Company and certain subsidiaries, including Southern Power, may enter into foreign currency derivatives to hedge exposure to changes in foreign currency exchange rates, such as that arising from the issuance of debt denominated in a currency other than U.S. dollars. Derivatives related to forecasted transactions are accounted for as cash flow hedges where the derivatives’ fair value gains or losses are recorded in OCI and are reclassified into earnings at the same time and on the same income statement line as the earnings effect of the hedged transactions, including foreign currency gains or losses arising from changes in the U.S. currency exchange rates. The derivatives employed as hedging instruments are structured to minimize ineffectiveness.

At December 31, 2020, the following foreign currency derivatives were outstanding:

	Pay Notional	Pay Rate	Receive Notional	Receive Rate	Hedge Maturity Date	Fair Value Gain (Loss) December 31, 2020
	(in millions)		(in millions)			(in millions)
Cash Flow Hedges of Existing Debt						
Southern Power	\$ 677	2.95%	€ 600	1.00%	June 2022	\$40
Southern Power	564	3.78%	500	1.85%	June 2026	25
Total	\$1,241		€1,100			\$65

The estimated pre-tax gains (losses) related to Southern Power’s foreign currency derivatives expected to be reclassified from AOCI to earnings for the year ending December 31, 2021 are \$10 million.

Derivative Financial Statement Presentation and Amounts

Southern Company, the traditional electric operating companies, Southern Power, and Southern Company Gas enter into derivative contracts that may contain certain provisions that permit intra-contract netting of derivative receivables and payables for routine billing and offsets related to events of default and settlements. Southern Company and certain subsidiaries also utilize master netting agreements to mitigate exposure to counterparty credit risk. These agreements may contain provisions that permit netting across product lines and against cash collateral. The fair value amounts of derivative assets and liabilities on the balance sheets are presented net to the extent that there are netting arrangements or similar agreements with the counterparties.

Notes to Financial Statements

At December 31, 2020 and 2019, the fair value of energy-related derivatives, interest rate derivatives, and foreign currency derivatives was reflected in the balance sheets as follows:

Derivative Category and Balance Sheet Location	2020		2019	
	Assets	Liabilities	Assets	Liabilities
(in millions)				
Southern Company				
Derivatives designated as hedging instruments for regulatory purposes				
Energy-related derivatives:				
Assets from risk management activities/Other current liabilities	\$ 24	\$ 11	\$ 3	\$ 70
Other deferred charges and assets/Other deferred credits and liabilities	18	19	6	44
Total derivatives designated as hedging instruments for regulatory purposes	\$ 42	\$ 30	\$ 9	\$ 114
Derivatives designated as hedging instruments in cash flow and fair value hedges				
Energy-related derivatives:				
Assets from risk management activities/Other current liabilities	\$ 3	\$ 5	\$ 1	\$ 6
Interest rate derivatives:				
Assets from risk management activities/Other current liabilities	20	—	2	23
Other deferred charges and assets/Other deferred credits and liabilities	—	—	—	1
Foreign currency derivatives:				
Assets from risk management activities/Other current liabilities	—	23	—	24
Other deferred charges and assets/Other deferred credits and liabilities	87	—	16	—
Total derivatives designated as hedging instruments in cash flow and fair value hedges	\$ 110	\$ 28	\$ 19	\$ 54
Derivatives not designated as hedging instruments				
Energy-related derivatives:				
Assets from risk management activities/Other current liabilities	\$ 388	\$ 331	\$ 461	\$ 358
Other deferred charges and assets/Other deferred credits and liabilities	270	232	207	225
Total derivatives not designated as hedging instruments	\$ 658	\$ 563	\$ 668	\$ 583
Gross amounts recognized	\$ 810	\$ 621	\$ 696	\$ 751
Gross amounts offset^(a)	\$(529)	\$(557)	\$(463)	\$(562)
Net amounts recognized in the Balance Sheets^(b)	\$ 281	\$ 64	\$ 233	\$ 189

Alabama Power				
Derivatives designated as hedging instruments for regulatory purposes				
Energy-related derivatives:				
Other current assets/Other current liabilities	\$ 7	\$ 2	\$ 2	\$ 14
Other deferred charges and assets/Other deferred credits and liabilities	5	5	2	10
Total derivatives designated as hedging instruments for regulatory purposes	\$ 12	\$ 7	\$ 4	\$ 24
Gross amounts recognized	\$ 12	\$ 7	\$ 4	\$ 24
Gross amounts offset	\$ (7)	\$ (7)	\$ (2)	\$ (2)
Net amounts recognized in the Balance Sheets	\$ 5	\$ —	\$ 2	\$ 22

Georgia Power				
Derivatives designated as hedging instruments for regulatory purposes				
Energy-related derivatives:				
Other current assets/Other current liabilities	\$ 7	\$ 5	\$ 1	\$ 32
Other deferred charges and assets/Other deferred credits and liabilities	8	8	3	21
Total derivatives designated as hedging instruments for regulatory purposes	\$ 15	\$ 13	\$ 4	\$ 53
Derivatives designated as hedging instruments in cash flow and fair value hedges				
Interest rate derivatives:				
Other current assets/Other current liabilities	\$ —	\$ —	\$ —	\$ 17
Gross amounts recognized	\$ 15	\$ 13	\$ 4	\$ 70
Gross amounts offset	\$ (12)	\$ (12)	\$ (3)	\$ (3)
Net amounts recognized in the Balance Sheets	\$ 3	\$ 1	\$ 1	\$ 67

Notes to Financial Statements

Derivative Category and Balance Sheet Location	2020		2019	
	Assets	Liabilities	Assets	Liabilities
(in millions)				
Mississippi Power				
Derivatives designated as hedging instruments for regulatory purposes				
Energy-related derivatives:				
Other current assets/Other current liabilities	\$ 4	\$ 3	\$ —	\$ 15
Other deferred charges and assets/Other deferred credits and liabilities	5	6	1	12
Total derivatives designated as hedging instruments for regulatory purposes	\$ 9	\$ 9	\$ 1	\$ 27
Gross amounts recognized	\$ 9	\$ 9	\$ 1	\$ 27
Gross amounts offset	\$ (7)	\$ (7)	\$ (1)	\$ (1)
Net amounts recognized in the Balance Sheets	\$ 2	\$ 2	\$ —	\$ 26

Southern Power				
Derivatives designated as hedging instruments in cash flow and fair value hedges				
Energy-related derivatives:				
Other current assets/Other current liabilities	\$ 2	\$ 2	\$ 1	\$ 2
Foreign currency derivatives:				
Other current assets/Other current liabilities	—	23	—	24
Other deferred charges and assets/Other deferred credits and liabilities	87	—	16	—
Total derivatives designated as hedging instruments in cash flow and fair value hedges	\$ 89	\$ 25	\$ 17	\$ 26
Derivatives not designated as hedging instruments				
Energy-related derivatives:				
Other current assets/Other current liabilities	\$ —	\$ 1	\$ 2	\$ 1
Net amounts recognized in the Balance Sheets	\$ 89	\$ 26	\$ 19	\$ 27

Southern Company Gas				
Derivatives designated as hedging instruments for regulatory purposes				
Energy-related derivatives:				
Assets from risk management activities/Other current liabilities	\$ 6	\$ 1	\$ —	\$ 9
Other deferred charges and assets/Other deferred credits and liabilities	—	—	—	1
Total derivatives designated as hedging instruments for regulatory purposes	\$ 6	\$ 1	\$ —	\$ 10
Derivatives designated as hedging instruments in cash flow and fair value hedges				
Energy-related derivatives:				
Assets from risk management activities/Other current liabilities	\$ 1	\$ 3	\$ —	\$ 4
Interest rate derivatives:				
Assets from risk management activities/Other current liabilities	—	—	2	—
Total derivatives designated as hedging instruments in cash flow and fair value hedges	\$ 1	\$ 3	\$ 2	\$ 4
Derivatives not designated as hedging instruments				
Energy-related derivatives:				
Assets from risk management activities/Other current liabilities	\$ 388	\$ 330	\$ 459	\$ 357
Other deferred charges and assets/Other deferred credits and liabilities	270	232	207	225
Total derivatives not designated as hedging instruments	\$ 658	\$ 562	\$ 666	\$ 582
Gross amounts recognized	\$ 665	\$ 566	\$ 668	\$ 596
Gross amounts offset^(a)	\$(503)	\$(531)	\$(456)	\$(555)
Net amounts recognized in the Balance Sheets^(b)	\$ 162	\$ 35	\$ 212	\$ 41

(a) Gross amounts offset include cash collateral held on deposit in broker margin accounts of \$28 million and \$99 million at December 31, 2020 and 2019, respectively.
(b) Net amounts of derivative instruments outstanding exclude immaterial premium and intrinsic value associated with weather derivatives for all periods presented.

Notes to Financial Statements

Energy-related derivatives not designated as hedging instruments were immaterial for the traditional electric operating companies at December 31, 2019. There were no such instruments for the traditional electric operating companies at December 31, 2020.

At December 31, 2020 and 2019, the pre-tax effects of unrealized derivative gains (losses) arising from energy-related derivative instruments designated as regulatory hedging instruments and deferred were as follows:

Regulatory Hedge Unrealized Gain (Loss) Recognized in the Balance Sheet at December 31, 2020					
Derivative Category and Balance Sheet Location	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Company Gas
(in millions)					
Energy-related derivatives:					
Other regulatory assets, deferred	\$ (2)	\$ —	\$(1)	\$(1)	\$ —
Other regulatory liabilities, current	12	5	2	1	4
Other regulatory liabilities, deferred	2	1	1	—	—
Total energy-related derivative gains (losses)	\$12	\$ 6	\$ 2	\$ —	\$ 4
Regulatory Hedge Unrealized Gain (Loss) Recognized in the Balance Sheet at December 31, 2019					
Derivative Category and Balance Sheet Location	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Company Gas
(in millions)					
Energy-related derivatives:					
Other regulatory assets, current	\$(63)	\$(14)	\$(31)	\$(15)	\$(3)
Other regulatory assets, deferred	(37)	(8)	(18)	(11)	—
Other regulatory liabilities, current	6	2	—	—	4
Total energy-related derivative gains (losses)	\$(94)	\$(20)	\$(49)	\$(26)	\$ 1

For the years ended December 31, 2020, 2019, and 2018, the pre-tax effects of cash flow hedge accounting on AOCI for the applicable Registrants were as follows:

Gain (Loss) Recognized in OCI on Derivative	2020	2019	2018
(in millions)			
Southern Company			
Energy-related derivatives	\$ (8)	\$ (13)	\$ 17
Interest rate derivatives	(26)	(57)	(1)
Foreign currency derivatives	48	(84)	(78)
Total	\$ 14	\$(154)	\$(62)
Georgia Power			
Interest rate derivatives	\$ (3)	\$ (59)	\$ —
Southern Power			
Energy-related derivatives	\$ (2)	\$ (4)	\$ 10
Foreign currency derivatives	48	(84)	(78)
Total	\$ 46	\$ (88)	\$(68)
Southern Company Gas			
Energy-related derivatives	\$ (6)	\$ (9)	\$ 7
Interest rate derivatives	(23)	2	—
Total	\$(29)	\$ (7)	\$ 7

For all years presented, the pre-tax effects of interest rate derivatives designated as cash flow hedging instruments on AOCI were immaterial for the other Registrants.

Notes to Financial Statements

The pre-tax effects of cash flow and fair value hedge accounting on income for the years ended December 31, 2020, 2019, and 2018 were as follows:

Location and Amount of Gain (Loss) Recognized in Income on Cash Flow and Fair Value Hedging Relationships	2020	2019	2018
(in millions)			
Southern Company			
Total cost of natural gas	\$ 972	\$ 1,319	\$ 1,539
Gain (loss) on energy-related cash flow hedges ^(a)	(8)	(2)	2
Total depreciation and amortization	3,518	3,038	3,131
Gain (loss) on energy-related cash flow hedges ^(a)	(3)	(6)	7
Total interest expense, net of amounts capitalized	(1,821)	(1,736)	(1,842)
Gain (loss) on interest rate cash flow hedges ^(a)	(26)	(20)	(21)
Gain (loss) on foreign currency cash flow hedges ^(a)	(23)	(24)	(24)
Gain (loss) on interest rate fair value hedges ^(b)	27	42	(12)
Total other income (expense), net	336	252	114
Gain (loss) on foreign currency cash flow hedges ^{(a)(c)}	114	(24)	(60)
Southern Power			
Total depreciation and amortization	\$ 494	\$ 479	\$ 493
Gain (loss) on energy-related cash flow hedges ^(a)	(3)	(6)	7
Total interest expense, net of amounts capitalized	(151)	(169)	(183)
Gain (loss) on foreign currency cash flow hedges ^(a)	(23)	(24)	(24)
Total other income (expense), net	19	47	23
Gain (loss) on foreign currency cash flow hedges ^{(a)(c)}	114	(24)	(60)

- (a) Reclassified from AOCI into earnings.
(b) For fair value hedges, changes in the fair value of the derivative contracts are generally equal to changes in the fair value of the underlying debt and have no material impact on income.
(c) The reclassification from AOCI into other income (expense), net completely offsets currency gains and losses arising from changes in the U.S. currency exchange rates used to record the euro-denominated notes.

The pre-tax effects of cash flow hedge accounting on income for interest rate derivatives and energy-related derivatives were immaterial for the other Registrants for all years presented.

At December 31, 2020 and 2019, the following amounts were recorded on the balance sheets related to cumulative basis adjustments for fair value hedges:

Balance Sheet Location of Hedged Items	Carrying Amount of the Hedged Item		Cumulative Amount of Fair Value Hedging Adjustment included in Carrying Amount of the Hedged Item	
	At December 31, 2020	At December 31, 2019	At December 31, 2020	At December 31, 2019
(in millions)				
Southern Company				
Securities due within one year	\$(1,509)	\$ (599)	\$(10)	\$ —
Long-term debt	—	(1,494)	—	3

The pre-tax effects of energy-related derivatives not designated as hedging instruments on the statements of income of Southern Company and Southern Company Gas for the years ended December 31, 2020, 2019, and 2018 were as follows:

		Gain (Loss)		
Derivatives in Non-Designated Hedging Relationships	Statements of Income Location	2020	2019	2018
(in millions)				
Energy-related derivatives	Natural gas revenues ^(*)	\$ 134	\$ 223	\$(122)
	Cost of natural gas	15	10	(6)
Total derivatives in non-designated hedging relationships		\$ 149	\$ 233	\$(128)

(*) Excludes the impact of weather derivatives recorded in natural gas revenues of \$9 million, \$3 million, and \$5 million for the years ended December 31, 2020, 2019, and 2018, respectively, as they are accounted for based on intrinsic value rather than fair value.

The pre-tax effects of energy-related derivatives not designated as hedging instruments were immaterial for all other Registrants for all years presented.

Contingent Features

Southern Company, the traditional electric operating companies, Southern Power, and Southern Company Gas do not have any credit arrangements that would require material changes in payment schedules or terminations as a result of a credit rating downgrade. There are certain derivatives that could require collateral, but not accelerated payment, in the event of various credit rating changes of certain Southern Company subsidiaries. At December 31, 2020, the Registrants had no collateral posted with derivative counterparties to satisfy these arrangements.

For the Registrants with interest rate derivatives at December 31, 2020, there were no interest rate derivative liabilities with contingent features. At December 31, 2020, the fair value of energy-related derivative liabilities with contingent features and the maximum potential collateral requirements arising from the credit-risk-related contingent features, at a rating below BBB- and/or Baa3, were immaterial for all Registrants. The maximum potential collateral requirements arising from the credit-risk-related contingent features for the traditional electric operating companies and Southern Power include certain agreements that could require collateral in the event that one or more Southern Company power pool participants has a credit rating change to below investment grade. Following the sale of Gulf Power to NextEra Energy, Gulf Power is continuing to participate in the Southern Company power pool for a defined transition period that, subject to certain potential adjustments, is scheduled to end on January 1, 2024.

Generally, collateral may be provided by a Southern Company guaranty, letter of credit, or cash. If collateral is required, fair value amounts recognized for the right to reclaim cash collateral or the obligation to return cash collateral are not offset against fair value amounts recognized for derivatives executed with the same counterparty.

Alabama Power and Southern Power maintain accounts with certain regional transmission organizations to facilitate financial derivative transactions and they may be required to post collateral based on the value of the positions in these accounts and the associated margin requirements. At December 31, 2020, cash collateral posted in these accounts was immaterial. Southern Company Gas maintains accounts with brokers or the clearing houses of certain exchanges to facilitate financial derivative transactions. Based on the value of the positions in these accounts and the associated margin requirements, Southern Company Gas may be required to deposit cash into these accounts. At December 31, 2020, cash collateral held on deposit in broker margin accounts was \$28 million.

The Registrants are exposed to losses related to financial instruments in the event of counterparties’ nonperformance. The Registrants only enter into agreements and material transactions with counterparties that have investment grade credit ratings by Moody’s and S&P or with counterparties who have posted collateral to cover potential credit exposure. The Registrants have also established risk management policies and controls to determine and monitor the creditworthiness of counterparties in order to mitigate their exposure to counterparty credit risk.

Southern Company Gas uses established credit policies to determine and monitor the creditworthiness of counterparties, including requirements to post collateral or other credit security, as well as the quality of pledged collateral. Collateral or credit security is most often in the form of cash or letters of credit from an investment-grade financial institution, but may also include cash or U.S. government securities held by a trustee. Prior to entering a physical transaction, Southern Company Gas assigns its counterparties an internal credit rating and credit limit based on the counterparties’ Moody’s, S&P, and Fitch ratings, commercially available credit reports, and audited financial statements. Southern Company Gas may require counterparties to pledge additional collateral when deemed necessary.

Southern Company Gas utilizes netting agreements whenever possible to mitigate exposure to counterparty credit risk. Netting agreements enable Southern Company Gas to net certain assets and liabilities by counterparty across product lines and against cash collateral, provided the netting and cash collateral agreements include such provisions. While the amounts due from, or owed to, counterparties are settled net, they are recorded on a gross basis on the balance sheet as energy marketing receivables and energy marketing payables.

The Registrants do not anticipate a material adverse effect on their respective financial statements as a result of counterparty nonperformance.

15. ACQUISITIONS AND DISPOSITIONS

Southern Company

In January 2019, Southern Company completed the sale of all of the capital stock of Gulf Power to a wholly-owned subsidiary of NextEra Energy, for an aggregate cash purchase price of approximately \$5.8 billion (less \$1.3 billion of indebtedness assumed), including the final working capital adjustments. The gain associated with the sale of Gulf Power totaled \$2.6 billion pre-tax (\$1.4 billion after tax).

In July 2019, PowerSecure completed the sale of its utility infrastructure services business for approximately \$65 million, including the final working capital adjustments. In contemplation of this sale, a goodwill impairment charge of \$32 million was recorded in the second quarter 2019. In December 2019, PowerSecure completed the sale of its lighting business for approximately \$9 million, which included cash of \$4 million and a note receivable from the buyer of \$5 million. In contemplation of this sale, an impairment charge of \$18 million was recorded in the third quarter 2019 related to goodwill, identifiable intangibles, and other assets.

In December 2019, Southern Company completed the sale of one of its leveraged lease investments for an aggregate cash purchase price of approximately \$20 million. The sale resulted in an immaterial gain.

During the fourth quarter 2020, management of Southern Company initiated steps to sell one of its leveraged leases and classified the investment in the leveraged lease as held for sale on Southern Company’s balance sheet as of December 31, 2020. The ultimate outcome of this matter cannot be determined at this time. See Note 3 under “Other Matters – Southern Company” and “Assets Held for Sale” herein for additional information.

Alabama Power

On August 31, 2020, Alabama Power completed its acquisition of the Central Alabama Generating Station, an approximately 885-MW combined cycle generation facility in Autauga County, Alabama. The total purchase price was \$461 million, of which \$452 million was related to net assets recorded within property, plant, and equipment on the balance sheet and the remainder primarily related to inventory, current receivables, and accounts payable. Alabama Power assumed an existing power sales agreement under which the full output of the generating facility remains committed to another third party for its remaining term of approximately three years. During the remaining term, the estimated revenues from the power sales agreement are expected to offset the associated costs of operation. See Notes 2 and 9 under “Alabama Power” and “Lessor,” respectively, for additional information.

Notes to Financial Statements

Southern Power

Southern Power’s acquisition-related costs for the projects discussed under “Asset Acquisitions” and “Construction Projects” below were expensed as incurred and were not material for any of the years presented.

Asset Acquisitions

Project Facility	Resource	Seller	Approximate Nameplate Capacity (MW)	Location	Southern Power Ownership Percentage	COD	PPA Contract Period
Asset Acquisitions During 2020							
Beech Ridge II	Wind	Invenergy Renewables LLC	56	Greenbrier County, WV	100% of Class A ^(a)	May 2020	12 years
Asset Acquisitions During 2019							
DSGP ^(b)	Fuel Cell	Bloom Energy	28	Delaware	100% of Class B	N/A ^(c)	15 years ^(d)
Asset Acquisitions During 2018							
Gaskell West 1	Solar	Recurrent Energy Development Holdings, LLC	20	Kern County, CA	100% of Class B ^(e)	March 2018	20 years

- (a) In May 2020, Southern Power purchased a controlling interest and now consolidates the project’s operating results in its financial statements. The Class B member owns the noncontrolling interest.
- (b) During 2019, Southern Power purchased a controlling interest and now consolidates the project’s operating results in its financial statements. The Class A and Class C members each own a noncontrolling interest. Southern Power records net income attributable to noncontrolling interests for approximately 10 MWs of the facility.
- (c) Southern Power’s 18-MW share of the facility was repowered between June and August 2019. In December 2019, a Class C member joined the existing partnership between the Class A member and Southern Power and made an investment to repower the remaining 10 MWs.
- (d) Remaining PPA contract period at the time of acquisition.
- (e) Southern Power owns a controlling interest under a tax equity partnership.

In March 2020, Southern Power entered into an agreement to acquire a controlling membership interest in an approximately 300-MW wind facility located in South Dakota. The acquisition is subject to certain customary conditions to closing, including commercial operation of the facility, which is expected to occur in the first quarter 2021. Subsequent to the acquisition, Southern Power expects to complete a tax equity transaction. The facility’s output is contracted under two long-term PPAs. The ultimate outcome of this matter cannot be determined at this time.

Notes to Financial Statements

Construction Projects

During 2020, Southern Power completed construction of and placed in service the Reading and Skookumchuck wind facilities, commenced construction of the Garland and Tranquillity battery energy storage facilities, and acquired and commenced construction of the Glass Sands wind facility. Total aggregate construction costs, excluding acquisition costs, are expected to be between \$392 million and \$460 million for the facilities under construction. At December 31, 2020, the total costs of construction incurred and included in CWIP for these projects were \$34 million. The ultimate outcome of these matters cannot be determined at this time.

Project Facility	Resource	Approximate Nameplate Capacity (MW)	Location	Actual/Expected COD	PPA Contract Period
Projects Under Construction at December 31, 2020					
Garland Solar Storage ^(a)	Battery energy storage system	88	Kern County, CA	Third quarter 2021	20 years
Tranquillity Solar Storage ^(a)	Battery energy storage system	72	Fresno County, CA	Fourth quarter 2021	20 years
Glass Sands ^(b)	Wind	118	Murray County, OK	Fourth quarter 2021	12 years
Projects Completed During 2020					
Skookumchuck ^(c)	Wind	136	Lewis and Thurston Counties, WA	November 2020	20 years
Reading ^(d)	Wind	200	Osage and Lyon Counties, KS	May 2020	12 years
Projects Completed During 2019^(e)					
Wildhorse Mountain ^(f)	Wind	100	Pushmataha County, OK	December 2019	20 years

- (a) In December 2020, Southern Power restructured its ownership of the project by contributing the Class A membership interests to an existing partnership and selling 100% of the Class B membership interests while retaining the controlling interest. Prior to commercial operation, Southern Power may restructure the project ownership again and enter into additional partnerships, but expects to retain the controlling interest. The ultimate outcome of this matter cannot be determined at this time.
- (b) In December 2020, Southern Power purchased 100% of the membership interests of the Glass Sands facility.
- (c) In October 2019, Southern Power purchased 100% of the membership interests of the Skookumchuck facility pursuant to a joint development arrangement. In November 2020, Southern Power completed a tax equity transaction whereby it received \$121 million, resulting in 100% ownership of the Class B membership interests. Southern Power subsequently sold a noncontrolling interest in the Class B membership interests and now retains the controlling ownership interest in the facility.
- (d) In 2018, Southern Power purchased 100% of the membership interests of the Reading facility pursuant to a joint development arrangement. In June 2020, Southern Power completed a tax equity transaction whereby it received \$156 million and owns 100% of the Class B membership interests.
- (e) During 2019, Southern Power also completed the expansion of Plant Mankato, which was sold to a subsidiary of Xcel on January 17, 2020. See “Sales of Natural Gas and Biomass Plants” below for additional information.
- (f) In 2018, Southern Power purchased 100% of the membership interests of the Wildhorse Mountain facility. In December 2019, Southern Power entered into a tax equity partnership and owns 100% of the Class B membership interests.

Development Projects

Southern Power continues to evaluate and refine the deployment of the remaining wind turbine equipment purchased in 2016 and 2017 to development and construction projects. Wind projects utilizing equipment purchased in 2016 and 2017, and reaching commercial operation by the end of 2021 and 2022, are expected to qualify for 100% and 80% PTCs, respectively. The significant majority of this equipment either has been deployed to projects that have been completed, are under construction, or are probable of completion, or has been sold to third parties. In 2018, as a result of a review of various options for probable dispositions of wind turbine equipment not deployed to development or construction projects, Southern Power recorded a \$36 million asset impairment charge on the equipment. Gains on equipment sales were immaterial in 2020 and totaled approximately \$17 million in 2019.

Sales of Renewable Facility Interests

In May 2018, Southern Power completed the sale of a noncontrolling 33% equity interest in SP Solar, a limited partnership indirectly owning substantially all of Southern Power’s solar facilities, to Global Atlantic for approximately \$1.2 billion. Since Southern Power retained control of the limited partnership, the sale was recorded as an equity transaction. On the date of the transaction, the noncontrolling interest was increased by \$511 million to reflect 33% of the carrying value of the partnership. This difference, partially offset by the tax impact and other related transaction charges, also resulted in a \$410 million decrease to Southern Power’s common stockholder’s equity.

In December 2018, Southern Power completed the sale of a noncontrolling tax equity interest in SP Wind, which owns a portfolio of eight operating wind facilities, to three financial investors for approximately \$1.2 billion. The tax equity investors together will generally receive 40% of the cash distributions from available cash and will receive 99% of the tax attributes, including future PTCs.

Southern Power consolidates each entity, as the primary beneficiary of the VIE, since it controls the most significant activities, including operating and maintaining the assets.

Sales of Natural Gas and Biomass Plants

In December 2018, Southern Power completed the sale of all of its equity interests in Plant Oleander and Plant Stanton Unit A (together, the Florida Plants) to NextEra Energy for \$203 million, including final working capital adjustments. In contemplation of this sale transaction, Southern Power recorded an asset impairment charge of approximately \$119 million (\$89 million after tax) in the second quarter 2018.

In June 2019, Southern Power completed the sale of its equity interests in Plant Nacogdoches, a 115-MW biomass facility located in Nacogdoches County, Texas, to Austin Energy, for a purchase price of approximately \$461 million, including final working capital adjustments. Southern Power recorded a gain of \$23 million (\$88 million after tax) on the sale.

On January 17, 2020, Southern Power completed the sale of its equity interests in Plant Mankato (including the 385-MW expansion unit completed in May 2019) to a subsidiary of Xcel for a purchase price of approximately \$663 million, including final working capital adjustments. The sale resulted in a gain of approximately \$39 million (\$23 million after tax). The assets and liabilities of Plant Mankato were classified as held for sale on Southern Company’s and Southern Power’s balance sheets at December 31, 2019. See “Assets Held for Sale” herein for additional information.

Southern Company Gas

Sale of Pivotal Home Solutions

In June 2018, Southern Company Gas completed the stock sale of Pivotal Home Solutions to American Water Enterprises LLC for a total cash purchase price of \$365 million, which includes the final working capital adjustment. This disposition resulted in a net loss of \$67 million, which includes \$34 million of income tax expense. In contemplation of the transaction, a goodwill impairment charge of \$42 million was recorded during 2018. The income tax expense included tax on goodwill not deductible for tax purposes and for which a deferred tax liability had not been recorded previously. Southern Company Gas and American Water Enterprises LLC entered into a transition services agreement whereby Southern Company Gas provided certain administrative and operational services, which ended during 2018.

Sales of Elizabethtown Gas and Elkton Gas

In July 2018, a Southern Company Gas subsidiary, Pivotal Utility Holdings, completed the sales of the assets of two of its natural gas distribution utilities, Elizabethtown Gas and Elkton Gas, to South Jersey Industries, Inc. for a total cash purchase price of \$1.7 billion, which includes the final working capital and other adjustments. This disposition resulted in a pre-tax gain that was entirely offset by \$205 million of income tax expense, resulting in no material net income impact. The income tax expense included tax on goodwill not deductible for tax purposes and for which a deferred tax liability had not been recorded previously. Southern Company Gas and South Jersey Industries, Inc. entered into transition services agreements whereby Southern Company Gas provided certain administrative and operational services through July 2, 2020.

Sale of Florida City Gas

In July 2018, Southern Company Gas and its wholly-owned direct subsidiary, NUI Corporation, completed the stock sale of Pivotal Utility Holdings, which primarily consisted of Florida City Gas, to NextEra Energy for a total cash purchase price of \$587 million, which includes the final working capital adjustment. This disposition resulted in a net gain of \$16 million, which includes \$103 million of income tax expense. The income tax expense included tax on goodwill not deductible for tax purposes and for which a deferred tax liability had not been recorded previously. Southern Company Gas and NextEra Energy entered into a transition services agreement whereby Southern Company Gas provided certain administrative and operational services through July 28, 2020.

Sale of Triton

In May 2019, Southern Company Gas sold its investment in Triton, a cargo container leasing company that was aggregated into Southern Company Gas’ all other segment. This disposition resulted in a pre-tax loss of \$6 million and a net after-tax gain of \$7 million as a result of reversing a \$13 million federal income tax valuation allowance.

Sale of Pivotal LNG and Atlantic Coast Pipeline

On March 24, 2020, Southern Company Gas completed the sale of its interests in Pivotal LNG and Atlantic Coast Pipeline to Dominion Modular LNG Holdings, Inc. and Dominion Atlantic Coast Pipeline, LLC, respectively, with aggregate proceeds of \$178 million, including final working capital adjustments. The loss associated with the transactions was immaterial. Southern Company Gas also expects to receive payments in April 2021 and August 2021 of \$5 million each contingent upon Dominion Modular LNG Holdings, Inc. meeting certain milestones related to Pivotal LNG. During 2019, based on the terms of these transactions, Southern Company Gas recorded an asset impairment charge, exclusive of the contingent payments, for Pivotal LNG of approximately \$24 million (\$17 million after tax) as of December 31, 2019. The assets and liabilities of Pivotal LNG and the interest in Atlantic Coast Pipeline were classified as held for sale as of December 31, 2019. See Note 7 under “Southern Company Gas” and “Assets Held for Sale” herein for additional information.

Sale of Natural Gas Storage Facility

On December 1, 2020, Southern Company Gas completed the sale of Jefferson Island to EnLink Midstream, LLC for a total purchase price of \$33 million, including estimated working capital adjustments. The gain associated with the sale totaled \$22 million pre-tax (\$16 million after tax).

Assets Held for Sale

Assets and liabilities held for sale have been classified separately on each company’s balance sheet at the lower of carrying value or fair value less costs to sell at the time the criteria for held-for-sale classification were met. For assets and liabilities held for sale recorded at fair value on a nonrecurring basis, the fair value of assets held for sale is based primarily on unobservable inputs (Level 3), which includes the agreed upon sales prices in executed sales agreements.

Since the depreciation of the assets sold in the Gulf Power transaction and Southern Company Gas’ Elizabethtown Gas, Elkton Gas, and Florida City Gas transactions continued to be reflected in customer rates through the closing date of each sale and was reflected in the carryover basis of the assets when sold, Southern Company and Southern Company Gas continued to record depreciation on those assets through the respective closing date of each transaction. Upon classification as held for sale in May 2018 for the Florida Plants, November 2018 for Plant Mankato, and April 2019 for Plant Nacogdoches, Southern Power ceased recognizing depreciation and amortization on the long-lived assets being sold.

Notes to Financial Statements

The following table provides the major classes of assets and liabilities classified as held for sale for Southern Company, Southern Power, and Southern Company Gas at December 31, 2020 and/or 2019:

	Southern Company		Southern Power	Southern Company Gas
	At December 31,		At December 31,	At December 31,
	2020	2019	2019	2019
(in millions)				
Assets Held for Sale:				
Current assets	\$ —	\$ 19	\$ 17	\$ 2
Total property, plant, and equipment	8	565	547	18
Goodwill and other intangible assets	—	40	40	—
Equity investments in unconsolidated subsidiaries	—	151	—	151
Leveraged leases	52	—	—	—
Other non-current assets	—	14	14	—
Total Assets Held for Sale	\$60	\$789	\$618	\$171
Liabilities Held for Sale (all current):	\$ —	\$ 5	\$ 3	\$ 2

Southern Company, Southern Power, and Southern Company Gas each concluded that the asset sales, both individually and combined, did not represent a strategic shift in operations that has, or is expected to have, a major effect on its operations and financial results; therefore, none of the assets related to the sales have been classified as discontinued operations for any of the periods presented.

Gulf Power and Southern Power’s Florida Plants, Plant Nacogdoches, and Plant Mankato represented individually significant components of Southern Company and Southern Power, respectively. Pre-tax income for these components for the years ended December 31, 2020, 2019, and 2018 are presented below:

	2020	2019	2018
(in millions)			
Earnings before income taxes:			
Gulf Power	N/A	N/A	\$140
Southern Power’s Florida Plants(a)(b)	N/A	N/A	\$ 49
Southern Power’s Plant Nacogdoches(a)(c)	N/A	\$13	\$ 27
Southern Power’s Plant Mankato(a)(d)	\$2	\$29	N/M

N/M – Not material
(a) Earnings before income taxes reflect the cessation of depreciation and amortization on the long-lived assets being sold upon classification as held for sale.
(b) 2018 amount represents the period from January 1, 2018 to December 4, 2018 (the divestiture date).
(c) 2019 amount represents the period from January 1, 2019 to June 13, 2019 (the divestiture date).
(d) 2020 amount represents the period from January 1, 2020 to January 17, 2020 (the divestiture date).

16. SEGMENT AND RELATED INFORMATION

Southern Company

Southern Company’s reportable business segments are the sale of electricity by the traditional electric operating companies, the sale of electricity in the competitive wholesale market by Southern Power, and the sale of natural gas and other complementary products and services by Southern Company Gas. Revenues from sales by Southern Power to the traditional electric operating companies were \$364 million, \$398 million, and \$435 million in 2020, 2019, and 2018, respectively. Revenues from sales of natural gas from Southern Company Gas to the traditional electric operating companies and Southern Power were immaterial and \$26 million, respectively, in 2020, \$14 million and \$64 million, respectively, in 2019, and \$32 million and \$119 million, respectively, in 2018. The “All Other” column includes the Southern Company parent entity, which does not allocate operating expenses to business segments. Also, this category includes segments below the quantitative threshold for separate disclosure. These segments include providing energy solutions to electric utilities and their customers in the areas of distributed generation, energy storage and renewables, and energy efficiency, as well as investments in telecommunications and leveraged lease projects. All other inter-segment revenues are not material.

Notes to Financial Statements

Financial data for business segments and products and services for the years ended December 31, 2020, 2019, and 2018 was as follows:

	Electric Utilities				Southern Company Gas	All Other	Eliminations	Consolidated
	Traditional Electric Operating Companies	Southern Power	Eliminations	Total				
(in millions)								
2020								
Operating revenues	\$15,135	\$ 1,733	\$ (371)	\$16,497	\$ 3,434	\$ 596	\$ (152)	\$ 20,375
Depreciation and amortization	2,447	494	—	2,941	500	77	—	3,518
Interest income	26	4	—	30	5	6	(4)	37
Earnings from equity method investments	—	—	—	—	141	12	—	153
Interest expense	825	151	—	976	231	614	—	1,821
Income taxes (benefit)	514	3	—	517	173	(297)	—	393
Segment net income (loss)(a)(b)(c)(d)(e)	2,877	238	—	3,115	590	(592)	6	3,119
Goodwill	—	2	—	2	5,015	263	—	5,280
Total assets	85,486	13,235	(680)	98,041	22,630	3,168	(904)	122,935
2019								
Operating revenues	\$15,569	\$ 1,938	\$ (412)	\$17,095	\$ 3,792	\$ 690	\$ (158)	\$ 21,419
Depreciation and amortization	1,993	479	—	2,472	487	79	—	3,038
Interest income	38	9	—	47	3	16	(6)	60
Earnings from equity method investments	2	3	—	5	157	—	—	162
Interest expense	818	169	—	987	232	517	—	1,736
Income taxes (benefit)	764	(56)	—	708	130	960	—	1,798
Segment net income (loss)(a)(f)(g)(h)	2,929	339	—	3,268	585	908	(22)	4,739
Goodwill	—	2	—	2	5,015	263	—	5,280
Total assets	81,063	14,300	(713)	94,650	21,687	3,511	(1,148)	118,700
2018								
Operating revenues	\$16,843	\$ 2,205	\$ (477)	\$18,571	\$ 3,909	\$1,213	\$ (198)	\$ 23,495
Depreciation and amortization	2,072	493	—	2,565	500	66	—	3,131
Interest income	23	8	—	31	4	8	(5)	38
Earnings from equity method investments	(1)	—	—	(1)	148	2	(1)	148
Interest expense	852	183	—	1,035	228	580	(1)	1,842
Income taxes (benefit)	371	(164)	—	207	464	(222)	—	449
Segment net income (loss)(a)(b)(f)(i)	2,117	187	—	2,304	372	(453)	3	2,226
Goodwill	—	2	—	2	5,015	298	—	5,315
Total assets	79,382	14,883	(306)	93,959	21,448	3,285	(1,778)	116,914

(a) Attributable to Southern Company.
(b) For the traditional electric operating companies, includes pre-tax charges at Georgia Power for estimated loss on Plant Vogtle Units 3 and 4 of \$325 million (\$242 million after tax) in 2020 and \$1.1 billion (\$0.8 billion after tax) in 2018. See Note 2 under “Georgia Power – Nuclear Construction” for additional information.
(c) For Southern Power, includes a \$39 million pre-tax gain (\$23 million gain after tax) on the sale of Plant Mankato. See Note 15 under “Southern Power” for additional information.
(d) For Southern Company Gas, includes a \$22 million pre-tax gain (\$16 million gain after tax) on the sale of Jefferson Island. See Note 15 under “Southern Company Gas” for additional information.

Notes to Financial Statements

- (e) For the “All Other” column, includes pre-tax impairment charges totaling \$206 million (\$105 million after tax) related to leveraged lease investments. See Note 3 under “Other Matters – Southern Company” for additional information.
- (f) For Southern Power, includes a \$23 million pre-tax gain (\$88 million gain after tax) on the sale of Plant Nacogdoches. See Note 15 under “Southern Power” for additional information.
- (g) For Southern Company Gas, includes pre-tax impairment charges totaling \$115 million (\$86 million after tax). See Notes 3 and 15 under “Other Matters – Southern Company Gas” and “Southern Company Gas – Sale of Pivotal LNG and Atlantic Coast Pipeline,” respectively, for additional information.
- (h) For the “All Other” column, includes the pre-tax gain associated with the sale of Gulf Power of \$2.6 billion (\$1.4 billion after tax), the pre-tax loss, including related impairment charges, on the sales of certain PowerSecure business units totaling \$58 million (\$52 million after tax), and a pre-tax impairment charge of \$17 million (\$13 million after tax) related to a leveraged lease investment. See Notes 3 and 15 under “Other Matters – Southern Company” and “Southern Company,” respectively, for additional information.
- (i) For Southern Power, includes pre-tax impairment charges of \$156 million (\$117 million after tax). See Note 15 under “Southern Power” for additional information.
- (j) For Southern Company Gas, includes a net gain on dispositions of \$291 million (\$51 million loss after tax), as well as a goodwill impairment charge of \$42 million related to the sale of Pivotal Home Solutions. See Note 15 under “Southern Company Gas” for additional information.

Products and Services

Electric Utilities’ Revenues				
Year	Retail	Wholesale	Other	Total
<i>(in millions)</i>				
2020	\$13,643	\$1,945	\$909	\$16,497
2019	14,084	2,152	859	17,095
2018	15,222	2,516	833	18,571

Southern Company Gas’ Revenues				
Year	Gas Distribution Operations	Gas Marketing Services	All Other	Total
<i>(in millions)</i>				
2020	\$2,902	\$408	\$124	\$3,434
2019	3,001	456	335	3,792
2018	3,155	568	186	3,909

Southern Company Gas

Southern Company Gas manages its business through four reportable segments – gas distribution operations, gas pipeline investments, wholesale gas services, and gas marketing services. The non-reportable segments are combined and presented as all other. See Note 15 under “Southern Company Gas” for additional information on the disposition activities described herein.

Gas distribution operations is the largest component of Southern Company Gas’ business and includes natural gas local distribution utilities that construct, manage, and maintain intrastate natural gas pipelines and gas distribution facilities in four states. In July 2018, Southern Company Gas sold three of its natural gas distribution utilities, Elizabethtown Gas, Elkton Gas, and Florida City Gas.

Gas pipeline investments consists of joint ventures in natural gas pipeline investments including a 50% interest in SNG, a 20% ownership interest in the PennEast Pipeline project, and a 50% joint ownership interest in the Dalton Pipeline. These natural gas pipelines enable the provision of diverse sources of natural gas supplies to the customers of Southern Company Gas. Gas pipeline investments also included a 5% ownership interest in the Atlantic Coast Pipeline construction project prior to its sale on March 24, 2020. See Notes 3, 5, and 7 for additional information.

Wholesale gas services provides natural gas asset management and/or related logistics services for each of Southern Company Gas’ utilities except Nicor Gas as well as for non-affiliated companies. Additionally, wholesale gas services engages in natural gas storage and gas pipeline arbitrage and related activities.

Notes to Financial Statements

Gas marketing services provides natural gas marketing to end-use customers primarily in Georgia and Illinois through SouthStar. In June 2018, Southern Company Gas sold Pivotal Home Solutions, which provided home equipment protection products and services.

The all other column includes segments and subsidiaries that fall below the quantitative threshold for separate disclosure, including storage and fuels operations. The all other column included Jefferson Island though its sale on December 1, 2020, Pivotal LNG through its sale on March 24, 2020, and the investment in Triton through its sale on May 29, 2019.

Financial data for business segments for the years ended December 31, 2020, 2019, and 2018 was as follows:

	Gas Distribution Operations ^(a)	Gas Pipeline Investments	Wholesale Gas Services ^(b)	Gas Marketing Services ^(c)	Total	All Other ^(d)	Eliminations	Consolidated
<i>(in millions)</i>								
2020								
Operating revenues	\$ 2,952	\$ 32	\$ 74	\$ 408	\$ 3,466	\$ 36	\$ (68)	\$ 3,434
Depreciation and amortization	442	5	1	22	470	30	—	500
Operating income (loss)	655	20	20	119	814	(7)	5	812
Earnings from equity method investments	—	141	—	—	141	—	—	141
Interest expense	192	29	4	3	228	3	—	231
Income taxes (benefit)	114	33	3	28	178	(5)	—	173
Segment net income (loss)	390	99	14	89	592	(2)	—	590
Total assets at December 31, 2020	19,090	1,597	850	1,503	23,040	11,336	(11,746)	22,630
2019								
Operating revenues	\$ 3,028	\$ 32	\$ 294	\$ 456	\$ 3,810	\$ 44	\$ (62)	\$ 3,792
Depreciation and amortization	422	5	1	26	454	33	—	487
Operating income (loss)	573	20	219	112	924	(154)	—	770
Earnings from equity method investments	—	162	—	—	162	(5)	—	157
Interest expense	187	30	5	3	225	7	—	232
Income taxes (benefit)	63	58	52	27	200	(70)	—	130
Segment net income (loss)	337	94	163	83	677	(92)	—	585
Total assets at December 31, 2019	18,204	1,678	850	1,496	22,228	10,759	(11,300)	21,687
2018								
Operating revenues	\$ 3,186	\$ 32	\$ 144	\$ 568	\$ 3,930	\$ 55	\$ (76)	\$ 3,909
Depreciation and amortization	409	5	2	37	453	47	—	500
Operating income (loss)	904	20	70	19	1,013	(98)	—	915
Earnings from equity method investments	—	145	—	—	145	3	—	148
Interest expense	178	34	9	6	227	1	—	228
Income taxes (benefit)	409	28	4	54	495	(31)	—	464
Segment net income (loss)	334	103	38	(40)	435	(63)	—	372
Total assets at December 31, 2018	17,266	1,763	1,302	1,587	21,918	11,112	(11,582)	21,448

- (a) Operating revenues for the three gas distribution operations dispositions were \$244 million for 2018. Segment net income for gas distribution operations includes a gain on dispositions of \$324 million (\$16 million after tax) in 2018.
- (b) The revenues for wholesale gas services are netted with costs associated with its energy and risk management activities. A reconciliation of operating revenues and intercompany revenues is shown in the following table.

	Third Party Gross Revenues	Intercompany Revenues	Total Gross Revenues	Less Gross Gas Costs	Operating Revenues
			(in millions)		
2020	\$4,544	\$ 115	\$4,659	\$4,585	\$ 74
2019	5,703	275	5,978	5,684	294
2018	6,955	451	7,406	7,262	144

- (c) Operating revenues for the gas marketing services disposition were \$55 million in 2018. Segment net income for gas marketing services includes a loss on disposition of \$33 million (\$67 million loss after tax) and a goodwill impairment charge of \$42 million in 2018 recorded in contemplation of the sale of Pivotal Home Solutions.
- (d) Segment net income (loss) for the "All Other" column includes a \$22 million pre-tax gain (\$16 million gain after tax) on the sale of Jefferson Island in 2020 and pre-tax impairment charges totaling \$115 million (\$86 million after tax) in 2019. See Note 3 under "Other Matters – Southern Company Gas" for additional information.

Writing and project management: Terrell McCollum; Design: Leap Communications; Photography: Jim Schnepf, Philip Wages, Walter Kirk; Printing: Sandy Alexander

Shareholder Information

Transfer Agent

EQ Shareowner Services is Southern Company’s transfer agent, dividend-paying agent, investment plan administrator and registrar. If you have questions concerning your registered Southern Company shareowner account, please contact:

EQ Shareowner Services
1110 Centre Pointe Curve, Suite 101
Mendota Heights, Minnesota 55120

Telephone: 1.800.554.7626
Website: shareowneronline.com

Southern Company Shareholder Relations

Telephone: 404.506.0965
Email: shareholderservices@southernco.com

Southern Investment Plan

The Southern Investment Plan is a convenient way to become a Southern Company shareholder. Participants in the Plan can purchase additional shares in Southern Company through optional cash purchases and reinvestment of dividends. The Southern Investment Plan prospectus can be found at Investor.southerncompany.com.

Dividend Payments

Southern Company has paid dividends since 1948. Historically, dividends are declared and paid quarterly at the discretion of the Board of Directors.

Auditors

Deloitte & Touche LLP
191 Peachtree St. NE
Suite 2000
Atlanta, GA 30303

Investor Information

For information about earnings and dividends, stock quotes and current news releases, please visit us at investor.southerncompany.com.

Institutional Investor Inquiries

Southern Company maintains an investor relations office in Atlanta, Georgia, 404.506.0901, to meet the information needs of institutional investors and securities analysts.

Electronic Delivery of Proxy Materials

Any stockholder may enroll for electronic delivery of proxy materials by logging on at www.icsdelivery.com/so.

Environmental Information

Southern Company publishes information on its activities to meet environmental commitments at www.southerncompany.com/corporate-responsibility.

To request printed materials, write to:

Senior Vice President Environmental and System Planning
600 North 18th St.
Bin 15N-8292
Birmingham, AL 35203-2206

Common Stock

Southern Company common stock is listed on the NYSE under the ticker symbol SO. On January 31, 2021, Southern Company had 107,362 shareholders of record.

The 2020 annual report is submitted for shareholders’ information. It is not intended for use in connection with any sale or purchase of, or any solicitation of, offers to buy or sell securities.

Pages 16-206 of this 2020 annual report contain excerpts from Southern Company’s Annual Report on Form 10-K for the year ended December 31, 2020, which was filed with the SEC on February 17, 2021. Information in these pages is provided as of the February 17, 2021 filing date and has not been updated for any subsequent events or developments.

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