First Quarter 2020 Earnings Conference Call

April 30, 2020
Certain information contained in this presentation is forward-looking information based on current expectations and plans that involve risks and uncertainties. Forward-looking information includes, among other things, financial objectives, earnings guidance, statements concerning cost and schedule for completion of ongoing construction projects, expected impacts of the COVID-19 pandemic, planned financing activities, and future regulatory actions. Southern Company cautions that there are certain factors that can cause actual results to differ materially from the forward-looking information that has been provided. The reader is cautioned not to put undue reliance on this forward-looking information, which is not a guarantee of future performance and is subject to a number of uncertainties and other factors, many of which are outside the control of Southern Company and its subsidiaries; accordingly, there can be no assurance that such suggested results will be realized. The following factors, in addition to those discussed in Southern Company’s and its subsidiaries’ Annual Reports on Form 10-K for the year ended December 31, 2019, Quarterly Report on Form 10-Q for the quarter ended March 31, 2020, and subsequent securities filings, could cause actual results to differ materially from management expectations as suggested by such forward-looking information: 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; market factors, including changes in fuel costs; economic conditions, including changes in interest rates and inflation; the possible effects of the continued COVID-19 pandemic; the extent and timing of costs and legal requirements related to coal combustion residuals; current and future litigation or regulatory investigations, proceedings, or inquiries, including litigation and other disputes related to the Kemper County energy facility; the 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 has been demonstrated at utility scale; unexpected changes in assumptions with respect to demand for electric energy; nuclear licensing-based compliance matters, including, for nuclear units, the timely submittal by Southern Nuclear of the Inspections, Tests, Analyses, and Acceptance Criteria documentation for each unit and the related reviews and approvals by the U.S. Nuclear Regulatory Commission ("NRC") necessary to support NRC authorization to load fuel, challenges with start-up activities, including major equipment failure, system integration and/or regional transmission upgrades, and/or operational performance; the ability to overcome or mitigate the current challenges at Plant Vogtle Units 3 and 4, including, but not limited to, those related to COVID-19, that could 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 and pipeline projects, including Public Service Commission approvals and Federal Energy Regulatory Commission 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 Municipal Electric Authority of Georgia ("MEAG") with respect to the portion of MEAG’s ownership interest in Plant Vogtle Units 3 and 4 involving Jacksonville Electric Authority, 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; performance of counterparties under ongoing renewable energy partnerships and development agreements; state and federal rate regulations and the impact of pending and future rate cases and negotiations, including rate actions relating to return on equity, 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 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; and the effect of accounting pronouncements issued periodically by standard-setting bodies. Southern Company and its subsidiaries expressly disclaim any obligation to update any forward-looking information.
Non-GAAP Financial Measures

In addition to including earnings in accordance with generally accepted accounting principles (GAAP), this presentation also includes historical adjusted earnings and earnings per share (EPS) excluding: (1) impacts related to (a) the sale of Gulf Power Company, (b) the sale of Plant Mankato, and (c) other acquisition and disposition activities; (2) charges, associated legal expenses, and tax impacts related to Mississippi Power’s integrated coal gasification combined cycle project in Kemper County, Mississippi (Kemper IGCC); and (3) earnings from the Wholesale Gas Services business.

The impacts of acquisitions and dispositions significantly impacted earnings and earnings per share for the three months ended March 31, 2020 and 2019.

Mississippi Power expects to substantially complete mine reclamation activities in 2020 and dismantlement of the abandoned gasifier-related assets and site restoration activities in 2024. The additional pre-tax period and closure costs associated with these activities, including related costs for compliance and safety, asset retirement obligation accretion, and property taxes, are estimated to total up to $27 million for the remainder of 2020, $15 million to $17 million annually in 2021 through 2023, and $5 million in 2024.

For all periods, presenting earnings and EPS excluding Wholesale Gas Services provides investors with an additional measure of operating performance that excludes the volatility that results from mark-to-market and lower of weighted average cost or current market price accounting adjustments.

This presentation also includes projected adjusted EPS for future periods excluding: additional acquisition and disposition impacts, any future charges associated with the Kemper IGCC and/or the construction of Plant Vogtle Units 3 and 4, and additional earnings of the Wholesale Gas Services business. Information concerning the magnitude of the impacts, if any, from these items on EPS is not available at this time. Accordingly, this presentation does not include a quantitative reconciliation of projected adjusted EPS (which is a forward-looking non-GAAP financial measure) because doing so would involve unreasonable efforts.

Southern Company believes presentation of EPS excluding the items described above provides investors with information comparable to guidance. Management also uses such measures to evaluate Southern Company's performance.
Q1 2020 Highlights

• Adjusted first quarter earnings exceeded estimate
• Top priority remains employee health and safety
• We are well prepared to manage the impacts of the COVID-19 pandemic
  – Operational performance has remained strong
  – No expected supply chain disruptions for utility operations or construction
  – Workforce has demonstrated resiliency through pandemic
• Continued progress on Vogtle 3&4 construction
  – Remain focused on meeting regulatory-approved in-service dates for Vogtle 3&4
• We remain committed to achieving our financial objectives for 2020
Vogtle 3 & 4

- Safety of the workforce and surrounding community remains paramount and will continue to guide our decision making.
- Next few months are pivotal as we adjust to a smaller, more streamlined workforce and seek to stabilize and increase productivity.
- We still expect to meet November 2021 and 2022 regulatory-approved in service dates:
  - Unit 3 aggressive site work plan target in-service date remains May 2021.
  - Unit 4 aggressive site work plan target in-service shifted back two months to May 2022.
- No change to total project capital cost forecast:
  - Allocated $66 million of contingency (Georgia Power’s share) to reflect cost risks associated with construction productivity, field support, subcontracts, and procurement, as well as the impacts of the April 2020 reduction in workforce.
  - Cost contingency combined with schedule cost margin remains ~20% of total estimate to complete.
Vogtle 3 & 4

- Through March, production for Unit 3 was generally consistent with the refined aggressive site work plan
  - Mechanical, electrical and subcontract activities started to build a backlog, which has continued
- COVID-19 pandemic has impacted productivity levels and pace of activity completion
- In Mid-April, implemented workforce reduction of ~20% intended to mitigate COVID-19 impacts
- Unit 3 production continues to meet or exceed November benchmark schedule
- Unit 3 direct construction ~90% complete
- Unit 3 Open Vessel Testing completion expected in next few days
- Unit 4 containment vessel top head and polar crane installation complete
Vogtle Unit 3 Direct Construction & Major Milestones
(Direct Construction is Bechtel’s Scope of Work)

- **Unit 3 In-service**
- **Fuel Load**
- **Start Hot Functional Testing**
- **Start Cold Functional Testing**
- **Main Control Room Ready for Testing**
- **Start Open Vessel Testing**
- **Start Integrated Flush**
- **Initial Energization**

**Direct Construction Monthly % Complete**
- **November Benchmark**
- **Aggressive Site Work Plan**
- **November Benchmark Milestone Start Dates**

**Marginal to regulatory approved in-service date of November 2021 in site’s refined aggressive work plan**

*Data for April 2020 represents estimate.*
## Q1 2020 Earnings Results

<table>
<thead>
<tr>
<th></th>
<th>2020</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Earnings Per Share As Reported</strong></td>
<td>$0.82</td>
<td>$2.01</td>
</tr>
<tr>
<td>Less:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acquisition and Disposition Impacts(^1)</td>
<td>$0.02</td>
<td>$1.26</td>
</tr>
<tr>
<td>Wholesale Gas Services</td>
<td>$0.02</td>
<td>$0.05</td>
</tr>
<tr>
<td><strong>Earnings Per Share Excluding Items</strong></td>
<td>$0.78</td>
<td>$0.70</td>
</tr>
</tbody>
</table>

1. Represents impacts related to the sales of Gulf Power and Plant Mankato and other completed dispositions.
Q1 2020 Year-Over-Year Adjusted EPS Drivers

Q1 2019: $0.70

Q1 2020: $0.78

Drivers:
- Weather: (2¢)
- Rates, Pricing, Usage, and Other: 9¢
- Southern Company Gas: 3¢
- Southern Power: (0¢)
- Parent & Other: (1¢)
- Shares: (1¢)

+ Investment in State-Regulated Utilities
- Weather (-10 cents vs. normal in 2020)
- Parent & Other
- Share Issuiances

Notes:
1 Excludes charges, associated legal expenses, and tax impacts related to the Kemper IGCC, acquisition and disposition impacts, and earnings from Wholesale Gas Services.
2 Southern Power includes (1¢) of divested earnings.
• We do not expect COVID-19 impacts to materially affect our long-term outlook:
  – Expected long-term EPS growth rate remains 4% to 6%
  – $40 billion, 5-year capital investment plan remains unchanged
  – No projected equity issuances through 2024
  – Liquidity is strong with good access to capital markets
  – 72 years of dividends equal to or greater than prior year

1. Future dividends are subject to approval of the Southern Company Board of Directors and depend on earnings, financial condition and other factors. Eight cent dividend increase approved by Southern Company Board of Directors on April 21, 2020.
COVID-19 social distancing and stay-at-home policies have negatively impacted commercial and industrial classes with some offset from positive residential impacts.

While the current situation is unprecedented, we have previously demonstrated significant cost management during economic downturns, including the 2008/2009 recession.

Our baseline projections indicate an overall 2020 weather normal annualized impact on retail sales of 2% - 5%

Estimated total impact on base revenues is $250M – $400M

Assumes stay-at-home policies phased out in mid-summer and modest economic recovery over balance of year. Actual impact will be highly dependent upon duration of stay-at-home policies and pace of recovery.
Continued to Enhance an Already Strong Liquidity Profile

SO Liquidity 12/31/19 ($B)

- Credit Facilities
- PC Bs
- Cash

$6.4B Net Liquidity

SO Liquidity 3/31/20 ($B)

- Credit Facilities
- PC Bs
- Cash

$7.6B Net Liquidity

Upcoming Maturities\(^1\) at Southern Power and the Parent Company are Fully Funded

- CP = Commercial Paper; PCBs = Pollution Control Bonds

Q1 2020 and Projected Full Year Adjusted EPS

Q1 2020 Adjusted EPS¹

- LDCs $0.16
- Electrics $0.61
- Energy Infrastructure under long-term contracts² ($0.11)
- All Other $0.04
- Parent $0.78

2020 Projected Full Year Adjusted EPS³

- LDCs $0.36
- Electrics $2.88
- Energy Infrastructure under long-term contracts² $0.29
- All Other ($0.45)
- Parent $0.08

Q2 2020 Estimate = $0.65 per share

Notes
Excludes wholesale gas services business, any further charges associated with construction projects, and further acquisition and disposition impacts.

1. 2020 Q1 average shares outstanding = 1,057M
2. Includes Southern Power, interstate natural gas pipelines and Southern Company system-owned distributed energy resources
3. Guidance provided as of February 20, 2020
Appendix
Significant Year-Over-Year Decrease in Coal Generation

1Energy mix represents all of the energy used to serve retail and wholesale customers. This energy mix includes resources under the direct financial control of Southern Company subsidiaries, as well as energy purchased from others. It is not meant to represent delivered energy mix to any particular retail customer or class of customers. With respect to renewable generation and associated renewable energy credits (RECs), to the extent an affiliate of Southern Company has the right to the RECs associated with renewable energy it generates or purchases, it retains the right to sell the energy and RECs, either bundled separately, to retail customers or third parties.
Capital Markets / Financing
### Projected Long-term Debt Financings

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Alabama Power</strong></td>
<td>$300</td>
<td>$300</td>
<td>$450</td>
<td>$900</td>
<td>$1,650</td>
</tr>
<tr>
<td><strong>Georgia Power</strong></td>
<td>$1,500</td>
<td>$850</td>
<td>1,450</td>
<td>800</td>
<td>3,100</td>
</tr>
<tr>
<td><strong>Mississippi Power</strong></td>
<td>-</td>
<td>400</td>
<td>-</td>
<td>-</td>
<td>400</td>
</tr>
<tr>
<td><strong>State-regulated Electrics</strong></td>
<td>$1,500</td>
<td>$1,150</td>
<td>$2,300</td>
<td>$1,700</td>
<td>$5,150</td>
</tr>
<tr>
<td><strong>Southern Power</strong></td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Southern Company Gas Capital</strong></td>
<td>350</td>
<td>600</td>
<td>750</td>
<td></td>
<td>1,700</td>
</tr>
<tr>
<td><strong>Nicor</strong></td>
<td>325</td>
<td>125</td>
<td>195</td>
<td></td>
<td>645</td>
</tr>
<tr>
<td><strong>Parent Company</strong></td>
<td>2,000</td>
<td>-</td>
<td>2,000</td>
<td>1,000</td>
<td>3,000</td>
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<tr>
<td><strong>Total Long-term Debt Issuance</strong></td>
<td>$3,500</td>
<td>$1,825</td>
<td>$5,025</td>
<td>$3,645</td>
<td>$10,495</td>
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1. Amounts and timing are subject to material change based upon numerous factors, including market conditions, regulatory approvals, the Southern Company system’s capital requirements, and available investment opportunities. Does not include remarketing of tax-exempt securities currently held by subsidiaries of the Company.
3. Could include DOE draws; excludes $125M of long-term bank notes.
4. Excludes $100M of long-term bank notes.
5. 2022 excludes $1,725M Junior Subordinated Notes remarketing related to the Company’s 2019 Equity Units.
# Long-term Debt Maturity Schedule

Remaining 2020-2022 maturities total ~$7 billion

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Alabama Power 3</td>
<td>$250</td>
<td>$310</td>
<td>$750</td>
<td>$1,310</td>
</tr>
<tr>
<td>Georgia Power</td>
<td>48</td>
<td>389</td>
<td>517</td>
<td>954</td>
</tr>
<tr>
<td>Mississippi Power</td>
<td>-</td>
<td>330</td>
<td>15</td>
<td>345</td>
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<tr>
<td><strong>State-regulated Electrics</strong></td>
<td><strong>$298</strong></td>
<td><strong>$1,029</strong></td>
<td><strong>$1,282</strong></td>
<td><strong>$2,609</strong></td>
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<tr>
<td>Southern Power</td>
<td>825</td>
<td>300</td>
<td>677</td>
<td>1,802</td>
</tr>
<tr>
<td>Southern Company Gas Capital 4</td>
<td>-</td>
<td>330</td>
<td>46</td>
<td>376</td>
</tr>
<tr>
<td>Nicor</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Parent Company</td>
<td>600</td>
<td>1,500</td>
<td>-</td>
<td>2,100</td>
</tr>
<tr>
<td><strong>Total Long-term Debt Maturities 3</strong></td>
<td><strong>$1,723</strong></td>
<td><strong>$3,259</strong></td>
<td><strong>$2,005</strong></td>
<td><strong>$6,987</strong></td>
</tr>
</tbody>
</table>

1. As of 4/30/2020
2. Excludes long-term bank notes, finance leases, and fixed rate pollution control bonds subject to remarketing
3. 2021 Total Long-term Debt Maturities includes $100M SEGCO maturity
4. Southern Company Gas includes maturities at Southern Company Gas Capital and AGL
Liquidity and Credit\(^1\)

as of 3/31/2020

Over $7.7 billion in committed credit facilities and available liquidity of $7.6 billion

### Credit Facility Expirations

<table>
<thead>
<tr>
<th></th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
<th>2023</th>
<th>2024</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unused Credit Lines</td>
<td>$33</td>
<td>-</td>
<td>$675</td>
<td>$125</td>
<td>$6,900</td>
<td>$7,733</td>
</tr>
</tbody>
</table>

### (in millions)

<table>
<thead>
<tr>
<th>(in millions)</th>
<th>Alabama Power</th>
<th>Georgia Power</th>
<th>Mississippi Power</th>
<th>Southern Company Gas</th>
<th>Southern Power</th>
<th>Parent</th>
<th>Other(^2)</th>
<th>Consolidated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unused Credit Lines</td>
<td>$1,328</td>
<td>$1,733</td>
<td>$210</td>
<td>$1,745</td>
<td>$591</td>
<td>$1,999</td>
<td>$30</td>
<td>$7,636</td>
</tr>
<tr>
<td>Cash</td>
<td>898</td>
<td>212</td>
<td>100</td>
<td>311</td>
<td>330</td>
<td>210</td>
<td>103</td>
<td>2,164</td>
</tr>
<tr>
<td>Total</td>
<td>$2,226</td>
<td>$1,945</td>
<td>$310</td>
<td>$2,056</td>
<td>$921</td>
<td>$2,209</td>
<td>$133</td>
<td>$9,800</td>
</tr>
<tr>
<td>Less: Outstanding CP</td>
<td>-</td>
<td>126</td>
<td>-</td>
<td>366</td>
<td>-</td>
<td>260</td>
<td>23</td>
<td>775</td>
</tr>
<tr>
<td>Less: PCB Floaters(^3)</td>
<td>854</td>
<td>550</td>
<td>40</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1,444</td>
</tr>
<tr>
<td>Net Available Liquidity</td>
<td>$1,372</td>
<td>$1,269</td>
<td>$270</td>
<td>$1,690</td>
<td>$921</td>
<td>$1,950</td>
<td>$110</td>
<td>$7,581</td>
</tr>
</tbody>
</table>

1. Due to rounding, numbers presented may not add-up precisely to the totals provided
2. Other includes amounts from non-SEC reporting subsidiaries including SEGCO, PowerSecure, Southern Nuclear, Southern LINC and others
3. PCB Floaters include all variable rate demand note pollution control revenue bonds outstanding
Vogtle 3 & 4
WASHINGTON – March 28, 2020 – North America’s Building Trades Unions (NABTU) members commend Southern Company on their recent announcement of reaching another major milestone at Georgia Power’s Vogtle 3 & 4 project. The final major lifts inside the containment vessels for the project are now complete following the placement of the Unit 4 containment vessel top head. Placement of the Unit 4 top head is a culmination of the hard work and dedication of the Vogtle 3 & 4 team.

The containment vessel is a high-integrity steel structure that houses critical plant components. Prior to lifting the containment vessel top head, workers successfully completed the placement of the 300-ton polar crane inside the Unit 4 containment vessel.

Vogtle 3 & 4 is currently the largest jobs-producing construction project in the state of Georgia, with more than 9,000 workers currently on site, and more than 800 permanent jobs available once the units begin operating. North America’s Building Trades Unions (NABTU) members represent 7,000 craft professionals on the project’s workforce.

NABTU and Southern Company have a longstanding partnership, built on a shared commitment to safety, training and workforce development. The project has been able to remain on track amidst the international COVID-19 pandemic due to the precautionary measures in place to preserve the health of workers.

This week, the company opened an onsite medical clinic accessible to all Vogtle Units 3 & 4 personnel. The clinic is open 24/7 and staffed with medical professionals who can administer tests for illnesses such as flu, strep, and COVID-19, if necessary. The free onsite services provide workers convenient medical care solutions and quick test results.

"Across the Southern Company system, we’re focused on protecting the safety and health of our employees and contract workers, including members of the North America’s Building Trades Unions,” said Tom Fanning, Southern Company chairman, president & CEO. “The rigorous preparations in place at Plant Vogtle have helped us take appropriate actions to respond to the impact of COVID-19."

“The health and safety of our members and their families is always job number one,” said Sean McGarvey, North America’s Building Trades Unions’ president. “We commend the extraordinary measures taken by Southern Company at Plant Vogtle to go above and beyond the call of duty to keep our members safe and healthy. Together, with great partners like Southern Company, the building trades are doing whatever it takes to help our country during this time and that includes ensuring we continue to safely operate, maintain and build new infrastructure to keep our nation powered and safe.”

In addition to the clinic, precautions to maintain health of those onsite include:
• Implementing self-isolation for team members who have been in close contact with individuals undergoing testing.
• Promoting prevention guidelines of the Centers for Disease Control and Prevention, such as social distancing.
• Staggering break times.
• Cancelling large in-person meetings.
• Suspending buses and trams onsite.
• Implementing aggressive cleaning practices.

Significant progress continues to be made at the construction site, with the project now approximately 84% complete.
Integrated Flush-
To clean and remove any foreign material that could potentially impact operation of equipment, all system piping and mechanical components that feed into the reactor vessel or coolant loops will be flushed. This flush will be performed utilizing permanent plant pumps and clean water, hydrolasing, air flushing, and some hand cleaning. Integrated flushing ensures systems can be tested without concern for damage from debris to meet the cleanliness and chemistry requirements necessary to operate systems per design.

Open Vessel Testing-
Verifies the water flows between the primary systems and the reactor vessel and that the pumps, motors, valves, pipes and other system components function as designed.

Main Control Room Ready for Testing-
To prepare for testing, the main control room must be able to be safely staffed by plant operators, which includes complete lighting, ventilation, fire protection and communication capabilities. Operators monitor and control equipment essential for safely starting and operating the plant. Having the equipment installed and operable in the main control room is a necessary step for completion of testing and start-up.
**Cold Hydro Test-**
Cold Hydro Testing contains several separate tests in different areas of the plant to verify that welds, joints, pipes, and other components of the reactor coolant system, steam-supply system and associated high pressure systems do not leak and will hold pressure. To accomplish these tests, internals will be installed in the reactor vessel and the integrated head package will be installed with all head bolts tensioned. The reactor coolant system will be filled and pressurized above normal operating conditions, backed down to normal design pressure, and held there while the comprehensive inspection is conducted.

**Hot Functional Test-**
Hot Functional Testing will demonstrate the integrated operation of the primary coolant system and steam supply system at design temperature and pressure with no fuel in the reactor. Operators use the heat generated by plant equipment to raise the temperature and pressure of plant systems to normal operating levels. The unit’s main turbine will be raised to normal operating speed using the plant’s steam. This test is the first time components and systems are operated together, allowing operators to exercise and validate procedures and is required before fuel is loaded into the reactor. Completion of the test marks the end of major construction.

**Fuel Load-**
Operators load nuclear fuel into the reactor for the first time in preparation for start-up testing and, ultimately, commercial operation. Completion of fuel load marks the end of major testing.