DIRECT TESTIMONY OF

STEPHEN E. KUCZYNSKI AND AARON P. ABRAMOVITZ

IN SUPPORT OF GEORGIA POWER COMPANY'S
TWENTY-THIRD SEMI-ANNUAL VOGTLE CONSTRUCTION MONITORING REPORT

DOCKET NO. 29849

I. INTRODUCTION

Q. PLEASE STATE YOUR NAMES, TITLES, AND BUSINESS ADDRESSES.

A. My name is Stephen E. Kuczynski. I am the Chairman, President, and Chief Executive Officer of Southern Nuclear Operating Company ("Southern Nuclear"). My business address is 7825 River Road, Waynesboro, Georgia 30830.

My name is Aaron P. Abramovitz. I am the Vice President of Business Operations for Plant Vogtle Units 3 and 4 (the "Project"). My business address is 7825 River Road, Waynesboro, Georgia 30830.

Q. MR. KUCZYNSKI, PLEASE SUMMARIZE YOUR EDUCATION AND PROFESSIONAL EXPERIENCE.

A. I graduated from the Milwaukee School of Engineering with a Bachelor of Science degree in electrical engineering technology. I am also a graduate of the Harvard Advanced Management Program and have earned a senior reactor operator license from the U.S. Nuclear Regulatory Commission ("NRC"). I was elected to my current position as Chairman, President, and Chief Executive Officer of Southern Nuclear in July 2011. I am responsible for construction of the Project and other nuclear development initiatives, as well as all operations at Southern Company's six operating nuclear reactors at plants Farley, Hatch, and Vogtle. I have more than 36 years of experience in the nuclear industry, joining Southern Nuclear from Exelon Nuclear, where I held the role of Senior Vice

President of Engineering and Technical Services, responsible for fleet engineering, capital projects, outage services, and nuclear fuel. Prior to that role, I was the Senior Vice President of Exelon Nuclear's Midwest Operations. In that role, I was responsible for oversight of Exelon Nuclear's six Illinois operating facilities and 11 reactors.

I previously served as chair of the Nuclear Energy Institute's ("NEI") Advanced Reactor Working Group and the New Plant Advisory Committee. I am a former member of the Terrestrial Power Industry Advisory Board and the board of advisors of X-Energy, a nuclear reactor and fuel design engineering services company. I previously served on the board of directors and the executive committee of NEI, the Institute of Nuclear Power Operations National Nuclear Accrediting Board, as well as the advisory boards for the Oak Ridge National Laboratory Nuclear Science and Engineering Directorate, and the U.S. Department of Energy's ("DOE") Gateway for Accelerated Innovation in Nuclear. I previously served as a member of the DOE's Office of Nuclear Energy, Nuclear Energy Advisory Committee. I have received the Special Achievement Award from the U.S. Nuclear Infrastructure Council and the Presidential Citation from the American Nuclear Society. I testified before Congress about advanced nuclear technology innovation on May 17, 2016.

Q. MR. KUCZYNSKI, HAVE YOU PREVIOUSLY TESTIFIED BEFORE THE GEORGIA PUBLIC SERVICE COMMISSION ("COMMISSION")?

A. Yes. I testified in this docket regarding the Eighteenth, Nineteenth, Twentieth/Twenty-first, and Twenty-second Semi-annual Reports.

Q. MR. ABRAMOVITZ, PLEASE SUMMARIZE YOUR EDUCATION AND PROFESSIONAL EXPERIENCE.

A. I graduated from the University of Georgia with a Bachelor of Business Administration in Finance and Management Information Systems. I joined Southern Company as a contractor in the Financial Strategy and Decision Support organization. This was followed by a series

of Financial Analyst roles in various disciplines that included Financial Planning, Financial Analysis, Regulatory Support, and Competitive Intelligence. From there I transitioned to Georgia Power Company ("Georgia Power") to serve as the Coordinator for Forestry and Right of Way services. In 2008, I was assigned to the Kemper Project in Mississippi, where I served in financial leadership roles of increasing responsibility, eventually serving as the Project's Finance Director, where I was responsible for governance, reporting, regulatory support, and executive and Board of Directors communications. In 2015, I returned to Atlanta to serve as the Director of Investor Relations for Southern Company, where I was responsible for Southern Company's communications and relationships with the investment community. In 2018, I was named the Southern Nuclear Vogtle 3 and 4 Vice President of Business Operations. In this role, I have responsibility for Southern Nuclear's Project Controls, Risk Management, Budgeting and Reporting, and Commercial Analysis & Controls.

Q. MR. ABRAMOVITZ, HAVE YOU PREVIOUSLY TESTIFIED BEFORE THE COMMISSION?

A. Yes. I testified in this docket regarding the Nineteenth, Twentieth/Twenty-first and Twenty-second Semi-annual Reports.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. The purpose of our testimony is to support the Twenty-third Semi-annual Vogtle Construction Monitoring ("VCM") Report and to update the Commission on efforts by Southern Nuclear regarding the construction and future operation of this long-term asset for Georgia customers. Additionally, our testimony, along with the testimony of Georgia Power's witnesses Mr. McKinney and Mr. Haswell, provides justification for the verification and approval of Georgia Power's actual expenditures invested in the Project between January 1, 2020 and June 30, 2020 (the "Reporting Period"), as made pursuant to the Certificate of Public Convenience and Necessity.

II. COVID-19 IMPACT AND RESPONSE

Q. PLEASE PROVIDE AN UPDATE ON THE COVID-19 IMPACTS ON SITE.

A. As stated in the VCM 23 Report, the Project continues to navigate the effects of COVID-19 on its workforce, cost and schedule. Protecting the health and safety of the Vogtle Units 3 and 4 team and the surrounding community remains the highest priority for the Project.

The Project continues to experience trends in positive COVID-19 tests similar to the surrounding local area. As of October 20, 2020, over 1,000 workers have tested positive, with almost 1,000 workers eligible to return to work. Since the beginning of the COVID-19 pandemic, over 4,000 workers have been tested onsite and approximately 6,600 workers have been isolated for at least 14 days as a result of being a close contact.

While the number of positive cases and isolations has been declining in recent months, the Project was impacted throughout the Reporting Period. Project performance impacts were experienced in large part due to higher than normal absenteeism for both craft and non-manual personnel. Even with our improving metrics for positive cases, isolations, and absenteeism, there are other disruptive aspects such as the impact to near-term planned work or ongoing work suddenly having to stop or change direction due to a person, or multiple people, requiring isolation. In addition to the direct construction impacts, subcontractors also faced similar obstacles and experienced a degradation in their performance as well. These performance challenges contributed to schedule milestone delays and increased costs on the Project. Further, disruptions in the supply chain continue to impact the Project as suppliers across the country navigate the pandemic's effects and related state and local government restrictions.

Q. PLEASE PROVIDE AN UPDATE ON THE COVID-19 PROTOCOLS THAT ARE IN PLACE ON THE PROJECT.

A. As mentioned in previous filings and testimony, the Project team has taken numerous proactive measures in response to COVID-19. These actions include isolation of tested,

positive, and close contact individuals, as well as the expansion of on-site medical facilities that are equipped to administer COVID-19 testing, deep cleaning of workspaces, reducing the number of workers in given areas, and utilizing facial coverings when social distancing is not possible.

As flu season approaches, the Project team is encouraging all personnel to get vaccinated for the flu. While this preventive measure does not decrease the chances of getting COVID-19, the medical team on site believes that it will help in the identification of symptoms between the two. The Project is offering flu vaccines onsite through the medical village.

The Project team will continue to work with health professionals to monitor the actions undertaken and will adjust as necessary to protect the health and safety of the workforce and community while reducing the impacts of the pandemic on the Project.

We expect the pandemic will continue to present challenges and risks to the Project. Even with this realization, the fact remains, however, that circumstances outside of our direct control may arise that could affect project performance and cost. Currently, the range of impact to the Company's estimated total cost is $70 million to $115 million. As the pandemic continues, the overall long-term impact of the pandemic on cost and schedule remains difficult to estimate definitively, and Southern Nuclear cannot presume any one outcome or predict the ultimate cost and schedule impacts based on the pandemic at this time.

III. PROJECT STATUS

Q. WHAT IS THE CURRENT STATUS OF THE PROJECT?

A. As discussed in the VCM 23 Report, the Project team continues its work on promoting a safety-first culture. The Total Recordable Incident Rate continues its trend below the Heavy Construction industry average. Site leadership continues to emphasize the importance of safety and, in the month of September, the Project experienced zero recordable injuries.

As Mr. McKinney and Mr. Haswell have described, there has been significant progress recently on Project milestones. Several major milestones have been completed since the last Reporting Period, including Unit 3 Cold Hydro Testing ("CHT") and Turbine on Gear ("TOG"), which are significant accomplishments and support the start of Hot Functional Testing ("HFT").

Additionally, Site Operations is preparing for Unit 3 Fuel Load and Startup Testing, which will commence following the completion of HFT and other pre-operational activities. Once fuel is loaded for Unit 3, Startup Testing will demonstrate the integrated operation of the primary coolant system and steam supply system at design temperature and pressure with fuel inside the reactor prior to declaration of commercial operation.

The Project continues to plan for commercial operation ahead of the regulatory-approved in-service dates of November 2021 for Unit 3 and November 2022 for Unit 4.

Q. WHAT IS THE PERCENT COMPLETE FOR THE PROJECT?

A. We provide the Total Project Percent Complete as of the end of the Reporting Period on page 15 of the VCM 23 Report. As of September 2020 (the last date for which information is available as of the filing of this testimony), those figures are:

Project Phase	September 2020 % Complete
Engineering	99.9%
Procurement	99.6%
Construction	85.5%
I&C/Cyber Security	99.9%
ITP/Startup Testing	32.7%
Total Project	**88.6%**

IV. STATUS OF PROJECT SCHEDULE

Q. DID THE JULY 2020 SCHEDULE UPDATE RESULT IN ANY CHANGES TO THE AGGRESSIVE SITE WORK PLAN?

A. Yes, as discussed in the VCM 23 Report, evaluation of the Project's performance against the February 2020 schedule refinement and impacts from COVID-19 necessitated the need to reforecast the aggressive site work plan in July 2020 ("July 2020 Schedule Update"). This schedule update effort resulted in shifts to milestone dates as the Site team accounted for the addition of hours to Bechtel's Direct Construction to-go work, as well as recent performance and anticipated future production as impacted by a number of factors, among them the COVID-19 pandemic

In the July 2020 Schedule Update, Unit 3 CHT was planned to occur in September 2020, with HFT planned to occur during the fourth quarter of 2020. Considering the planned timing of CHT and HFT, the Project team was able to re-sequence the Structural Integrity Test ("SIT") and Integrated Leak Rate Test ("ILRT"), which were both successfully completed in July 2020. The July 2020 Schedule Update did not adjust Unit 3 Fuel Load or Commercial Operation Date ("COD").

The July 2020 Schedule Update also evaluated the amount of effort and associated hours necessary to complete the final phases of construction for Bechtel scope across both units, Balance of Plant ("BOP") and fabrication.

As stated in the VCM 23 Report, the July 2020 Schedule Update was premised on 1.7% of direct construction completion per month for Unit 3 and 1.7% direct construction completion per month through the end of the year for Unit 4. Over the past three months since the July 2020 Schedule Update, Unit 3 has been averaging direct construction completion of 1.6% and Unit 4 has averaged 1.1%. While these numbers are lower than the July 2020 Schedule Update targets, Unit 3 remains ahead of the 1% average expected

to meet its November Benchmark, and Unit 4 is only slightly off the 1.2% average November Benchmark pace required through the end of this year.

Q. SINCE THE SUBMITTAL OF THE VCM 23 REPORT, HAS THE SITE UPDATED THE EXPECTATIONS FOR THE TIMING OF MAJOR MILESTONES FOR ITS WORKPLAN?

A. Yes, with Unit 3 direct construction approximately 94% complete, CHT complete, and as the site begins to shift its focus towards commencing operations, our range of completion outcomes continue to narrow. For Unit 3, we are shifting from an aggressive site workplan to more of an expectation for the timing of remaining activities and major milestones. Considering impacts from COVID-19 and the recent productivity of electrical, and subcontracted scopes of work in Unit 3, the Project team has moved the HFT, Fuel Load and COD dates out by approximately twelve weeks from the July 2020 Schedule Update dates. These changes will allow Construction additional time to finish required scopes of work to support the success of these remaining Project milestones. Project leadership will continue to evaluate the site work plan for opportunities to complete work efficiently while also attempting to reduce risk to the successful startup of plant operations.

The table on the following page summarizes Southern Nuclear's expected timing for the remaining major milestones for Unit 3 as compared to the November Benchmark and the site work plan that was updated in July 2020.

Table 1-A – Unit 3 Milestone Dates			
Major Milestones	Current Site Expectation	November Benchmark	July 2020 Aggressive Site Schedule
Cold Hydro Testing Finish	*Complete*	*Complete*	*Complete*
Hot Functional Testing at temperature and pressure	January 2021	February 2021 (1)	October 2020
Fuel Load	April 2021	June 2021	December 2020
Commercial Operation Date	August/September 2021	November 2021	May 2021

(1) Margin exists in the November benchmark for the start of HFT, which could occur by late-March 2021 and still meet the regulatory-approved COD of November 2021.

The table below summarizes Southern Nuclear's current aggressive site work plan for Unit 4 as compared to the its November Benchmark and the July 2020 Schedule Update.

Table 1-B – Unit 4 Schedule Dates			
Major Milestones	Current Aggressive Site Work Plan	November Benchmark	July 2020 Aggressive Site Schedule
Start Open Vessel Testing	May 2021	August 2021	May 2021
Finish Open Vessel Testing	June 2021	September 2021	June 2021
Cold Hydro Testing Finish	August 2021	November 2021	August 2021
Hot Functional Testing at temperature & pressure	November 2021	March 2022	October 2021
Fuel Load	February 2022	June 2022	January 2022
Commercial Operation Date	June 2022	November 2022	May 2022

Project leadership acknowledges that our expected case for Unit 3 is challenging and Unit 4's site work plan is aggressive, but continues to believe that working toward a challenging schedule is necessary to maintain the focus and drive of the Project, identify and mitigate risks early, and ultimately support the Project's objective of meeting the regulatory-approved in-service dates for Units 3 and 4.

Q. PLEASE PROVIDE AN UPDATE ON THE PROJECT'S PROGRESS AGAINST THE UNIT 3 REGULATORY BENCHMARK SCHEDULE.

A. The November benchmark schedule provides points of comparison against the site work plan. It also provides forecasted production levels needed to meet the regulatory-approved in-service date of November 2021 for Unit 3. Through September 2020, Unit 3 has a surplus of direct hours when compared to the November benchmark schedule. In addition to being ahead of the benchmark schedule in hours, the Project continues to stay in line with the required milestones necessary to meet the regulatory-approved in-service dates. For reference, while our current November benchmark assumes HFT in February, that testing could start by late-March 2021 to support Fuel Load in mid-year, which would still support a November 2021 completion date for Unit 3.

Considering current progress, current pace of completion, and assuming HFT starts near the beginning of next year, Unit 3 could be completed ahead of the November 2021 regulatory commitment.

V. CONSTRUCTION AND TESTING PROGRESS

Q. HOW IS CONSTRUCTION PROGRESSING AT THE SITE?

A. As of the end of September 2020, total construction on the Project is approximately 86% complete when including site-specific BOP structures. Unit 3 direct construction, consisting of Bechtel's current scope of work (plus direct scope completed in the Unit 3 power block prior to Bechtel) is approximately 94% complete, Unit 4 direct construction is approximately 70% complete, and BOP is approximately 87% complete. Significant progress continues in all phases of construction, with the setting of the Unit 3 Shield Building roof, setting of the Unit 4 Containment Vessel top head, and continued bulk and system commodity installation in both units, as well as continued system turnovers in support of component testing.

Q. HOW HAS ELECTRICAL PERFORMANCE ON UNIT 3 BEEN SINCE THE LAST REPORTING PERIOD?

A. During the Reporting Period, Unit 3 electrical performance continued to drive the critical path. Lower than planned electrical earnings contributed to lower than planned system turnovers as compared to the site work plan. As stated in our VCM 22 testimony, as the Project has progressed into electrical system work related to the now completed CHT and upcoming milestones of Condenser Vacuum and HFT, the complexity of this work has been a contributing factor for the lower than planned performance. Additionally, the COVID-19 effects on the workforce have amplified these impacts. Site leadership continues to work to remove obstacles and implement plans to improve electrical commodity performance.

Project success will continue to be dependent on Construction's ability to meet its projected construction curves in this commodity. The site's work plan for electrical earnings will continue to face challenges as production requirements increase to support system turnovers and startup milestones. However, Project leadership expects some mitigation of these challenges as work areas start to become less congested, which should support an increase in productivity.

Q. PLEASE DISCUSS THE PROGRESS OF SYSTEM TURNOVERS FOR UNIT 3.

A. The current site work plan continues to support the Project team's progress through significant testing evolutions leading up to Plant operations. The experience gained through each testing evolution provides the Project team additional lessons learned and reduces the amount of outstanding Project risk associated with Plant testing. Additionally, the Project team continues to increase their test execution proficiency with the completion of each testing evolution.

The Project team's focus on completing scope directly associated with major testing evolutions has impacted the total number of completed system turnovers as compared to

the site work plan. Through October 1, over 42 systems have been turned over from Construction to Testing and over 87 systems are at 90% completion or higher. Focusing exclusively on achieving a system turnover schedule or measuring progress solely by the number of system turnovers would have significantly hampered the amount of testing completed by the Project team during the Reporting Period and, in turn, increased the amount of potential risk associated with the Project.

The Project continues to reduce risk through the completion of major testing evolutions including Unit 3 SIT/ILRT, TOG, and CHT. CHT represented the first time the primary and secondary systems for Unit 3 were operated together, demonstrating a level of integrated system operation prior to the start of HFT.

Q. WHEN WILL FUEL INITIALLY BE DELIVERED TO THE SITE?

A. The site continues to prepare for its first receipt of fuel during November. Readiness for fuel receipt is one of the key milestones laying the foundation for the site to achieve approval for Fuel Load. The area required for fuel receipt will be the first area in the Nuclear Island of the site to be turned over to Operations. Additionally, as evidenced by a successful WANO Pre-Startup Safety Review that highlights the strong positioning we have attained to instill the right safety culture to successfully startup and operate these units, completion of the NRC-evaluated Emergency Preparedness exercise, and the receipt of the first 62 Reactor and Senior Reactor Operator licenses, the Operations team continues to successfully demonstrate our readiness for fuel receipt and plant operations to both the NRC and the World Association of Nuclear Operators ("WANO") as part of ongoing reviews.

Q. WHAT IS THE STATUS OF HOT FUNCTIONAL TESTING FOR UNIT 3?

A. HFT places the Plant's systems into normal operating conditions and demonstrates the integrated operation of the primary coolant system and steam supply system at design temperature and pressure, but without fuel in the reactor. Heat generated by the RCPs will be utilized to raise the temperature and pressure of plant systems to normal operating levels. This test will be the first time that components and systems are operated together, allowing operators to exercise and validate procedures as required before Fuel Load.

The Project team has remained focused on completing Construction scope to support testing evolutions in preparation for the execution of HFT in the coming months. As stated previously, several critical testing evolutions that are prerequisites to the execution of HFT were successfully completed and provide additional support for the Project team's focus on Unit 3's Startup Testing.

The Project team has started to successfully operate Unit 3's RCPs for the first time. RCPs are a critical component for the operation of the AP1000 and will provide the heat to raise the temperature and pressure of plant systems to normal operating levels, which is a key element for HFT. The completion of TOG and completion of Condenser Vacuum later in the year will prepare the Unit to utilize the secondary systems and main turbine. During HFT, the main turbine will be increased to normal operating speed using plant steam. HFT will be the first time the components and systems are operated together, allowing operators to run and validate procedures as required in preparation for Fuel Load. Completion of HFT will validate many testing ITAACs, which are required to receive approval to load fuel.

Following the completion of HFT, the Project team will cool down the Plant and begin preparing for initial fuel load into the Reactor Vessel. The Site Operations team will perform surveillances to ensure conditions and testing requirements are met prior to loading fuel as preparations for Startup Testing continues.

Through the remainder of this year and into the first quarter of 2021, the Project team will continue to focus on completion of system turnovers, major testing evolutions, and documentation in preparation for NRC approval to load fuel and transition into Plant operations.

Q. WHAT ARE ITAAC AND HOW MANY NEED TO BE SUBMITTED TO THE NRC?

A. The Inspections, Tests, Analyses, and Acceptance Criteria, also known as ITAAC, are the standard identified in the Combined Operating License that must be met to verify that the as-built Vogtle Units 3 and 4 conform to the approved plant design and applicable regulations. All ITAAC must be completed and accepted by the NRC before Vogtle Units 3 and 4 can load fuel and start operations. There are several types of ITAAC, but the majority are related to engineering, construction, and testing. The current number of ITAAC required for Unit 3 is 399. Unit 4 currently requires only 394 because there are a few ITAAC that are common to both Units and must be submitted with Unit 3 to support Fuel Load. Southern Nuclear may load fuel following its final ITAAC submission, and after the NRC makes a finding under 10 CFR 52.103(g) (also known as the 103(g) letter) that all acceptance criteria have been met. The 103(g) finding will authorize Southern Nuclear to load fuel into the Reactor Vessel and commence Startup Testing.

Q. PLEASE PROVIDE AN UPDATE ON THE STATUS OF ITAAC SUBMITTALS.

A. SNC and NRC staff have been working together for years on proactive measures to manage the ITAAC process and to mitigate the impacts of the expected volume of ITAAC reviews prior to Unit 3 Fuel Load. Early on, SNC and NRC worked together to reduce the volume of ITAAC submissions by combining similar ITAAC into a single submission. These efforts reduced the number of required ITAAC from 881 to 399 for Unit 3, and from 881 to 394 on Unit 4. Another key mitigation measure was the establishment of the Uncompleted ITAAC Notification ("UIN") process where UINs provided NRC staff with

advance notice of the closure methodology for each ITAAC. All Unit 3 and Unit 4 UINs have been submitted to and accepted by the NRC. This process has assisted in "front loading" the ITAAC review process by reducing the workload as the closure documentation is submitted leading up to Fuel Load. ITAAC Closure Notifications ("ICNs") document the results that meet the acceptance criteria. ICNs have and will be submitted following completion of construction and/or testing. Through October 15, 2020, 149 of 399 Unit 3 ICNs and 105 of 394 Unit 4 ICNs have been verified as complete per NRC reporting.

SNC and NRC staff continue to engage in communication to identify, discuss, and resolve ITAAC-related issues. Both organizations have worked together to mitigate the time between SNC's submittal of its ITAAC all-complete letter and NRC's issuance of the 52.103(g) finding, which is currently planned to be a maximum of 17 days. The Project team remains confident that all ITAAC ICNs will be submitted in a timely fashion supportive of the November regulatory-approved in-service dates and that the NRC will have adequate resources to support their review.

Q. PLEASE PROVIDE AN UPDATE ON UNIT 4 AS IT PREPARES FOR TRANSITION FROM CONSTRUCTION TO TESTING.

A. As discussed in the VCM 23 Report, Unit 4 is approaching the transition from heavy construction activities to testing as preparations begin to support the Initial Energization and Integrated Flush testing milestones next year. The Project team continues to work diligently to increase the level of craft personnel on Unit 4. Recall, in mid-April, as COVID-19 positive cases, self-isolation rates, and absenteeism continued to grow, the Project took action to reduce the site's workforce by approximately 20%. This reduction in workforce was intended to mitigate the impacts of the pandemic to the site. As a result of that reduction in force, many of Unit 4's remaining resources were shifted to Unit 3.

Currently, the Project team is in the process of building back resources for Unit 4 as Unit 3 construction nears completion.

Even as craft resources are increasing, Unit 4 continues to make progress through construction and testing activities, as we expect Unit 4's Main Control Room to be ready to support testing before the end of this year. The team continues to incorporate lessons learned from Unit 3, such as Unit 4 planning to utilize the "Train" approach in the upcoming Initial Energization milestone as it begins component testing. The AP1000 Units have a secondary (redundant) energy pathway that supports energization of the Unit. The "Train" approach allows testing to occur on one energy pathway, while the other is de-energized, allowing for flexibility in construction and testing.

VI. COST FORECAST

Q. PLEASE DISCUSS ANY UPDATES TO THE TOTAL CAPITAL FORECAST FOR THE PROJECT.

A. Southern Nuclear continues to utilize its processes and tools to monitor and evaluate costs associated with completing the Project. As stated in the VCM 23 Report, Georgia Power's estimated cost for the Project increased by approximately $150 million. Following the cost contingency allocation and contingency replenishment that occurred during the second quarter of 2020, Georgia Power's projected share of the Project is now $8.5 billion.

Q. PLEASE PROVIDE AN UPDATE ON PROJECT COST CONTINGENCY.

A. As discussed in the VCM 23 Report, the Company's share of the projected cost to complete the Project had included $366 million in cost contingency. In the second quarter of 2020, this contingency was fully allocated and was exceeded by approximately $34 million. The drivers of the most recent contingency allocation were similar to past allocations and were amplified by the impact of COVID-19 on the Project. These drivers include higher than forecasted costs associated with construction productivity; craft labor incentives;

additional resources for supervision, field support, project management, initial test program, startup, operations and engineering support; subcontracts; and procurement.

Following the contingency allocation, Southern Nuclear recommended additional construction contingency be added to the Total Project Cost Forecast, of which the Company's share is approximately $114 million. The Company and Southern Nuclear continue to anticipate that all the forecasted contingency, including the most recent addition, will be allocated and spent by the completion of the Project.

Southern Nuclear continues to evaluate cost impacts to the Project and believes that there likely will be a contingency allocation soon but has not yet completed its analysis.

Q. HOW ARE POTENTIAL COST RISKS TO THE PROJECT EVALUATED?

A. Southern Nuclear utilizes a monthly cost forecasting process to evaluate cost and cost risks to the Project. This process includes regular monthly meetings with each functional area to review actual spend to date, budgets, forecasted costs and areas of risk or concern. Southern Nuclear utilizes a monthly Cost Control process to ensure timely updates to the Project's estimate to complete, forecast assumptions, and cost risks associated with staffing, procurement, Bechtel's remaining scope of work, subcontracts, and Westinghouse services, as well as other engineering and supporting activities. Through combining its monthly Cost Control process with the risk management program, change control process, project metrics, and weekly updates to the Project's schedule, the Project team evaluates and communicates the Project's cost risk and cost contingency profile on a monthly basis to the Project owners and to the Public Interest Advocacy ("PIA") Staff.

At a summary level, the Project's forward-looking cost risk profile can be grouped into categories which include Bechtel Direct Construction, Subcontracts, Procurement, Engineering, and Other Staffing. Using its suite of tools and analysis, and taking into account the Project's forward-looking risk profile, as well as progress to date, Southern Nuclear develops a range of cost risk to the Project, which is highly dependent on Direct

Construction's "to-go" CPI, Direct Construction's "to-go" hours or effort to completion, and the projected in-service dates for Units 3 and 4. Further, and equally important to estimating the range of cost risk remaining on the Project, Southern Nuclear also considers the existing contingencies embedded in the Project's current estimate to complete. Together the estimated range of cost risks and available contingencies provide, Southern Nuclear with estimates of potential cost overrun scenarios on the Project.

Q. PIA STAFF AND VMG HAVE PROVIDED TESTIMONY STATING THE PROJECT IS GOING TO OVERRUN THE CURRENT COST ESTIMATE. DO YOU HAVE ANY COMMENTS ON THEIR COST ANALYSIS?

A. PIA Staff and VMG's analyses provide data points to this Commission, the Project's owners, and Southern Nuclear, just like the various analyses and data produced by Georgia Power's Oversight team and Southern Nuclear itself. When assessing the risk profile for this Project, Southern Nuclear considers and values the analyses and opinions from each entity that has roles to play in completion of this Project. While the analysis filed as part of PIA Staff and VMG's VCM 22 testimony is valuable, it is important to bear in mind that it is just one data point.

As Southern Nuclear reviewed PIA Staff and VMG's analysis, it was apparent that the analysis was a very high-level view, or what is often referred to as an "order of magnitude" analysis. The analysis used adjusted initial contract values for Bechtel's craft hours and field non-manual services as its primary basis, then multiplied those dollar values by various CPI factors to reach a conclusion on projected Project costs at completion of the Project. The analysis performed by VMG assumes the remaining to-go Construction hours as of July 2018 will be earned at CPI rates of 1.4 and 1.45.

In reviewing the PIA Staff and VMG calculation, it appears several key data points were not considered in the analysis. First, PIA Staff and VMG's analysis appears to be based off "to-go" costs established in July 2018, rather than Southern Nuclear's preferred

approach of assessing cost risk based on a routinely updated estimate to complete that considers cost spent to date, updated risk assessments, updated cost forecast assumptions, contingency allocations to-date and, ultimately, Project progress to date. Since PIA Staff and VMG's analysis was first presented in VCM 22, Southern Nuclear would have expected PIA Staff and VMG's calculation to start from August or September of 2019, taking into account the information known at that time, as opposed to starting that analysis from July 2018 and ignoring over a year's worth of Construction hours earned and worked to date. Thus, it appears PIA Staff and VMG applied CPI rates of 1.4 and 1.45 to all hours, including hours which had been actualized prior to the filing of PIA Staff and VMG's testimony.

As a point of reference, with Unit 3 approximately 94% complete, BOP approximately 85% complete, and Unit 4 approximately 70% complete, the Project has experienced a CPI rate of approximately 1.35 to date vs. the 1.4 and 1.45 assumed in PIA Staff and VMG's analysis. Also, while not out of the realm of possibilities, for the Project to finish Direct Construction at an ending point of 1.4 and 1.45 CPI (as assumed in PIA Staff and VMG's analysis), Southern Nuclear estimates that each hour earned from this point forward on Unit 3, BOP3, and Unit 4 would need to be earned at a CPI of approximately 1.7.

Further, in July 2018, there was $410 million of embedded cost contingency in Southern Nuclear's estimated cost to complete for Bechtel Direct Construction. As a key variable in its June 2018 cost estimate, Southern Nuclear assumed that this embedded cost contingency would be utilized to offset the potential of higher than expected CPI. It does not appear that PIA Staff and VMG included this embedded cost contingency in its calculation based on CPI performance.

Q. DO YOU THINK THE PIA STAFF AND VMG'S ANALYSIS IS INACCURATE?

A. As stated earlier, the analysis is valuable as a data point; however, there are multiple approaches and methods to assess the cost risk for this Project. In July 2018, Direct Construction of Unit 3 and Unit 4 represented over one third of remaining costs for the Project, and that ratio still holds today. Direct Construction also represents the largest cost risk to the Project, accounting for over half of the remaining cost risk to the Project. While it is possible that the Total Project Cost could increase in the future, based on its current analysis of risks and the recent cost increase to the Project, Southern Nuclear believes that the amount of that potential increase is less than that estimated by the PIA Staff and VMG.

VII. CONCLUSION

Q. HOW WOULD YOU DESCRIBE THE PROGRESS DURING THE REPORTING PERIOD?

A. Even in the challenging environment of a pandemic, the Project team made significant progress towards the goal of achieving the regulatory-approved in-service dates. The Project's ability to meet those dates is dependent on numerous factors, as discussed throughout this testimony.

While the pandemic directly impacted productivity and progress on both Units, Project leadership rose to the challenge of creating a safe environment in which the Project could operate, and continues to identify and incorporate opportunities for efficiencies as part of a comprehensive plan to improve performance and achieve the regulatory-approved in-service dates.

The Project team remains committed first to the safety of the personnel at the site and the surrounding community, while also focused on executing to the site work plan to maintain margin to the regulatory-approved in-service dates. Production in electrical and

subcontract performance remain areas of focus for the Project, as Project leadership continues to implement process improvements for planning, scheduling, and coordination of work, including critical subcontractors. Project leadership continues to focus on opportunities to complete major testing evolutions, implement actions to address performance, evaluate effectiveness, and further erode risk as the Project transitions through testing, startup, and into operations.

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes.