DIRECT TESTIMONY OF

DAVID L. MCKINNEY AND JEREMIAH C. HASWELL

IN SUPPORT OF GEORGIA POWER COMPANY’S   
TWENTY-Sixth SEMI-ANNUAL VOGTLE CONSTRUCTION MONITORING REPORT

DOCKET NO. 29849

1. INTRODUCTION

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

A. My name is David L. McKinney. I am the Senior Vice President of Nuclear Development at Georgia Power Company (“Georgia Power” or the “Company”). My business address is 241 Ralph McGill Boulevard, N.E., Atlanta, Georgia 30308.

My name is Jeremiah C. Haswell. I am the Project Oversight Director for Georgia Power. My business address is 241 Ralph McGill Boulevard, N.E., Atlanta, Georgia 30308.

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

A. I graduated from Auburn University with a Bachelor of Science degree in Civil Engineering. I joined Southern Company Services as a co-op in the Hydro Engineering department and moved from there into a Project Engineer role in Southern Company Generation. I then served as a Civil Engineering Manager in the Technical Services Department before taking an assignment as Project Manager of Combined Cycle Construction. After that, I served as General Manager of New Generation Construction. I have served in various leadership roles on Plant Vogtle Units 3 and 4 (the “Project”) since 2009, with my current role being the Senior Vice President of Nuclear Development for Georgia Power. In this role, I have responsibility for Commercial and Cost Management, Project oversight, regulatory relationships with the Georgia Public Service Commission (the “Commission”) and their staff (“Commission Staff”) as well as the U.S. Department of Energy (“DOE”).

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

A. Yes. I testified in this docket regarding the Sixth, Seventh, Eighth, Ninth/Tenth, Eleventh, Twelfth, Thirteenth, Fourteenth, Fifteenth, Sixteenth, Seventeenth, Eighteenth, Nineteenth, Twentieth/Twenty-first, Twenty-second, Twenty-third, Twenty-fourth, and Twenty-fifth Semi-annual Vogtle Construction Monitoring (“VCM”) Reports.

Q. Mr. Haswell, please summarize your education and professional experience.

A. I graduated from the University of Alabama at Birmingham with a Bachelor of Science degree in Mechanical Engineering and a Master of Science degree in Civil Engineering (Construction Management focus). I completed a Master of Business Administration at Augusta State University and am a licensed Professional Engineer. I joined Southern Company as an Engineer in Southern Company Services Research and Technology Management focusing on new technology deployment in the existing operating fleet. I held multiple Team Leader roles in the areas of Maintenance, Engineering, and Compliance at Alabama Power Company’s Plant Gorgas. In 2012, I moved to Plant Vogtle Units 3 and 4 in the Construction Compliance organization and later the role of Construction Compliance Supervisor for the Turbine Island and Balance of Plant. I am currently the Project Oversight Director with responsibility for regulatory filings for the Project, compliance with Georgia Power’s loan guarantee with the DOE, Project oversight, risk management, and lead interface with the Commission Staff, Construction Monitor, and the other Project Owners (Oglethorpe Power Corporation, the Municipal Electric Authority of Georgia, and Dalton Utilities, through the Board of Water, Light and Sinking Fund Commissioners of the City of Dalton) (collectively, the “Owners”).

Q. Mr. Haswell, have you previously testified before the commission?

A. Yes. I testified in this docket regarding the Thirteenth, Fourteenth, Fifteenth, Seventeenth, Eighteenth, Nineteenth, Twentieth/Twenty-first, Twenty-second, Twenty-third, Twenty-fourth, and Twenty-fifth Semi-annual VCM Reports.

Q. HOW IS YOUR TESTIMONY ORGANIZED?

A. Our testimony is submitted on behalf of Georgia Power and a panel consisting of Stephen Kuczynski and John Williams will set forth the testimony of Southern Nuclear Operating Company (“Southern Nuclear” or “SNC”), the Project manager at the site. Georgia Power continues to exercise its oversight role on behalf of itself and as agent for the other Owners. Southern Nuclear continues to have primary responsibility for cost and schedule performance as well as safety and quality in all aspects of the Project.

q. What is the purpose of your testimony?

A. The purpose of our testimony is to support the Twenty-sixth Semi-annual Vogtle Construction Monitoring Report (“VCM 26 Report”), which presents $584 million in capital expenditures invested between July 1, 2021, and December 31, 2021 (the “Reporting Period”) for Commission review.

Our testimony will demonstrate Georgia Power’s commitment to bringing this 60-year, carbon- and emission-free generation technology online. We will also provide an update on current Project status as well as the current Project cost and schedule.

Q. What period does the Twenty-Sixth VCM report cover?

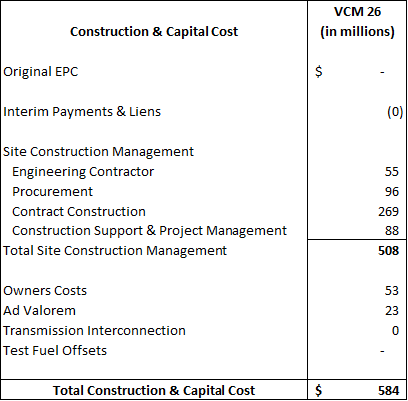
A. The VCM 26 Report, incorporated herein by reference, covers the period between July 1, 2021, and December 31, 2021.

1. Project cost

Q. what is the current status of the Project’s Estimated cost?

**A.** The Company’s projected share of the total Project cost forecast is $10 billion, the same as reported in the VCM 26 Report. Georgia Power invested $584 million of capital expenditures during the Reporting Period, bringing Georgia Power’s cumulative capital investment in the Project through the close of the Reporting Period to approximately $8.4 billion, after accounting for Georgia Power’s portion of the Toshiba Parent Guaranty (less the costs associated with securing the Parent Guaranty payment and the customer refunds totaling approximately $188 million). Georgia Power’s investment in the Project has been prudently incurred and complies with the Certificate.

**Q. PLEASE ELABORATE ON GEORGIA POWER’S ACTUAL EXPENDITURES DURING THE REPORTING PERIOD.**

**A.** The following table identifies the breakdown of Georgia Power’s $584 million of actual expenditures during the Reporting Period.

Q. What is the company requesting the commission to do with the $584 million?

**A.** The Company is presenting the $584 million to the Commission for review only and is not requesting verification and approval of that amount at this time.

Q. Will the Company request verification and approval of this amount at a future date?

**A.** As stated in the stipulation adopted by the Commission in its VCM 24 Order, the Company may request verification and approval of these costs at a later date, but not prior to the prudency review contemplated by the VCM 17 Order. The decision has not yet been made and will not be made until that time.

1. Project STATUS

Q. Please provide an update on project status.

A. The Project has continued progress towards the receipt of the Nuclear Regulatory Commission’s (“NRC”) 103(g) letter and subsequent Fuel Load on Unit 3. In support of the historic 103(g) letter, and as of March 31, 2022, the Project team has submitted 319 Unit 3 Inspections, Tests, Analyses and Acceptance Criteria (“ITAAC”) Closure Notifications (“ICNs”) to the NRC for review, with 79 Unit 3 ICNs remaining to be submitted. Since the VCM 26 Report was filed, the Project has achieved numerous accomplishments, including successful completion of the testing associated with the Passive Cooling System on the outside of the Containment Vessel, and the placement of all 157 fuel assemblies into the Spent Fuel Pool (“SFP”). In addition to the fuel assemblies, the two neutron sources were inserted into two of the fuel assemblies stored in the SFP and will be utilized to start the reaction once Fuel Load is completed and the necessary Plant conditions are achieved. The Project team continues to make progress with the closure of documentation as demonstrated by progress on Inspection Record (“IR”) completions. Continued completion of the documentation supports closure of work packages required for 103(g) and Fuel Load.

Unit 4 continues to make progress with the transition from construction to critical testing evolutions as recently demonstrated with the successful completion of the Structural Integrity Test (“SIT”) and the Integrated Leak Rate Test (“ILRT”) as well as continued progress with the Open Vessel Testing (“OVT”) evolution. The SIT and ILRT testing evolutions are examples of the quality work completed on Unit 4 to ensure it is constructed per design requirements. Through March 2022, direct construction for Unit 4 was 93% complete.

While the Project continues to make progress, many challenges remain to completing the work to go and achieving the remaining major milestones. As discussed in the VCM 26 Report, the target in-service dates for both Units were adjusted during this Reporting Period, with Unit 3 projected during the fourth quarter of 2022 or the first quarter of 2023 and Unit 4 projected during the third quarter or the fourth quarter of 2023. This shift in schedule is primarily due to the need for additional time to address continued construction challenges and to allow for the comprehensive testing necessary to ensure the unwavering commitment to quality and safety standards is achieved.

Q. PLEASE PROVIDE AN UPDATE ON the Project’s documentation Closure Efforts.

A. As discussed in the VCM 26 Report, the closure of IRs and associated work packages posed a significant challenge to the Project’s completion and contributed to the revision of the projected in-service dates for both Units. Significant focus on documentation closure has resulted in positive gains in documentation closure to support the near-term Unit 3 103(g) finding and Fuel Load milestones, and the Project continues its focus on this effort.

Q. What is the current status of the NRC Special Inspection?

A. As discussed in the VCM 26 Report, the NRC released its report in November 2021 following the special inspection of the circumstances that led to construction remediation work on electrical cable and associated raceway systems. The NRC recently completed its planned follow-up inspection at Unit 3, which evaluated the corrective actions and remediation efforts and identified no findings during the follow-up inspection. While the associated NRC inspection report is not anticipated until May 2022, the NRC has closed the two white findings identified by the NRC in November 2021 and returned Vogtle Unit 3 to the baseline inspection program, moving the NRC inspection process back to Column 1 (Licensee Response) of the Construction Reactor Oversight Program.

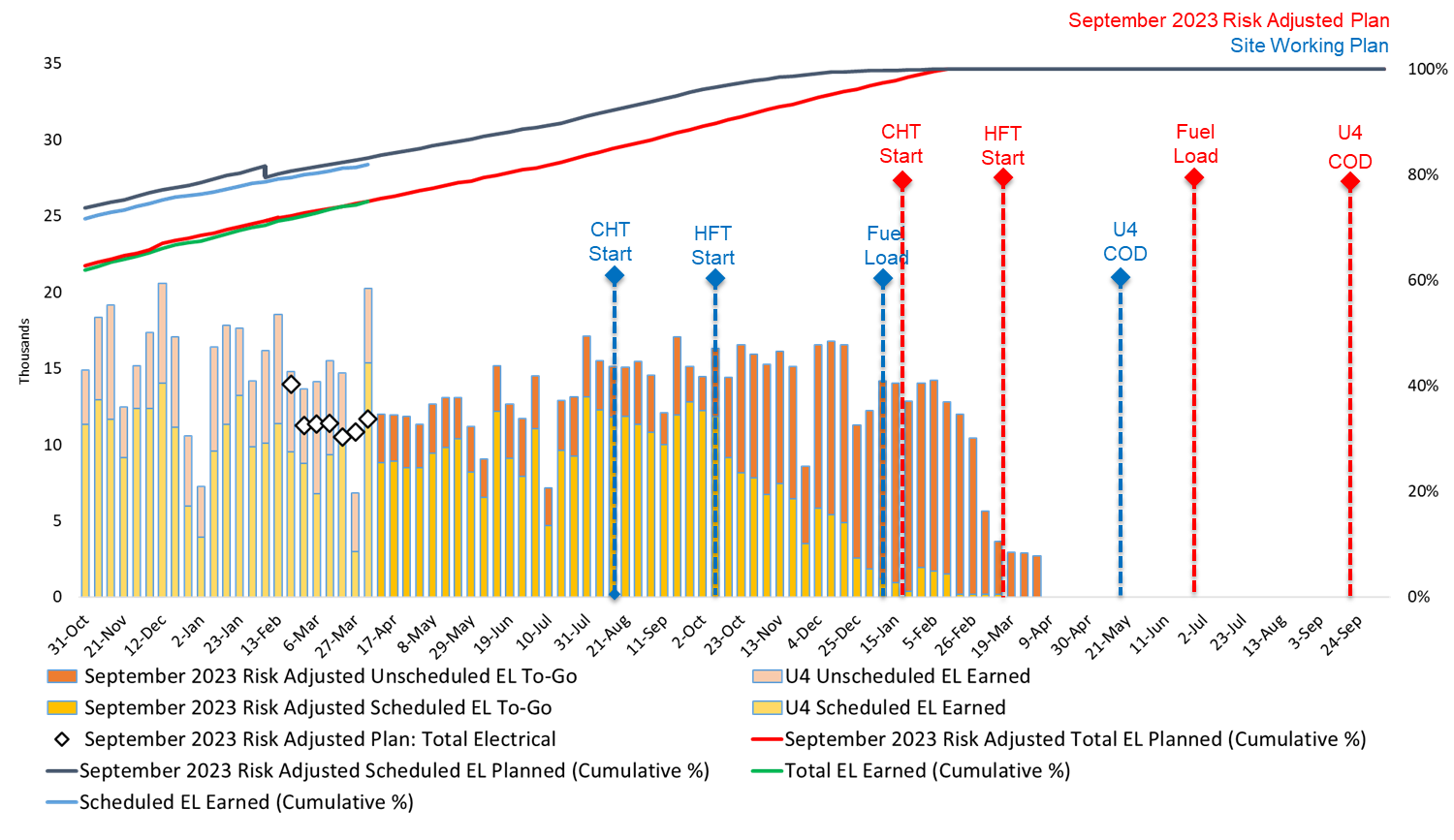
Q. Please provide an update on the Unit 3 SFP Repairs.

**A.** Repairs to the SFP and associated testing were completed in 2021, which facilitated the loading of all 157 fuel assemblies in the SFP earlier this year. The fuel assemblies will remain in the SFP until they are loaded in the Reactor Vessel during the Fuel Loading process, which is planned for later this year.

Q. Please provide an update on unit 4 performance.

**A.** Progress on Unit 4 has slowed due to the temporary diversion of additional craft and support resources from Unit 4 to support construction efforts on Unit 3. In response to the resource realignment, the Project team is continuing its efforts to increase craft labor and field non-manual support resources, particularly electricians, to help provide for continued progress and to increase production.

As you can see in the table below, electrical progress on Unit 4 is maintaining the forecasted pace assumed for the September 2023 Risk Adjusted Schedule. However, the forecast assumes an increase in production later in the year. To achieve the September 2023 Risk Adjusted Schedule, production will need to increase, and the number of craft and field non-manual support resources will need to increase as well. Further decreases in production could pressure the Project’s abilities to meet a December 2023 in-service date.

**  
*Figure A - Unit 4 Electrical Percent Complete*

Q. Has the lower Unit 4 Production had an effect on Schedule?

**A.** As discussed in the VCM 26 Report, the target or projected in-service date for Unit 4 was extended to encompass a range of third or fourth quarter 2023.

Progress continues for the necessary work to support the continuation of OVT, while construction production has supported the successful completion of several testing evolutions including SIT, ILRT and Lube Oil Flush. With construction production constraints primarily in the electrical disciplines, the workforce has been augmented by utilizing specialty contractors for specific work evolutions, such as safety-related terminations. Additionally, the incorporation of lessons learned from Unit 3 continues to improve first-time quality with changes to work sequencing expected to reduce the amount of congestion from Subcontractors as electrical resources increase.

1. COVID-19 IMPACT AND RESPONSE

**Q. WHAT IS THE ESTIMATED SCHEDULE AND COST IMPACT OF COVID-19 FOR THE PROJECT?**

**A.** The Project team continues to monitor the number of COVID-19 cases on-site, which has dramatically decreased following the wave witnessed at the beginning of 2022.

Throughout the pandemic, the Company and Southern Nuclear have proactively managed the impacts on site and remain dedicated to protecting the safety and health of workers on site at Vogtle Units 3 and 4 as well as the surrounding community. It is still estimated that productivity impacts of the COVID-19 pandemic consumed three to four months of the schedule margin previously embedded in the site work plans for both units, with an estimated cost of $160-200 million for Georgia Power’s portion of these costs.

1. CONCLUSION

Q. What is Georgia Power requesting at this time?

A. The Company is not requesting that the Commission take any action at this time regarding the $584 million in actual expenditures invested in the construction of the Project during the Reporting Period of July 1, 2021, through December 31, 2021.

Q. Does this conclude your testimony?

A. Yes.