PUBLIC DISCLOSURE

Atlanta Gas Light

CHEROKEE LNG EXPANSION – LNG TRACKER

QUARTERLY REPORT NO. 5

Docket No. 43820

May 25, 2023



ATLANTA GAS LIGHT
CHEROKEE LNG EXPANSION – LNG TRACKER
QUARTERLY REPORT NO. 5
DOCKET NO. 43820

Applicant name, address, and principal place of business:

Atlanta Gas Light Company
Ten Peachtree Place
Atlanta, Georgia 30309

Authorized person to receive notices or communications with respect to application:

Blake O'Farrow
Director, External Affairs
Atlanta Gas Light Company
10 Peachtree Pl NE
Atlanta, GA 30309
bofarrow@southernco.com

Elizabeth Wade
Chief Counsel, Regulatory Affairs
Atlanta Gas Light Company
10 Peachtree Pl NE
Atlanta, GA 30309
ewade@southernco.com

Mark D. Caudill
Attorney for Atlanta Gas Light Company
3290 Commons Gate Bend
Berkeley Lake, GA 30092-4946
Mark@MDCaudill.com

Robert S. Highsmith Jr.
Lindsey S. Williamson
Attorney for Atlanta Gas Light Company
Holland & Knight LLP
1180 West Peachtree St., N.W., Suite 1800
Atlanta, GA 30309
robert.highsmith@hklaw.com
lindsey.williamson@hklaw.com

Location for public inspection:

Atlanta Gas Light Company
Ten Peachtree Place
Atlanta, Georgia 30309
www.atlantagaslightcompany.com

A copy is also available on file at the Georgia Public Service Commission:

Georgia Public Service Commission
244 Washington Street S.W.
Atlanta, Georgia 30334-5701
www.psc.ga.gov



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INTRODUCTION

Atlanta Gas Light Company ("AGL" or the "Company") files this Quarterly Report No. 5 for the Cherokee LNG Expansion Project (the "Project") with the Georgia Public Service Commission (the "Commission" or "GPSC") in compliance with Appendix A of the Stipulation approved by the Commission's November 18, 2021 Order in Docket No. 43820 (the "i-CDP Order") approving AGL's Amended 2022-2031 i-CDP (the "Plan"). The Stipulation approved by the i-CDP Order requires that AGL submit Quarterly Reports to the GPSC Staff ("Staff") documenting the execution progress of the Project. This report documents the execution progress for the first quarter of 2023 covering the period from January 1 through March 31, 2023.

Appendix A further stipulates that each calendar quarter, AGL shall provide:

1. A high-level Project schedule similar to Appendix G in AGL's Pre-12/23/20 FEED Report, including:
    a. AGL's current contracting and construction approach for the Project and AGL's system improvement projects;
    b. Tasks and associated subtasks to be based on the five Project components listed inTable 14 of AGL's Amended 2022-2031 i-CDP;
    c. A detailed narrative discussing the schedule to be provided each month on a quarterly basis; and
    d. A narrative to focus on variances to previous reporting with explanations and actions taken to address.
2. A Project budget update similar to Table 14 of AGL's Amended 2022-2031 i-CDP, including:
    a. The budget updates to include these categories and associated subcategories;
    b. A detailed narrative discussing the budget to be provided each month on a quarterly basis; and
    c. A narrative to focus on variances to previous reporting with explanations, cost variances support, and actions taken to address.
3. A Project risk register similar to the risk register in AGL's Pre-12/23/20 FEED Report, which incorporates:
    a. A risk register to incorporate AGL's current contracting and construction approach for the Project and AGL's system improvement projects;



b. An organization of the risk register to be based on the five Project components and associated subcomponents listed in Table 14 of AGL's Amended 2022-2031 i-CDP;
c. A detailed narrative discussing the risks to be provided each month; and
d. A narrative to focus on variances to previous reporting with explanations and actions taken to address.

PROJECT SCHEDULE

Tank Engineering, Procurement, & Construction ("EPC") engineering and construction work and Detailed Engineering Design work for the Tank Balance of Plant (BOP), Power Generation and Liquefaction project phases of the Project remained in progress in the first quarter of 2023. Current work progress remains on schedule to meet the key in-service dates of Project components specified in the i-CDP Plan, except risk is high that the tank balance of plant in-service may be delayed until late 2023 or early 2024 (see the Project Risk Register section). A high-level schedule showing the major tasks associated with project execution and projected in-service dates is provided in Attachment A.

The key Project work completed in the quarter ending March 31, 2023, include the following:

1. LNG Storage Tank Construction Progress

   January Work Completed:

   - Received Inner Shell Ring 10 (SR10)
   - Finished SR9 X-Ray
   - Finished PT on SR8 Shell Stiffener
   - Welded out the platform column repads to slope bar and dome roof
   - Subassembled Main Platform sections
   - Installed majority of the Main Platform
   - Fabricating piping for pipe rack
   - Welded inner tank corner weld
   - Continue fabrication of pipe for the pipe rack
   - Completed installation of SR9 shell stiffener
   - Completed installation of SR10
   - Subassembled portions of radial walkway for top of tank
   - Figure 1 shows a view of the tank construction site at the end of January 2023

   February Work Completed:

   - Finished hanging the main platform
   - Installation of roof nozzles started
   - Sub assembled and installed the radial walkway
   - Finished hanging the PSV Platform
   - Erected straight run of the pipe rack
   - Completed weld out and NDE of SR11
   - Completed weld out of SR10 Shell Stiffener
   - Completed weld out of SR12
   - Pipe rack piping is 90% fabricated
   - Installed the last outer tank pipe support
   - Started installing spill pans and grating on main platform
   - Began installing handrails on the main platform
   - Began installing piping cold shoes
   - Began installing pipe in pipe rack

- Figure 2 shows a view of the tank construction site at the end of February 2023

March Work Completed:

- Finished installing foamglass for the tank bottom
- Installing roof nozzles
- Installed and welding the Radial Walkway in position
- Began installing piping cold shoes
- Began installing pipe in pipe rack
- Started installing spill pans on main platform
- Began fabricating roof top piping
- Installed foamglass for pump column pads
- Installed davit crane on the PSV platform
- Started hanging scaffolding under platform to access tank top piping
- Received inner tank bottom plate from warehouse
- Started installing pump column repads
- Welding SR11 shell stiffener
- Completed installation of SR12
- Installing waterfall piping
- Welding SR11 shell stiffener
- Figure 3 shows a view of the tank construction site at the end of March 2023

Engineering Work Completed:

- Drawings issued for construction (IFC)
    - Revised Ellipsoidal Head Plate Drawings (IFC)
    - Revised PSV Manifold Drawings (IFC)
    - Pump Column Drawings (IFC)
    - Power Distribution Panel Drawings (IFC)
    - Installation Detail Drawings (spill pan TEs, multi point probe, beacon light) (IFC)
    - Panel List (IFC)
    - Specification for Pipe and Equipment Insulation Material and Installation (IFC)
    - 42” Roof Manhole – MH1 Drawing (IFC)
    - Seismic Monitor Supports SM1 & SM2 (IFC)
    - Spiral Stairway & Emergency Ladder Layout (IFC)
    - Section Thru Spiral Stairway (IFC)
    - Spiral Stairway Elevation (IFC)
    - Revised PSV Manifold and Tank Process Penetration Drawings (IFC)
    - Specification for Pipe Support (IFC)
    - Branch Connection Weld Details (IFC)
    - Tank Penetration Drawing N21 & N22
    - Tank Platform & Stair Grating Plan (IFC)
    - Instrumentation List
    - Electrical Conduit & Cable Schedule
    - Instrument Installation Specification
    - Instrument Testing, Calibration Verification and Functional Testing
    - Pneumatic Testing of Shell Manway Elliptical Heads
    - Tank Top Platform and Connection Drawings

- Piping Pressure Test Procedure
- Pipe Cleaning and Drying Procedure
- Pipe Pressure Blowing Procedure
- In-Tank Pump Column Fabrication Specification
- Electrical Cable Tray Location
- Electrical 120VAC Power Diagram

- Engineering work continues according to schedule.

2. Detailed Engineering Progress

Engineering Work Completed:

- Tank BOP, Power Generation, Liquefaction and Fire Protection detailed design continued in progress
- Specifications and Procurement Packages for Equipment Purchases
- Support for review of engineering deliverables from equipment provider vendors
- BOP and Power Generation Issued for Construction (IFC) design drawings for finalizing construction bids and contracting



Figure 1: View of Tank Construction Site at the End of January 2023



Figure 2: View of Tank Construction Site at the End of February 2023



Figure 3: View of Tank Construction Site at the End of March 2023

PROJECT BUDGET

AGL's Annual Spend Analysis for the Project for the month ends of December 2022 (end of 4th Quarter 2022), January, February and March 2023 are provided in Tables 1, 2, 3 and 4, respectively. The cost data presented in these tables is converted to $ millions relative to the original Table 14 in the i-CDP Plan. Table 5 presents the cost deviations between Table 1 and Table 4. The total estimated direct cost of completion for execution of the Project remains at approximately [redacted]

Table 1: Annual Spend Analysis – from AGL's Project financials update for December 2022 (end of 4th Quarter 2022)

[redacted]

Table 2: Annual Spend Analysis – from AGL's Project Financials Update for January 2023



Table 3: Annual Spend Analysis – from AGL's Project Financials Update for February 2023



Table 4: Annual Spend Analysis – from AGL's Project Financials Update for March 2023



Table 5: Deviations between Table 4 (March 2023) and Table 1 (December 2022).



Discussion of Deviations in Table 5

Table 5 shows the cost estimate deviations between the March 2023 (end of 1st Quarter 2023) estimate presented in Table 4 herein and the December 2022 (end of 4th Quarter 2022) estimate presented in Table 1 herein.

[redacted]

Cost deviations such as this are to be expected during project execution as major equipment procurements are executed, equipment delivery and payment schedules are finalized, and construction schedules and cash flows adjustments are made.

[redacted]

Total actual costs through March 2023 were [redacted] and the total estimated remaining cost to complete project execution was [redacted] (including internal costs and contingency).

PROJECT RISK REGISTER

The Project Team is using a rolling wave planning approach to managing risks for each of the execution phases, maintaining a heightened focus on the risks to the current / upcoming phases while maintaining overall visibility of the future phases.

Currently, the team is primarily focused on the risks to the Tank Balance of Plant (BOP), Power Generation and Liquefaction scopes with a potential to impact the 2023 and 2024 in-service delivery. Risk will be continuously refined and reassessed as additional information becomes available.

The register developed from these workshops is provided in Attachment C (showing the medium and higher risk items only). There were no changes to project risk items during the last quarter. The BOP and Power Generation construction schedule for the contractor that is awarded the work will be used to set a new baseline schedule and target in-service dates for the tank, BOP and Power Generation. At that time the risk register will be updated to define risks specific to the new baseline.

One "High-Risk" item remained in the last quarter:

- **BOP Late equipment delivery** – Delivery schedules of some key electrical equipment are expected to impact the originally planned in-service date of November 2023. Lead times of electrical equipment are a common problem impacting many current industrial and other construction projects. Equipment delivery dates are much longer than historical average for transformers, the Power Distribution Center (PDC) building, switch gear, emergency generator, and Allen Bradley I/O cards and control panels. Delivery and installation of these equipment will be critical to placing the Tank/BOP into service.

All other risk items were the same as the previous quarter. Specific medium risk items in the risk register document potential impacts on in-service schedules. First, there is a risk related to late receipt of equipment vendor drawings required to complete detailed design, Issued for Bid (IFB), and Issued for Construction (IFC) drawing packages. Second, there is a risk related to potential for late deliveries of equipment and materials from vendors. Both risks could impact construction and prevent the Tank/Balance of Plant (2023) and Liquefaction system (2024) from being placed into service according to the schedule stated in the i-CDP.



These specific risks, and the potential inability for the BOP being placed in service by November 2023, and the Liquefaction System being placed into service by mid-2024, mean that LNG from the Cherokee LNG expansion may not be available to provide the incremental LNG supply indicated in the i-CDP for 2023 and 2024. However, these risks do not mean that AGL will be unable to meet system demand in 2023 and 2024. AGL has already considered this contingency and how to mitigate such a circumstance. As stated in the approved 2022-2025 Capacity Supply Plan, AGL will seek added bundled peaking if the expected additional vaporization capability described in the plan is delayed.

Appendix C provides further information on these risk items and mitigation plans being implemented to minimize the probability and/or potential impact of these risks.

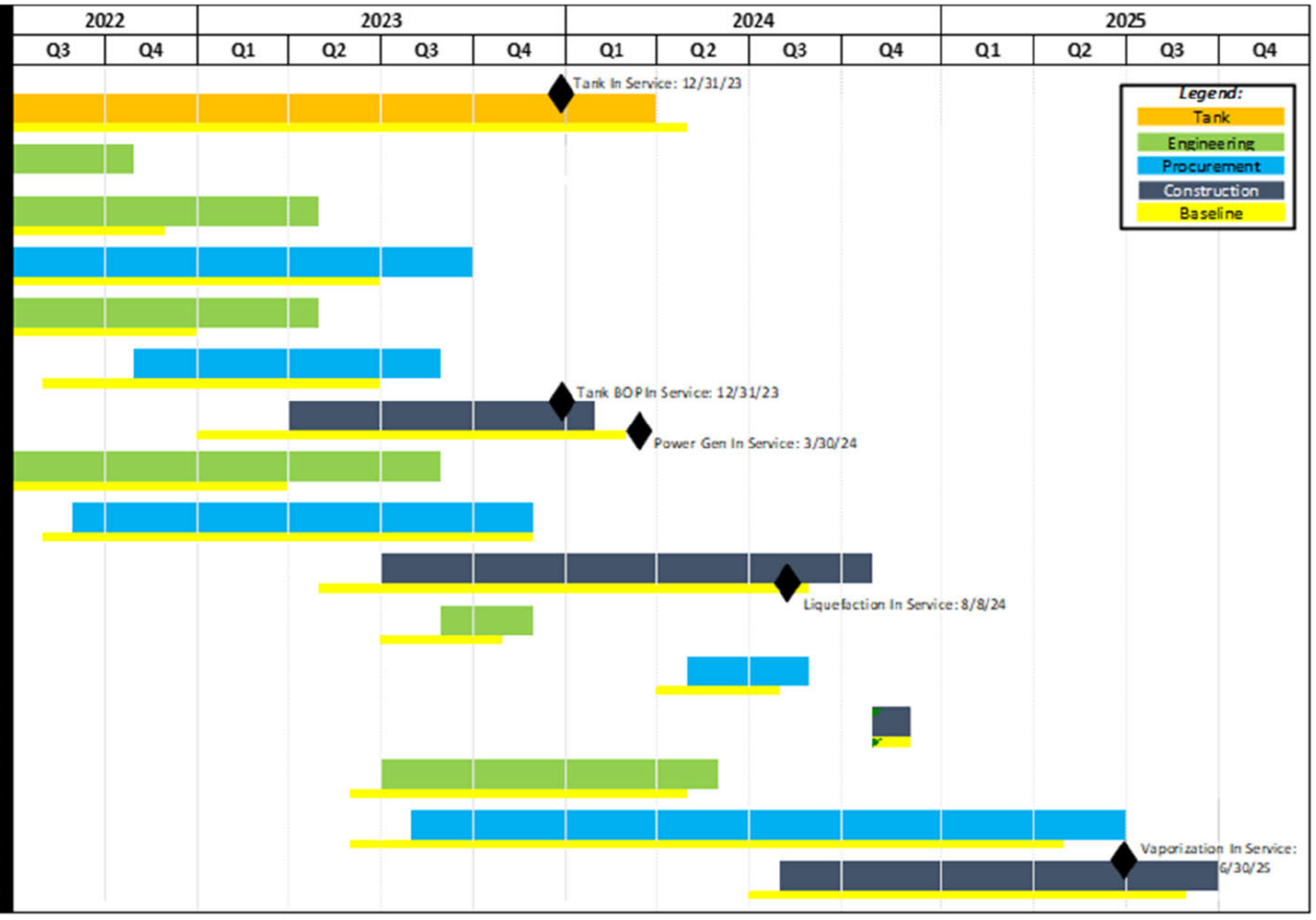


ATTACHMENT A. PROJECT SCHEDULE

High level project schedule for execution of the Project.

Cherokee LNG Summary Schedule
As Of: March 30, 2023

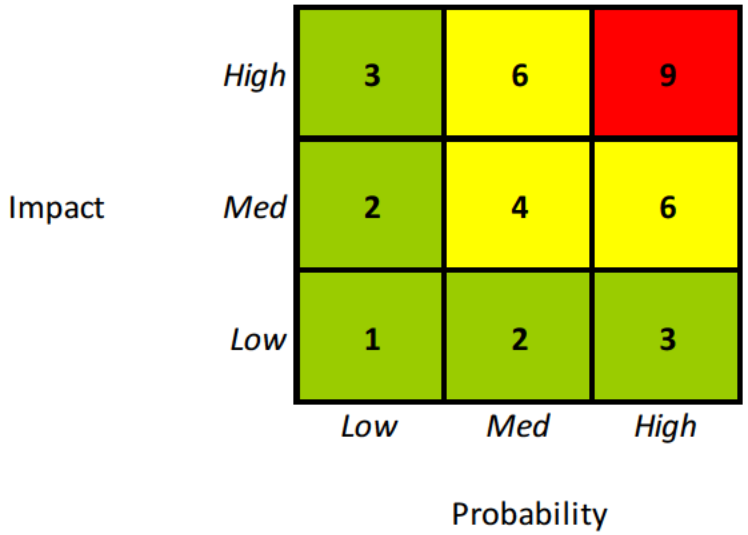
	Start	Finish
Tank Construction (Matrix)	*26-Aug-21*	31-Mar-24
Stage 1: Front-End Engineering and Design	*22-Oct-21*	*31-Oct-22*
Stage 2: Tank BOP Detailed Design	*6-Apr-22*	1-Apr-23
Stage 2: Tank BOP Procurement	*6-May-22*	12-Sep-23
Stage 3: Power Generation Detailed Design	*6-Apr-22*	1-Apr-23
Stage 3: Power Generation Procurement	30-Nov-22	8-Aug-23
Tank BOP / Power Gen Construction	1-Apr-23	22-Jan-24
Stage 4: Liquefaction Detailed Design	*24-Jun-22*	31-Aug-23
Stage 4: Liquefaction Procurement	*27-Sep-22*	9-Nov-23
Liquefaction Construction	15-Jul-23	14-Oct-24
Stage 5: Existing Liquefaction Demolition Engineering	1-Sep-23	23-Nov-23
Stage 5: Existing Liquefaction Demolition Procurement	28-May-24	19-Aug-24
Stage 5: Existing Liquefaction Demolition Construction	2-Jan-25	6-Jan-25
Stage 6: Vaporization Detailed Design	21-Jul-23	27-May-24
Stage 6: Vaporization Procurement	8-Aug-23	9-Jun-25
Vaporization Construction	24-Aug-24	25-Sep-25



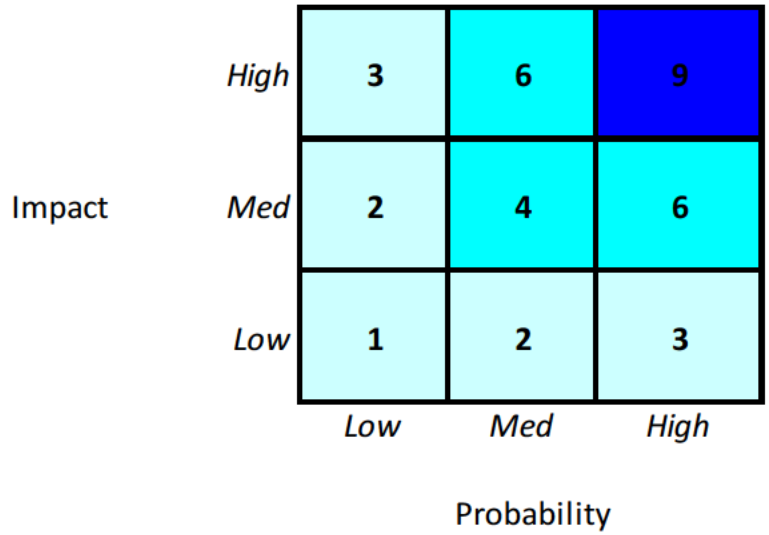
ATTACHMENT B. PROJECT RISK REGISTER

HEAT MAP ILLUSTRATION

Risk Matrix Value & Color Code



Opportunities Matrix Value & Color Code



L = Low
M = Medium
H = High

PROJECT RISK REGISTER – **TANK/BOP**



PROJECT RISK REGISTER – **POWER GENERATION**

[redacted]

PROJECT RISK REGISTER – **LIQUEFACTION**

[redacted]

PROJECT RISK REGISTER – VAPORIZATION

