PUBLIC DISCLOSURE

Atlanta Gas Light

CHEROKEE LNG EXPANSION – LNG TRACKER

QUARTERLY REPORT NO. 4

Docket No. 43820

February 22, 2023



ATLANTA GAS LIGHT
CHEROKEE LNG EXPANSION – LNG TRACKER
QUARTERLY REPORT NO. 4
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

CHEROKEE LNG EXPANSION – LNG TRACKER QUARTERLY REPORT NO. 3 TABLE OF CONTENTS

INTRODUCTION 3

PROJECT SCHEDULE 5

PROJECT BUDGET 10

PROJECT RISK REGISTER 14

ATTACHMENT A. PROJECT SCHEDULE 16

ATTACHMENT B. PROJECT RISK REGISTER 18



List of Figures:

Figure 1: View of Tank Construction Site at the End of October 2022 8

Figure 2: View of Tank Construction Site at the End of November 2022 8

Figure 3: View of Tank Construction Site at the End of December 2022 9

List of Tables:

Table 1: Annual Spend Analysis – from AGL's Project financials update for September 2022.. 10

Table 2: Annual Spend Analysis – from AGL's Project financials update for October 2022..... 11

Table 3: Annual Spend Analysis – from AGL's Project financials update for November 2022... 11

Table 4: Annual Spend Analysis – from AGL's Project financials update for December 2022... 12

Table 5: Deviations between Table 4 (December 2022) and Table 1 (September 2022)..... 12

INTRODUCTION

Atlanta Gas Light Company ("AGL" or the "Company") files this Quarterly Report No. 4 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 fourth quarter of 2022 covering the period from October 1 through December 31, 2022.

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 in Table 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 fourth quarter of 2022. 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 higher 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 project schedule will be updated after the construction bids for BOP/Power Generation are finalized in February 2023.

The key Project work completed in the quarter ending December 31, 2022, include the following:

1. LNG Storage Tank Construction Progress

   October Work Completed:

   - Finished Installation of inner tank shell ring 2 (SR2)
   - Installed Door Sheet at 270°
   - Received 9% Ni Steel Inner Tank Stiffeners
   - Continued welding Inner Tanks stiffener welds
   - Pursuing monorail hoist and operation training
   - Completed installation and non-destructive examination (NDE) on SR2
   - Received SR12 from warehouse
   - Staged SR12 in between Inner and outer tank
   - Completed installation and NDE on SR3
   - Completed installation and NDE on SR4
   - Received SR5 from warehouse
   - Staged SR11 between inner and outer tank
   - Cut and install C-channel for annular bracing
   - Started jumping scaffolding to next shell ring
   - Installing shell stiffeners on the inside of the outer tank
   - Figure 1 shows a view of the tank construction site at the end of October 2022

   November Work Completed:

   - Continued to hang shell stiffeners on the inside of the outer tank
   - Hang, fit and weld out of SR5
   - Subbing up roof nozzle piping
   - Hang, fit, and weld out of SR6
   - Worked on roof nozzle piping
   - Weld out of SR5 shell stiffeners
   - Hang, fit, and weld out of SR7
   - Sub assembled first section of the main platform
   - Finished stitch welding the outer tank shell stiffeners
   - Fit and weld waterfall piping



- Assembled and hung outer tank pipe supports
- Figure 2 shows a view of the tank construction site at the end of November 2022

December Work Completed:

- Completed NDE of SR7
- In process of fabricating waterfall piping
- Welded pipe supports to outer tank shell
- Welding shell ring stiffeners
- Completed installation and weld out of SR8
- Completed installation and weld out of SR7 Shell Ring Stiffener
- Started subassembly of main platform sections
- Started positioning one section of the main platform on roof for measurements
- Completed NDE of SR8
- Installed SR9 and partially welded out
- Installed and started welding SR8 Shell Stiffener
- Subassembly of pipe rack piping
- Figure 3 shows a view of the tank construction site at the end of December 2022

Engineering Work Completed:

- Drawings issued for review and approval (IFA)
  - Electrical Lighting Wiring Diagrams (IFA)
  - Pump Column Welding Procedure Specifications (IFA)
  - Pump Column Quality Plan (IFA)
  - Piping Insulation Spec (IFA)
  - Power Distribution Drawings (IFA)
  - Electrical Conduit and Cable Schedule (IFA)
  - Piping Procedures and Specifications (IFA)
  - Inspection and Testing Plan for Field Weld Fabrication (IFA)
  - Power and Control Plans
  - Panel List
  - Electrical Power Diagram
- Drawings issued for construction (IFC)
  - Piping Specifications (IFC)
  - Pipe Support Specification (IFC)
  - Tie Point List (IFC)
  - Process Safety Valve Manifold Drawings (IFC)
  - RTD Panel Layouts (IFC)
  - Player Weld Spec (IFC)
  - Piperack Foundations (IFC)
  - Spill Pan Erection Drawing (IFC)
  - Fabrication Inspection and Testing Plans (IFC)
  - Piping Specification for Flange Bolts (IFC)
  - Piping Plans and Section Drawings (IFC)
  - Arrow Pipe Production Schedule (IFC)
  - Instrumentation Location Drawings (IFC)
  - Electrical Lighting Wiring Diagram (IFC)
  - Instrument List (IFC)
  - Electrical Conduit & Cable Schedule (IFC)



- Inner Tank Door Sheet Stiffeners (IFC)
- Piping Isometric's (IFC)
- Piping Line List (IFC)
- Tank Roof Stairs and Walkway Plans and Sections (IFC)
- Deck and Penetration Insulation Drawing (IFC)

- 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.
   - Liquefaction System HAZOP completed
   - BOP and Power Generation 3D Model design review completed
   - BOP and Power Generation issue for bid (IFB) design drawings issued for construction request for proposals (RFP) package. RFP issued in November – Proposals due in January



Figure 1: View of Tank Construction Site at the End of October 2022



Figure 2: View of Tank Construction Site at the End of November 2022



Figure 3: View of Tank Construction Site at the End of December 2022

PROJECT BUDGET

AGL's Annual Spend Analysis for the Project for the month ends of September (end of 3rd Quarter 2022), October, November and December 2022 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 cost of completion for execution of the Project remains at approximately [redacted].

Table 1: Annual Spend Analysis – from AGL's Project financials update for September 2022 (end of 3rd Quarter 2022)

[redacted]

Table 2: Annual Spend Analysis – from AGL's Project financials update for October 2022



Table 3: Annual Spend Analysis – from AGL's Project financials update for November 2022



Table 4: Annual Spend Analysis – from AGL's Project financials update for December 2022



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



Discussion of Deviations in Table 5

Table 5 shows the cost estimate deviations between the December 2022 (end of 4th Quarter 2022) estimate presented in Table 4 herein and the September 2022 (end of 3rd 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]

PROJECT RISK REGISTER

In the 4th Quarter of 2022, the AGL Project team undertook monthly review meetings focused on each execution phase of the Project to update the 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 significant changes to project risk items during the last quarter.

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 and 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 Tank and Balance of Plant 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 filed and 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.



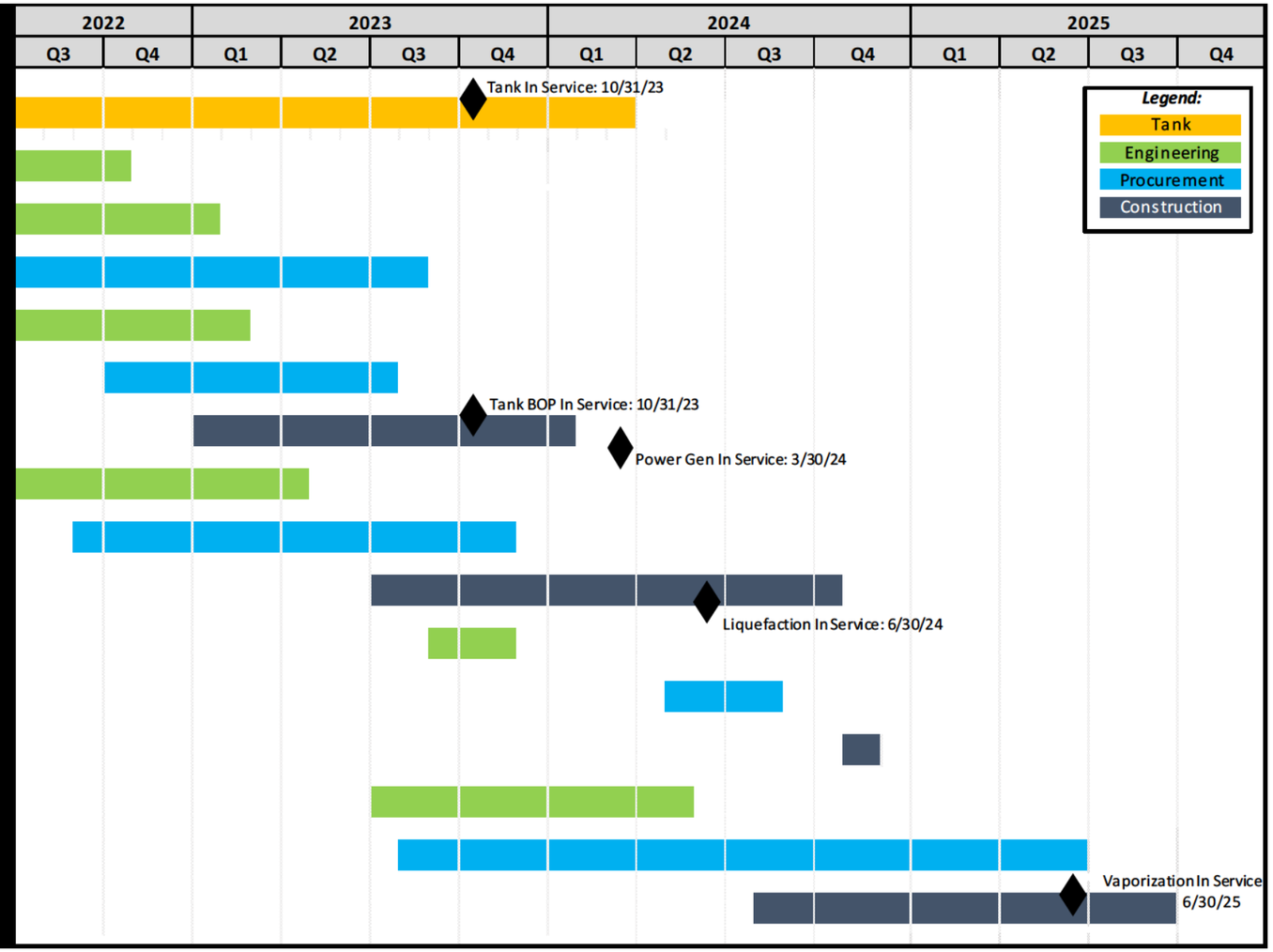
ATTACHMENT A. PROJECT SCHEDULE

High level project schedule for execution of the Project.

Cherokee LNG Summary Schedule

As Of: October 6, 2022

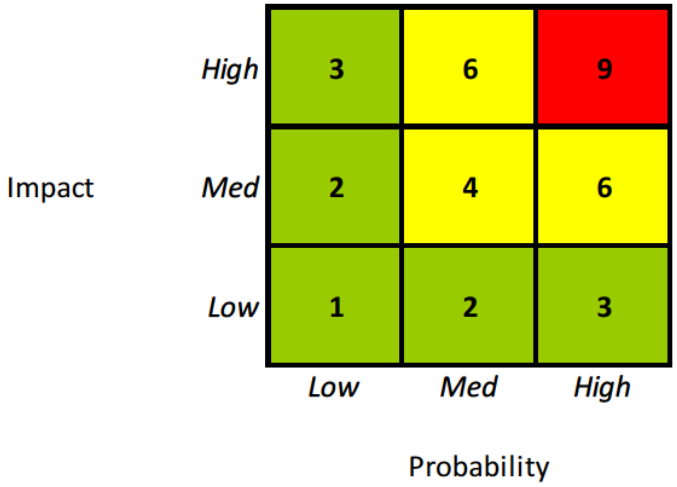
	Start	Finish
Tank Construction (Matrix)	*26-Aug-21*	31-Mar-24
Stage 1: Front-End Engineering and Design	*22-Oct-21*	6-Oct-22
Stage 2: Tank BOP Detailed Design	*6-Apr-22*	10-Jan-23
Stage 2: Tank BOP Procurement	*6-May-22*	14-Aug-23
Stage 3: Power Generation Detailed Design	*6-Apr-22*	16-Feb-23
Stage 3: Power Generation Procurement	6-Oct-22	26-Jul-23
Tank BOP / Power Gen Construction	31-Jan-23	22-Jan-24
Stage 4: Liquefaction Detailed Design	*24-Jun-22*	27-Apr-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



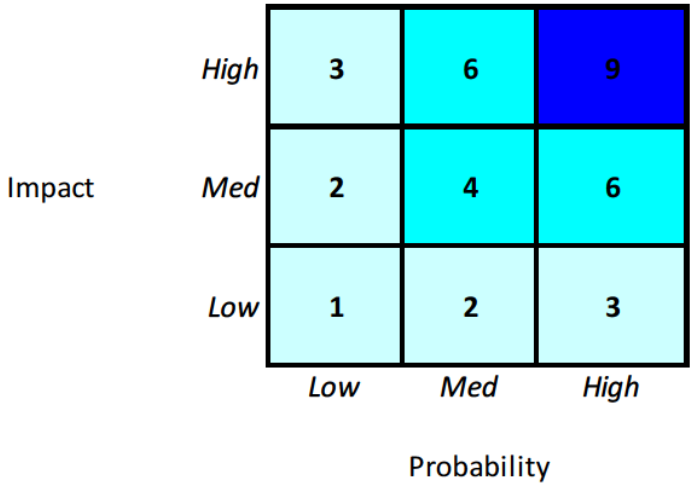
ATTACHMENT B. PROJECT RISK REGISTER

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



PROJECT RISK REGISTER – LIQUEFACTION



PROJECT RISK REGISTER – VAPORIZATION

[redacted]