Avalon Combustion Turbine Project Early Execution Update

Period Ended May 31, 2025

July 15, 2025

A report to the Board of Commissioners of Public Utilities



Contents

1.0	Progress to Date	1
1.1	Engage Combustion Turbine Suppliers	
1.2	Engage Transformer Suppliers	
1.3		
1.4	Engage EPCM Consultant	1
1.5	Geotechnical Investigation	1
1.6	Miscellaneous Engineering Studies	1
1.7	Early Execution Civil Works	2
1.8	Transmission Line Relocations with Newfoundland Power Inc	2
2.0	Project Risks and Mitigations	2
3.0	Project Schedule	4
4.0	Project Budget	4
5.0	Conclusion	4

List of Appendices

Appendix A: Project Schedule Milestone Table

Appendix B: Detailed Cost Information



1 1.0 Progress to Date

2 1.1 Engage Combustion Turbine Suppliers

- The request for proposals ("RFP") for the supply of combustion turbines ("CT") was issued for public
- 4 tender in early May and closed on July 4, 2025, with two bids submitted. A review of the bids is
- 5 underway.

1.2 Engage Transformer Suppliers

- 7 The process of engaging with transformer suppliers is ongoing. An RFP for the supply of four Generator
- 8 Step-Up Transformers and one Station Service Transformer was issued and closed on June 17, 2025.
- 9 There were seven bids received, and Hydro is reviewing the bids.

10 1.3 Environmental Assessment Registration

- 11 The Environmental Assessment ("EA") release was provided by the Minister of Environment and Climate
- 12 Change on May 30, 2025. Hydro is reviewing the EA release submission and will consult with the
- 13 Department of Environment and Climate Change as required.

14 **1.4** Engage EPCM Consultant

15 The RFP for EPCM¹ services is complete and has been released. It is scheduled to close on July 31, 2025.

16 1.5 Geotechnical Investigation

- 17 Hydro plans to complete initial geotechnical activities separate from the EPCM award. The RFP
- 18 continues to be prepared as it relates to contract strategy. Hydro intends to leverage its existing Master
- 19 Standing Offer agreements to secure a vendor for the work. Hydro is working to ensure a quality RFP is
- developed and prepared for issue. The RFP is expected to be issued in July 2025.

1.6 Miscellaneous Engineering Studies

- 22 Hydro awarded the first study to Hatch Ltd. ("Hatch") to investigate the fire water tie-in to the existing
- Holyrood site infrastructure and investigate the use of CT1 black start diesel for starting the new Avalon
- 24 CT. The anticipated completion of this design study will move into the next reporting period as further
- 25 investigation and engineering are required. A second study RFP was developed to investigate the
- 26 wastewater tie-in to the existing Holyrood site infrastructure, interconnection of the CT1 and CT2 fuel

¹ Engineering, Procurement and Construction Management ("EPCM").



21

Page 1

- 1 systems, and bulk fuel storage assessment for optimization, inventory management, and segregation of
- 2 storage for third-party access. Hatch was awarded the second study in late May.

3 1.7 Early Execution Civil Works

- 4 The RFP for early execution civil works was issued and closed on June 27, 2025, with four bids
- 5 submitted. Hydro is reviewing.

6 1.8 Transmission Line Relocations with Newfoundland Power Inc.

- 7 Hydro is collaborating with Newfoundland Power Inc. ("Newfoundland Power") for the development,
- 8 design and execution of relocating Transmission Lines 38L and 39L—two transmission lines that are within
- 9 the project footprint at the Holyrood site. Newfoundland Power is developing the engineering scope of
- 10 work and Contribution in Aid of Construction ("CIAC") submission for the Board of Commissioners of
- 11 Public Utilities ("Board'). The cost estimate and CIAC are expected in the next reporting period.

12 2.0 Project Risks and Mitigations

- 13 A summary of key risks identified during the planning and execution of the project, as well as associated
- mitigations and status, are provided in Table 1.

Table 1: Key Risks^{2,3}

Risk Title/Description	Mitigations	Status
Supply chain pressures may increase the cost of goods and increase delivery times.	 Prepare separate RFPs for turbines and transformers such that requirements for sparage, life of field services, etc. are established right from the beginning with the original equipment manufacturers. Given the state of the supply within the market, it is essential that the right prioritizing in 	Open – Project schedule is being maintained, and early procurement of the CTs and transformers is progressing. Management reserve is included in the overall project budget to address strategic risks.
	terms of the overall schedule is established for critical path long	

² This table considers the whole scope of the Avalon CT project, not only early execution activities. It is intended to highlight only key risks that may impact project success. Hydro uses a more comprehensive project risk register to facilitate risk management. Hydro regularly updates the risk register, and should a risk escalate in ranking or a new high risk be identified, it will be added to this table in future updates.

³ Risks, which are shown as closed, will be removed in the next report.



Page 2

Risk Title/Description	Mitigations	Status
CT supplier backlog as a result of competition from other projects, there may be limited supplier resources, added complexities in the international supply chain, and a potential sellers' market resulting in higher costs and extended delivery schedules.	 Enhanced oversight during the design and manufacturing process. Engage with suppliers to explore contracting models and risk allocation strategies. Execute procurement in the early execution phase. 	Open – Engaging with CT and transformer suppliers in the early execution phase. RFP has been issued with RFP close on July 4, 2025.
Regulatory (Board) approval process extends beyond the assumed timeline. If the regulatory approval process extends beyond the assumed timeline, the project schedule will be delayed, and the ability to make contract commitments to support the project schedule will be impacted. This will have both a schedule and cost impact due to cost escalation and loss of project momentum.	 Produce a robust Board application and work closely with the Board during the application process. Receive timely Board approval of Early Execution Application. 	Open – 2025 Build Application has been submitted to the Board. Approval of early execution received.
If internal decision-making processes are not efficient, it can lead to project execution delays and schedule and cost impacts. For example, timesensitive decisions such as awarding of contracts (e.g., equipment and construction) and proceeding with early execution. The cost impact of a one-year delay is estimated at \$30 million to \$50 million.	 Established Project Governance structure, project steering committee, and project leadership team with clear limits of authority. Established processes and systems to facilitate effective decision making, including a review of existing authority levels. Developing contingency plans for key personnel so decisions can be made when there are competing priorities or absences. Corporate Interface Manager in place to manage all interfaces between Major Projects and Corporate groups. 	Open – Governance structure established. Authority levels are suited to the current project phase. An interface manager was established for internal interface resolution. Continue to monitor for efficient decision making as early execution progresses.



3.0 Project Schedule

- 2 The Project Milestone Schedule is provided in Appendix A. The Avalon CT early execution scope remains
- 3 on track to meet schedule targets.

4 4.0 Project Budget

- 5 The Board approved an early execution budget of \$30,710,000. Hydro is progressing the work in
- 6 alignment with the approved budget, with no deviations noted for the reporting period. The project
- 7 remains on track to meet approved cost targets, and Hydro continues to actively manage risks to
- 8 maintain compliance with all regulatory requirements.
- 9 As of May 31, 2025, the expenditure forecast remains consistent with the approved budget; however,
- 10 expenditures to date are tracking less than planned. Appendix B provides further detailed cost
- information, including an overview of costs incurred to May 31, 2025.

12 5.0 Conclusion

- 13 As of the end of the reporting period, the Avalon CT early execution remains on track to meet the
- 14 approved cost and schedule targets, and Hydro continues to actively manage risks to maintain
- 15 compliance with all regulatory requirements.



Appendix A

Project Schedule Milestone Table



	Avalon Cor	nbustic	on Turbir	ne Pro	Avalon Combustion Turbine Project Schedule -		Data	Data Date: 30-May-25	7-25
hidro			May 2025	25					
	Early	/ Execu	tion / 20)25 M	Early Execution / 2025 Milestones				
Activity Name		Baseline	Forecast	Variance	Jan Feb Mar Apr May	2025 Jul Jul	Aug Sep	Oct Nov) Dec
Avalon Combustion Turbine									
PUB Submission		21-Mar-25	21-Mar-25 A	0	•				
Environmental Assessment Registration Submission		03-Mar-25	28-Mar-25 A	-24	•				
Early Execution Approval by PUB			25-Apr-25 A		•				
Environmental Assessment Release		03-May-25	30-May-25 A	-27					
GSU Transformer Contract Award		13-Jun-25	04-Sep-25	-83		•	•		
Start of Site Early Execution		02-Jul-25	10-Sep-25	-70			♦		
PM001 Combustion Turbine Generator Package Award	Award	18-Jul-25	12-Sep-25	-56		♦	♦		
NF Power Early Exection Complete (38L & 39L Relocated)		03-Dec-25	11-Nov-25	23				◆	
EPCM Contract Award		29-Aug-25	18-Nov-25	-81			~	♦	
EPCM Project Kickoff		05-Sep-25	25-Nov-25	-81			♦	•	
PUB Approval		31-Dec-25	31-Dec-25	0					*
Notes: 1 The forecasted Commercial Operation Date (COD) for Avalon Combustion Turbine (CT) has changed compared to the Project Control Schedule Baseline (PCSBL), which was included with the build application. The original PCSBL target COD was 12-Oct-2.029 and the current forecasts is 07-Dec-2029 resulting in a variance of 56 days. This variance is directly attributable to the revised CT Package Award forecast. All other noted schedule variances relate to non-critical path activities. These activities currently have sufficient float and do not impact the overall COD forecast. 2 In the May schedule update, the activity for Public Utilities Board approval had a minor update to the remaining duration. This was completed to remove the scheduling software calculated variance. 3 Blue line in the milestone schedule represents the project status date.	Avalon Combustion Tur 029 and the current fo ie to non-critical path a ities Board approval ha ject status date.	rbine (CT) has c recast is 07-De ctivities. These ad a minor upd	c-2029 resulting ir	d to the Proj n a variance ly have suffii	ect Control Schedule Baseline (PCSBI of 56 days. This variance is directly a' cient float and do not impact the ove . This was completed to remove the s	L), which was incl ttributable to the srall COD forecast scheduling softwa	uded with the revised CT Pa are calculated	build ckage variance.	
◆ Milactona			. 40 1 000	-			3000	200000000000000000000000000000000000000	t
◆ ♦ Milestone ♦ ♦ Baseline MS			Page 1 0f 1	.		Layou Filter:T	Jt:MP: 2025 ASK filter: N	Layout:IMP: 2025 Millestone Report Filter:TASK filter: MP_PUB MS Table.	ble.
]

Appendix B

Detailed Cost Information



Redacted

Redacted