Q. **Reference: CA-NLH-062 p2 and Attachment 1 pp2-3. PUB basis: Appendix A III Asset History, Scope and Budget, p14; Asset Condition, p15; Additional Supporting Documentation, p17**

Provide the findings and status of the investigation into renewed Unit 1 valve sticking on April 17, 2025, including corrective work and verification of satisfactory operation. Identify any resulting work and cost within the proposed 2027 overhaul, and explain the treatment of amounts recovered or recoverable from the previous contractor.

A. The investigation into the control valve sticking issue has been completed and the issue is resolved. Unit 1 at the Holyrood Thermal Generating Station ("Holyrood TGS") is currently online and has been load tested to full capability.

The initial investigation, completed during an outage from March 10–16, 2025, focused on misalignment of the components that transfer the movement of the hydraulic ram to the camshafts that move the individual control valves. The upper rack guide was found to be slightly misaligned, and contact was noted between a pin on the cam lobe for valve four and the lever that opens the valve. These issues were corrected and the unit returned to service; however, the sticking issues reoccurred in April 2025.

A second outage from April 25–27, 2025, was taken to further investigate the issue. During this investigation, slight contact was noted between a pin on the cam lobe for valve six and the lever that opens the valve, causing the valve camshaft movement to bind. The interference was corrected by filing a small amount of material off the pin and the unit was returned to service, with testing indicating the control valve sticking issue was not observed. The unit was taken offline on April 29, 2025, as it was no longer required to support the Island Interconnected System.

Control valve binding was experienced again when the unit was returned to service in September 2025. The unit operated with a derating until an outage could be taken from November 27–30, 2025, where it was determined that further removal of a small amount of

material was required from the pin on valve six. This was completed and the unit returned to service. This issue did not return during the remainder of the 2025–2026 operating season and has not occurred thus far in the 2026–2027 operating season.

The cause of the failures was determined to be poor alignment of the camshafts during installation as part of the valve overhaul. The intermittent nature of the problem, related to temperature of the components at various stages of operation, complicated the investigation. The contractor that had been on site previously re-mobilized to site and led the initial investigation in March at no charge to Newfoundland and Labrador Hydro. The outages in April and November were directed by engineering staff at the Holyrood TGS, with work completed by plant labour.

There is no additional work scope required for the proposed valve outage in 2027; however, the contractor will pay particular attention to alignment during reassembly.