1	Q.	In addition to foot traffic, what other traffic is required to access the pumphouses
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4 5	A.	The present restrictions on foot traffic only limit the amount of work that can be performed within the pumphouse.
6		Corrective and preventative maintenance for the pumphouse overhead crane requires
7		mobile lifting equipment such as a boom lift or scissor lift to provide personnel access to
8		complete the maintenance.
9		• Cooling water ("CW") pump overhauls require the pumps to be dismantled, set in a
10		laydown position, and transported off-site for refurbishment. This effort requires lifting
11		the components onto a flatbed truck positioned inside the pumphouse within reach of
12		the pumphouse overhead crane. The restricted floor loading limits the area for pump
13		component laydown and prevents the flatbed from entering the pumphouse.
14		• To facilitate maintenance work in the pumphouses, mobile equipment, such as forklifts,
15		would normally be utilized.
16		This restriction was recommended by Hatch Ltd. in its structural report. 1 As the extent of the risk
17		of structural failure is unknown, Hydro requires the Level 2 Condition Assessment to determine
18		whether the temporary work arounds detailed below are sufficient to enable work to continue
19		within Pumphouse 1 for the duration of the Bridging Period or if there is risk of more imminent
20		failure that would require intervention prior to the retirement of the Holyrood Thermal
21		Generating Station ("Holyrood TGS").
22		In light of these restrictions, Newfoundland and Labrador Hydro ("Hydro") has developed
23		certain temporary work plans to allow for the necessary work to continue. Depending on the

scope of the crane work, it may be possible to erect scaffolding rather than using mechanical

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<sup>&</sup>lt;sup>1</sup> "2025 Capital Budget Application," Newfoundland and Labrador Hydro, July 16, 2024, sch. 7, proj. 8, app. A.

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lifts. This has considerable impacts on cost and schedule, and for more significant repairs to the 1 2 crane, this would likely not be a viable option. 3 A temporary plan, requiring the use of an external mobile crane, was developed in 2022 by a 4 structural engineer to allow safe removal of CW pump components from either of the two 5 pumphouses. The pump components are placed by the overhead crane on identified sections of 6 the floor that are over the sump pit walls, supported by the ground. The mobile crane, stationed 7 outside the pumphouse, removes the components from the identified laydown areas and onto a truck for transport. This plan, while successful in 2022 and 2023, impacts cost and schedule, 8 9 increases handling risks, and may not be available for future pump overhauls if the annual inspections of the sump find extended areas of damage that preclude safe laydown of the pump 10 11 components. 12 There are no temporary work plans to address the use of other mobile equipment, such as 13 forklifts. If left unattended, the concrete deterioration will continue to progress. In addition to the 14 loading restrictions, the floor slab may be at risk of structural failure if left unmitigated; the 15 16 Level 2 Condition Assessment is required to assess the risk of structural failure and identify the 17 mitigations necessary to ensure structural integrity of the cooling water sumps. The pumphouses must remain in safe operating condition until they are decommissioned upon the 18 19 retirement of Holyrood TGS. Given the complex nature of the work area and the requirement to 20 complete the work under a unit outage, the proposed Level 2 Condition Assessment is necessary

to accurately define the concrete's condition and inform Hydro's longer-term plan.

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