

1 Q. With reference to the Project **C-16, Install Backup System for Raw Water Supply**
2 **and Clarifier - Holyrood**, given that the risk events posited in support of this Project
3 have been known since 2007, what measures as Hydro taken in the interim to
4 protect or mitigate against these risk events?

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7 A. A Business Continuity Plan for the Holyrood Thermal Generating Station created in
8 2008 and revised in 2010 outlines the impact to the organization in the event of a
9 failure of the raw water supply line. Remedial actions to reduce the risk of failure
10 have been identified. These include:

- 11 1. Inspect reservoir level and dam for integrity;
- 12 2. Check reservoir supply and debris build up to prevent loss of supply or blockage
13 of inlet;
- 14 3. Check and function test reservoir outlet;
- 15 4. Inspect ground above 16" raw water supply for signs of leaks monthly;
- 16 5. Pressure test or Non Destructive Test (NDT) line bi-annually; and
- 17 6. Check and function test reservoir outlet and raw water inlet valve FF-412 at the
18 same time as NDT or pressure test.

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20 Items one through four are completed as part of the preventative maintenance
21 program. The dam and inlet conditions are also checked in Hydro's Dam Inspection
22 Program and have been completed by both visual inspection and by means of
23 remote operated vehicle (ROV). Items five and six have not been completed as
24 there is concern that a higher risk of failure will be experienced during the test
25 period due to the increased pressure inside an aged pipe that is in the last quartile
26 of its expected service life.

1 The Raw Water Clarifier has been inspected and maintained under the plant's
2 preventative maintenance program. External contractors have been engaged to
3 evaluate the condition of the clarifier on an annual basis. The walls of the clarifier
4 are inspected for corrosion and the epoxy coating has been replaced where
5 necessary. The gear box and rake are maintained by plant personnel. This
6 preventative maintenance has maintained the life and proper function of the
7 clarifier but it does not change the fact that the system is old and the likelihood of
8 downtime increases with its age. In the event of clarifier failure, a proper bypass
9 will provide a temporary means of ensuring raw water is available to the plant while
10 repairs are being made.