

1 **Re: 2009 Capital Projects: \$500,000 and Over p. B-17 - Replacement of Diesel**
2 **Units**

3 Q. The following quote appears at page B-17;

4

5 “The existing units in Norman Bay suffer from chronic fuel pump problems.
6 The replacement of the existing units with more modern units requires the
7 upgrade of the existing custom automatic controls which were designed for
8 the older units. Unit 557 in Postville is underutilized in the plant because it is
9 unreliable and replacement parts are not readily available. Unit 2020 in
10 Paradise River is too large for the system, which is experiencing extremely
11 low loads and thus is underutilized resulting in increased use of the
12 remaining units in the plant. This also results in low plant efficiency.”

13

14 a) With respect to the **Paradise River** station, has NLH identified any
15 performance deficiencies with Unit 2020 *other than* the lube oil contamination
16 issue identified at Volume II, Tab 6, Page 14?

17

18 b) Has NLH performed a comparison of the capital costs of replacing Unit
19 2020 versus any quantifiable operational efficiency losses should Unit 2020
20 be retained on the system?

21

22

23 A. a) Hydro has not identified any specific performance deficiencies with Unit
24 2020 other than the lube oil contamination issue.

25

26 Unit 2020 is 26 years old, has an ongoing lube oil contamination issue, and is
27 oversized for the system. At system forecast peak load for 2013, this unit
28 would operate at only 42 percent of rated capacity. Typically, it would

1 operate at loads even lower, which are not recommended for extended
2 periods.

3

4 b) No, Hydro has not performed a comparison of the capital costs of
5 replacing Unit 2020 versus any quantifiable operational efficiency losses
6 should Unit 2020 be retained on the system.

7

8 Essentially, the problems with this unit and its size result in its use on the
9 system being limited to an “as necessary” situation. The goal is to operate
10 the system in the most efficient manner possible, thus this unit would
11 typically only be used when the smaller units are not available due to
12 maintenance or operational problems.