

1 Q. Operating expenses for TRO are forecast to decline over the 2002 to 2007
2 period. Identify specific initiatives Hydro has undertaken to reduce the rural
3 deficit and estimate the 2007 test year savings resulting from each initiative.
4 (Regulated Activities Evidence, page 23, lines 9 to 10)

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7 A. There have been several initiatives in TRO that contribute to reducing the
8 rural deficit. It is difficult to estimate the direct savings for each, however, as
9 noted in the list below, some initiatives have quantified savings identified.
10 Such initiatives are outlined below:

11 • The interconnection of Rencontre East, completed in 2006, was
12 the least cost alternative to supply long term reliable power to the
13 former diesel plant community. A present worth comparison of
14 costs for continued diesel operation versus the interconnection
15 indicates the interconnection alternative would provide a 15-year
16 payback under base case conditions. At the end of the 31-year
17 study period, the interconnection provides a CPW (cumulative
18 present worth) cost preference of \$1,042,907 over continued
19 diesel operation.

20 • Through its Hydrowise Energy Awareness Program, Hydro
21 continues to inform its customers of ways to reduce energy
22 consumption and save money. Up to the end of 2005, Hydro
23 distributed approximately 14,000 compact fluorescent lights to its
24 customers in diesel systems. For further details regarding a current
25 update on this initiative see Attachment 2 in response to CA 5
26 NLH.

- 1 • In recent years and continuing into 2007 there has been a strong
2 emphasis on planning and scheduling which helps control the rural
3 deficit. More effective planning and scheduling has helped
4 maintain reliable service during a period in which the operating and
5 maintenance costs have tracked below inflation. There is a
6 significant coordination effort in the up front planning process to
7 ensure delays and duplicate asset outages are minimized.
8 Planning and scheduling results in better utilization of the
9 workforce with the planner ensuring the available weekly capacity
10 of each crew is matched to the estimated weekly work. Overall,
11 planning and scheduling helps Hydro perform effective
12 maintenance activities in the most efficient manner.
- 13 • In an effort to control rising transportation expenses, Hydro
14 continues evaluating transportation alternatives to ensure that the
15 most cost effective means of transportation are used.
- 16 • Extending diesel engine overhauls from 15,000 to 20,000 hours,
17 will eliminate one overhaul over the life of each of the 74 engines
18 Hydro plans to maintain in service. With an average annual engine
19 operating time of 4,000 hours per engine and a typical engine
20 operating life of 90,000 hours, there will be on average 3.3 less
21 overhauls per year. With an average cost per overhaul of
22 approximately \$55,000, the annual saving equates to an estimated
23 \$181,500. This savings assumes Hydro maintains 74 engines with
24 the overhaul criteria remaining at 20,000 hours, and there is no
25 increased maintenance cost as a result of extending the overhauls.
- 26 • In analyzing tenders for the purchase of new diesel engines,
27 Hydro's Engineering Services group completes a life cycle cost
28 analysis to help ensure the overall least cost option is chosen. In

1 the life cycle cost analysis such things as capital cost, overhaul
2 cost, fuel cost (based upon fuel efficiency data), and routine
3 operation and maintenance cost are considered.