

1 Q. Further to NP-74 NLH: The computer system installed in 1995 to assist
2 operators to optimize unit performance would be expected to provide
3 continued performance improvements on a go forward basis as the operators
4 gain experience with the system. The higher conversion rates realized in
5 2001 and 2002 seem to reflect a continued improvement in conversion
6 factors. Why has the trend for the past several years as opposed to a more
7 current period been used to arrive at a 2004 conversion factor?

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10 A. The conversion factor is dependent on a number of factors in addition to the
11 use of the computer system used by the operators. A number of these are
12 listed in IC-317 NLH. Two of the items mentioned in IC-317 NLH are unit
13 load level and unit fouling. Both of these are related to the manner in which
14 the units are dispatched by System Operations. System Operations
15 dispatches the units to obtain best plant efficiency with due consideration to
16 reservoir storage levels. Varying storage levels result in varying unit and
17 plant loading and thereby the plant conversion factor. Please refer to
18 Production Evidence Schedule V where the monthly average unit load and
19 monthly average conversion factors are presented. This illustrates that plant
20 conversion factor varies with average unit loading.

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22 The more recent years (2001 and 2002) have more months with the average
23 unit loading in the upper range (130 MW) and the previous years (1999 and
24 2000) have more months with loading in the lower range (73 MW average).
25 In order to predict the average conversion factor over the range of system
26 hydraulic generation that may occur Hydro recommends using the average
27 conversion factor over an extended period of time to capture some historic
28 variability. To use only 2001 and 2002 data would skew the results towards

- 1 lower hydraulic production. In the same manner if only 1999 and 2000 data
- 2 was used the results would be skewed towards higher hydraulic production.
- 3 The period from 1996 to 2002 provides a balance of a variety of conditions.