

1 **UNDERTAKING J1.12**

2
3 **Undertaking**

4
5 Calculate the annual capacity factor of PGS in each direction during 2009

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8 **Response**

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10 For 2009, the Pump Generating Station (“PGS”) capacity factor was 8 per cent in
11 generation mode and 12 per cent in pump mode.

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13 These capacity factors were calculated using actual 2009 PGS generation and pumping
14 relative to the maximum generation and consumption capacity of the six units at the
15 station. This is the standard method for calculating capacity factors.

16
17 There is a difference between *capacity factors* and *utilization values*. The utilization
18 values provided in Ex. E1-T2-S1, page 4, lines 11-13 indicate how often at least one unit
19 in the facility was pumping or generating. For clarity, the utilization values indicate that
20 44 per cent of the time at least one PGS unit was generating electricity and 27 per cent
21 of the time at least one PGS unit was pumping.

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23 Using the pump / generation cycle provided in Exhibit K1.5 filed by Energy Probe (filed
24 as Undertaking J15.6 in EB-2007-0905) and assuming it applies every day of the year,
25 the equivalent capacity factors would be 13 per cent in generation mode and 18 per cent
26 in pump mode.