

REDACTED

1 **Request IR-40:**

2
3 **With regard to Application Appendix 7, p. 1:**

- 4
- 5 **a) Please provide the transmission costs assumed for the 2013 “Coal uprate,” 2012 wind,**
6 **and 2030 Biomass PPA.**
- 7
- 8 **b) Please explain whether the “Wind (100MW nameplate,40 MW firm)” resource is**
9 **modeled as NSPI-owned or PPA.**
- 10
- 11 **c) Please provide the price assumed for the “Wind (100MW nameplate,40 MW firm)”**
12 **resource, and the derivation of that price.**
- 13
- 14 **d) Please specify the location of the coal plant upgrades listed for 2013.**
- 15
- 16 **e) For each biomass co-firing project listed, please identify the unit modeled as co-fired**
17 **and provide the assumed capital cost.**
- 18
- 19 **f) Please provide the fuel prices in \$/MMBtu and \$/MWh for the co-firing projects.**

20
21 **Response IR-40:**

- 22
- 23 **a) Transmission costs are as follows:**
- 24
- 25 • 2013 Coal Uprate - \$3.6 million per unit
 - 26 • 2013 Wind block - \$45 million
 - 27 • 2030 Biomass PPA - \$2.1 million
- 28

REDACTED

1 Response IR-40: (cont'd)

2

3 b) The wind resource in Base Case Plan A is modeled as a PPA.

4

5 c) The price of the wind is as per the 2009 IRP Update Basic Assumptions. The price is
6 [REDACTED]. A back-up adder and transmission
7 costs are also included.

8

9 d) The coal plant upgrades are located at Lingan.

10

11 e) The biomass co-firing projects are modeled as follows:

12

- 13 • 2012 – four Lingan units
- 14 • 2019 – Point Tupper
- 15 • 2020 – Point Aconi
- 16 • 2021 – two Trenton units

17

18 The capital cost for biomass co-firing is \$7 million per unit, except for Point Aconi which is
19 \$4 million. The costs are as per the 2009 IRP Update Basic Assumptions.

20

21 f) The biomass fuel price is [REDACTED]. The estimated
22 price assuming operating costs only (not including a capital cost portion) and a fuel blend of
23 90 percent low sulphur coal and a maximum of 10 percent biomass, is approximately
24 [REDACTED]. This price could vary depending on unit heat rate,
25 blended fuels and other operating factors.