

Lapworth, Heather

From: King, Jeff
Sent: Friday, November 19, 2004 3:16 PM
To: Lapworth, Heather
Cc: Power Planning Division
Subject: FW: Council's windpower assumptions

Heather,

Please enter Rod Noteboom's comments into the administrative record.

- Jeff

-----Original Message-----

From: Rodney Noteboom [REDACTED]
Sent: Friday, November 19, 2004 2:08 PM
To: King, Jeff
Cc: Bill Dearing; Jeff Atkinson
Subject: Re: Council's windpower assumptions

Jeff,

I have just a few small comments for the draft power plan. The comments pertain primarily to the cost of Eastern WA/OR wind. I attempted to reach you by phone and was not successful so I am submitting these comments by email.

The information you sent me in Appendix 1 was quite helpful. You have done a very thorough job to estimate the cost of wind resources. I understand that your costs are in year 2000 dollars. Grant PUD has worked with both Phase 1 and Phase 2 of the Nine Canyon Wind project and the final cost of wind resources in the draft plan appears low from what I would initially expect. Some of the assumptions appear to be optimistic, and I recognize the items discussed below are all assumptions and there is not a single correct answer.

- 1) The annual decrease in costs for Technology Development and Vintage Cost Escalation are optimistic when considering the compounding effects of these cost decreases. In some cases, wind technology is going to need to make some improvements simply to maintain the same costs in order to overcome some problems with design of certain components. While I do not have specific numbers for this assumption, I think something in the neighborhood of -1% instead of -1.9% to -2.3% would be appropriate.
- 2) The shaping costs of \$4/MWh seems a bit low. BPA currently offers a general shaping product for \$6/MWh, and this is a very low priced product. BPA does have a less expensive shaping product that is available only to a select group of BPA customers. I suggest using \$6/hour unless BPA has explicitly stated a plan to lower the cost of their product. It is doubtful that any other provider in the Northwest will offer very much shaping service at a rate less than BPA.
- 3) I think the transmission costs do not account for reserves. The \$15/kW/year is the cost for one leg of PTP without reserves at current BPA rates. Also, since wind has an especially low load factor, wind transmission costs will increase more than other generation transmission costs on a per kWh basis when BPA TBL raises rates in Oct 2005. I suggest adding in the cost of reserves if they are truly left out, and making an adjustment for the unequal effect of TBL rate increases.
- 4) The green tag benefit is currently at \$6 per MWh. There is not an established market at this time to actually get paid for green tags. Since green tags are not really related to costs but to the price paid for wind, I suggest giving no benefit for green tags and making a footnote to indicate that no benefit has been given for green tags. This comment would apply to all resources for which

the green tag benefit has been applied.

Rod Noteboom

Rod Noteboom
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Grant County PUD
509-766-2523

>>> "King, Jeff" [REDACTED] 11/10/2004 5:05:05 PM >>>

Ron,

Attached, as we discussed in our phone conversation is the section of Appendix I concerning our windpower assumptions. Once you have had a chance to look this over, give me a call and we can talk over any changes that you think should be made for the final plan.

- Jeff King

<<App I Power Generating Technologies - Wind 111004.doc>>

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