

From: Bell, Barry
Sent: Thursday, June 19, 2008 12:37 PM
To: 'waynejoliver@aol.com'; 'Cheryl Murray'; 'Philip Hayet'
Subject: Additional Information Exchange Between Company and DPU

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

From: Duvall, Greg
Sent: Thursday, June 19, 2008 12:35 PM
To: Duvall, Greg; 'Charles Peterson'
Cc: Bell, Barry; Larsen, Jeff; Moench, Mark; Warnken, Pete; Kusters, Stacey {Mkt Affiliate}; Bird, Stefan
Subject: RE: Capacity Factor 2020-2026

Here is the answer to 2.

There are three variable costs that can be added to the commodity price to determine the total variable cost which is the cost that is used to determine plant dispatch. These are pipeline losses, variable pipeline charges, and sales tax. The losses and variable pipeline charges for Chehalis and the west growth station are very similar. The primary difference between the two is that the Chehalis plant includes a Washington sales tax adder and the growth station does not. This adds 3.852 percent to the cost of the gas for Chehalis.

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

From: Duvall, Greg
Sent: Thursday, June 19, 2008 9:53 AM
To: Charles Peterson
Cc: Bell, Barry; Larsen, Jeff; Moench, Mark; Warnken, Pete; Kusters, Stacey {Mkt Affiliate}; Bird, Stefan
Subject: RE: Capacity Factor 2020-2026

Chuck,

Here are the responses to your questions.

1. Your observation is correct that the numbers were only a partial set of resources. The idea was to focus on the dispatch of the new gas plants to highlight the issue.
2. Will provide soon.
3. There should be no such problem.

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

From: Charles Peterson [mailto:Chpeterson@utah.gov]
Sent: Thursday, June 19, 2008 8:03 AM
To: Duvall, Greg

Cc: Bell, Barry; Larsen, Jeff; Moench, Mark; Warnken, Pete; Kusters, Stacey {Mkt Affiliate}; Bird, Stefan
Subject: Re: Capacity Factor 2020-2026

Greg,

Thank you for sending this analysis. We have a couple of initial questions.

1. Why does total GWh drop by about 1,000 GWh between the Business plan without Chehalis and the one with Chehalis? Aren't you trying to serve the same loads in both cases?
2. We understand that the growth stations did not necessarily have all expenses included. Could you give us some idea of the kinds of expenses that haven't been included, and their approximate magnitude?
3. Our biggest concern is that there is no possibly erroneous assumption that would impact the earlier years where the calculated net positive benefits are derived from. It would appear from your explanation that there should be no such problem, will you verify that this is correct?

Thanks, Chuck

>>> "Duvall, Greg" <Greg.Duvall@PacifiCorp.com> 6/18/2008 7:36 PM >>>
Chuck,

I have attached a spreadsheet that should help illustrate the reduction in capacity factor of the Chehalis plant beginning in 2020.

The first tab labeled "GWh" is summary of information from the confidential workpapers supporting my testimony that show the GWh output of the new natural gas plants from 2020 through 2026. The first set of numbers shows the generation from the business plan, the second set of numbers shows the generation under the Chehalis study, and the third set of numbers shows the difference between the two. The IRP model added two growth stations in the west, plus one in Goshen and one in Utah. Growth stations are simply generic CCCTs. As can be seen, when the IRP CCCT is replaced by the Chehalis plant, generation at the growth stations increases to help fill the gap.

The second tab labeled "Fuel & VOM Costs" shows the dispatch cost of each of these gas units which helps explaining the reduced capacity factor of the Chehalis plant. The tab shows that Chehalis ranks last in dispatch order as compared to the two west-side growth stations. This ranking is a reflection of model assumptions and is a result of adding specific, known costs to the Chehalis and not adding the same type of costs to the generic growth station proxy plants. As can be seen, the dispatch costs are very close, but in an optimization model, the plant with the lowest variable cost will dispatch the most. The capacity factor of the Chehalis plant would be higher if the dispatch order were reversed.

Hope this helps.

Greg