

1 A: Yes. It would be beneficial for the Commission to increase oversight of PSE
2 activities related to the sales of RECs to ensure that the benefits of such
3 transactions are maximized for customers who are funding the costs of the
4 facilities from which these RECs are supplied. A recently filed settlement
5 agreement in Docket No. UE-090205, PacifiCorp's pending general rate case,
6 establishes terms for reporting and monitoring of REC sales activities by the
7 utility on an ongoing basis.⁸⁴ I recommend that the Commission adopt similar
8 reporting and monitoring requirements for PSE to ensure that information is
9 available to monitor PSE's REC sales and to help determine whether customer
10 benefits from such sales are being maximized.

11 **VII. PSE'S WIND GENERATION DEVELOPMENT STRATEGY**

12 **Q: What is PSE's development strategy for wind generation resources?**

13 A: In late 2006, PSE created a development strategy to address difficulties it was
14 experiencing at the time in acquiring wind generation and other renewable
15 resources.⁸⁵ Under this new strategy, PSE planned to become involved early in
16 the process of development of wind and other renewable energy resources, rather
17 than purchasing operating projects or mature development rights from other
18 parties.⁸⁶ At the time it entered into this new strategy, there was high demand for
19 new wind generation projects within the industry, and PSE felt that by becoming
20 involved in the development process at an early stage, it could reduce
21 development risk and lower costs by avoiding project development fees. In
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⁸⁴ See, Settlement Stipulation from Docket No. UE-090205.

⁸⁵ Exhibit No. RG-1HCT, p. 63.

⁸⁶ Exhibit No. RG-1HCT, p. 63.

1 conjunction with this new wind development strategy, in November of 2008, PSE
2 entered into a Joint Development Agreement (JDA) with Renewable Energy
3 Systems America (RES) to acquire, develop and own new wind generation
4 projects.⁸⁷ As part of the RES JDA, PSE has announced plans to develop
5 approximately **[Begin Highly Confidential]** XXXXXXXX **[End Highly**
6 **Confidential]** of new wind generation projects at four separate sites which it
7 collectively refers to as the Lower Snake River Projects.⁸⁸ The Company has
8 indicated that it plans to construct the first 250 MW of the Lower Snake River
9 Project in 2011.⁸⁹

10 **Q: Is PSE seeking Commission approval of its development strategy, the RES**
11 **JDA, or development of new wind projects pursuant to the JDA in this case?**

12 A: No.⁹⁰ The Company states that the purpose of its testimony regarding this issue is
13 to update the Commission and parties regarding the progress it is making in
14 implementing its development strategy.

15 **Q: Does PSE currently have sufficient wind generation resources to meet future**
16 **Renewable Portfolio Standard (RPS) requirements on its system?**

17 A: Yes. PSE currently owns the Hopkins Ridge and Wild Horse wind projects,
18 including the soon to be completed Wild Horse Expansion project. The Company
19 also has a contract to purchase 50 MW from the Klondike III wind farm.
20 Together, these existing wind resources provide approximately 479 MW of
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⁸⁷ Exhibit No. RG-1HCT, pp. 91-92.

⁸⁸ Exhibit No. RG-1HCT, p. 63.

⁸⁹ Exhibit No. RG-1HCT, p. 99.

⁹⁰ Exhibit No. RG-1HCT, p. 91.

1 installed capacity, which is sufficient to allow PSE to meet the Washington State
2 RPS requirement to supply 3% of its total system load with renewable resources
3 beginning in 2012 and through 2015.⁹¹

4 **Q: Why is PSE seeking to develop 250 mw of new wind generation by 2011**
5 **under the RES JDA if it already has sufficient wind capacity to meet**
6 **Washington's RPS requirements through 2015?**

7 A: PSE established a corporate goal of supplying 10% of its system load with
8 renewable energy by 2013.⁹² The Company states that it is committed to meeting
9 this corporate goal, if economically feasible and necessary to meet load energy
10 requirements, in the stipulation agreement for its 2007 Merger proceeding,
11 WUTC Docket No. U-072375.⁹³

12 **Q: Would it be prudent for PSE to proceed with the development or acquisition**
13 **of new wind generation capacity at this time?**

14 A: The determination of prudence of generating investments depends on the cost and
15 need for projects as well as evaluated benefits when compared to available
16 alternatives. It is conceivable that PSE could justify the purchase or ownership of
17 250 MW of new wind generation by 2011; however, if the reported costs of the
18 Company's Wild Horse Expansion project are indicative of costs that can be
19 expected for future wind projects, it is unlikely that a new wind project would be
20 economically or otherwise justified in 2011.

21 **Q: What is the estimated cost of PSE's Wild Horse expansion project?**

⁹¹ Exhibit No. RG-1HCT, p. 97.

⁹² Exhibit No. RG-1HCT, p. 97.

⁹³ PSE's Response to Public Counsel Data Request No. 523 and WUTC Staff Data Request No. 176.

1 A: The estimated capital cost of the 44 MW Wild Horse wind expansion project is
2 approximately \$102.5 million (\$2,330 per kW).⁹⁴ Based on PSE's estimates of the
3 revenue requirement for the project, the average cost of energy produced from the
4 Wild Horse expansion project in its first year of operation would be nearly \$169
5 per MWh after production tax credits.⁹⁵ PSE estimates that 20-year levelized cost
6 of energy from the Wild Horse expansion project will be approximately \$124 per
7 MWh. These costs of wind energy from the Wild Horse expansion project are
8 three to four times the forecasted cost of market energy purchases during the rate
9 year.

10 **Q: Why is it appropriate to compare costs of wind generation projects to market**
11 **energy prices?**

12 A: Wind generation projects are essentially non-dispatchable, non-firm energy
13 resources, as are most market energy purchases. It is not appropriate to compare
14 costs of wind generation projects to other new generation alternatives since wind
15 generation projects are not firm resources. For these reasons, it is inappropriate to
16 compare costs of wind generation projects to the all-in cost of other new
17 generating resource alternatives when evaluating the economic feasibility of wind
18 generation options.

19 **Q: What does the cost of energy from the Wild Horse expansion project suggest**
20 **regarding PSE's plan to develop the first 250 MW of the Lower Snake River**
21 **Wind project by 2011?**

⁹⁴ Exhibit No. RG-1HCT, p. 84.

⁹⁵ PSE's Response to Public Counsel Data Request No. 484.

1 A: Based on current planning estimates, and the construction cost of the Wild Horse
2 expansion project, the total capital cost of the Lower Snake River Wind projects
3 which PSE plans to develop under the RES JDA is likely to be more than \$3
4 billion. This amount of new investment would be nearly double PSE's current
5 generation rate base. Unless the total cost of energy delivered from these new
6 wind projects proves to be far lower than the cost of energy from the Wild Horse
7 expansion project, it seems unlikely that any new investment in the Lower Snake
8 River wind projects would be prudent before such capacity is needed to meet RPS
9 requirements, which is currently projected to be 2016 or later. Moreover, PSE is
10 under no obligation to meet its corporate goal of supplying 10% of its system
11 load with renewable energy by 2013 unless new wind additions are economically
12 feasible, necessary to meet PSE's system load requirements and beneficial to
13 customers.

14 **Q: Please summarize your conclusions regarding PSE's announced development**
15 **strategy for wind generation.**

16 A: Wind generation projects are non-dispatchable, non-firm energy resources, and
17 the cost of energy delivered from PSE's new wind projects is approximately 3 to 4
18 times the current market price of purchased energy. Given these facts, it does not
19 appear it would be prudent for PSE to proceed with the development of any new
20 wind generation projects until such projects are needed to meet the Company's
21 RPS requirements, or are otherwise justified by economic benefits to customers
22 when compared to available resource alternatives.

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1 **Q: Do you have a specific recommendation at this time regarding PSE's**
2 **announced wind development strategy?**

3 A. No. As I observed earlier, PSE has stated it is not requesting approval or a
4 prudence determination for any specific wind project, or for its overall strategy
5 for wind development. My testimony is a response to the "update" provided by
6 PSE in this case. I am suggesting major issues that may need to be considered in
7 this area. It is important that PSE not be allowed to argue in a future proceeding
8 that parties (or the Commission) were informed of and did not object to the
9 Company's announced wind development strategy. Whether or not it addresses
10 the merits of the planning, the Commission may wish to state in its order in this
11 case that no prudence finding was requested, no showing made, and therefore no
12 decision has been made to pre-approve any aspect of PSE's wind development
13 plans.

14 **Q: Does that conclude your testimony?**

15 A: Yes.