

EXHIBIT NO. \_\_\_\_\_ (CJB-25)  
DOCKET NO. \_\_\_\_\_  
2003 POWER COST ONLY RATE CASE  
WITNESS: CHARLES J. BLACK

BEFORE THE  
WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

WASHINGTON UTILITIES AND  
TRANSPORTATION COMMISSION,

Complainant,

Docket No. \_\_\_\_\_

v.

PUGET SOUND ENERGY, INC.,

Respondent.

DIRECT TESTIMONY OF  
CHARLES J. BLACK  
ON BEHALF OF PUGET SOUND ENERGY, INC.

Exhibit CJB-25  
Portfolio Descriptions, April 2003 Least Cost Plan<sup>1</sup>

From the list of resources to be included in the Least Cost Plan analysis, PSE developed several technology mixes for analysis under a host of conditions. The following list describes the resource mixes considered in the Least Cost Plan analysis.

- **All Gas.** This portfolio mix meets the energy requirements of the various planning levels with CCGT resources. Duct Firing and SCGT resources meet the capacity requirements of the various planning levels.
- **All Coal.** This portfolio mix meets the energy requirements of the various planning levels with coal-fired steam resources. SCGT resources meet the capacity requirements of the various planning levels.
- **Gas and Coal.** This portfolio mix meets the energy requirements of the various planning levels with CCGT and coal-fired steam resources, with a mix of approximately two-thirds gas and the remaining coal. Duct Firing and SCGT resources meet the capacity requirements of the various planning levels.
- **All Wind.** This portfolio mix meets the energy requirements of the various portfolios entirely with wind resources. Duct Firing and SCGT resources meet the capacity requirements of the various planning levels.
- **5% Wind, Gas and Coal.** This portfolio mix uses wind to meet five percent of customer load by 2013. PSE meets the remainder of the energy requirements of the various planning levels with CCGT and coal-fired steam resources, with a mix of approximately two-thirds gas and one-third coal. Duct Firing and SCGT resources meet the capacity requirements of the various planning levels.
- **10% Wind, Gas and Coal.** This portfolio mix uses wind to meet 10 percent of customer load by 2013. PSE meets the remainder of the energy requirements of the various planning levels with CCGT and coal-fired steam resources, with a mix of approximately two-thirds gas and one-third coal. Duct Firing and SCGT resources meet the capacity requirements of the various planning levels.
- **2% Wind and Gas.** This portfolio mix uses wind to meet two percent of customer load by 2013. PSE meets the remainder of the energy requirements of the

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<sup>1</sup> Source: April 2003 Least Cost Plan, Chapter XI, p. 5.

various planning levels with CCGT resources. Duct Firing and SCGT resources meet the capacity requirements of the various planning levels.

- **5% Wind and Gas.** This portfolio mix uses wind to meet five percent of customer load by 2013. PSE uses the remainder of the energy requirements of the various planning levels with CCGT resources. Duct Firing and SCGT resources meet the capacity requirements of the various planning levels are met with.
- **10% Wind and Gas.** This portfolio mix uses wind to meet 10 percent of customer load by 2013. PSE meets the remainder of the energy requirements of the various planning levels with CCGT resources. Duct Firing and SCGT resources meet the capacity requirements of the various planning levels.