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BEFORE THE STATE OF WASHINGTON  
ENERGY FACILITY SITE EVALUATION COUNCIL

IN RE APPLICATION NO. 99-1

EXHIBIT \_\_\_\_\_(MS-RT)

SUMAS ENERGY 2 GENERATION  
FACILITY

**APPLICANT'S PREFILED REBUTTAL TESTIMONY**

**WITNESS : MARK SCHRIMP**

**Q. Please introduce yourself to the Council.**

A. My name is Mark Schrimp. I am project manager with Black & Veatch. Black & Veatch is a full service engineering and construction firm. I have worked for Black & Veatch for twenty years after receiving my BS in Electrical Engineering in 1980. I have worked my entire career providing engineering and construction services for the high voltage transmission and distribution industry. Our clients include investor owned utility companies, public utilities, governmental agencies, power developers, industrial companies, equipment manufacturers and international utility companies. A copy of my resume is provided as Exhibit \_\_\_\_ (MS-1).

EXHIBIT \_\_\_\_\_ (MS-RT) –  
MARK SCHRIMP  
REBUTTAL TESTIMONY - 1

[31742-0001/Mark Schrimp Rebuttal.docSL003726.754]

**PERKINS COIE LLP**  
1201 Third Avenue, Suite 4800  
Seattle, Washington 98101-3099  
(206) 583-8888

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**Q. Describe your involvement with the SE2 project.**

A. I have been involved in the connection of SE2 to the high voltage transmission system including system studies, addressing open access and tariff issues and preliminary design of the physical facilities, substation and transmission lines.

**Q. Which testimony are you responding to with this rebuttal?**

A. I have been asked to respond to testimony concerning available transmissison capacity relating to the SE2 project, including portions of the testimony filed by Anthony White (BPA) and Nancy Hirsh (NWECC).

**Q. Both Ms. Hirsh and Mr. White refer to a System Impact Study conducted by BPA. What is the System Impact Study?**

A. In March 2000, SE2 submitted a request to BPA Transmission Business Line (TBL) for firm transmission service from the Custer Substation to the Big Eddy and John Day substations. Firm transmission service is not required for SE2's operation. Rather, SE2 could use or sell the transmission service to purchasers of its power and others.

When firm transmission service is requested, TBL determines if a study is required to determine the impacts of the requested service on the Bonneville Transmission System. The study is called a System Impact Study (SIS). If required, TBL will perform the SIS at the requester's expense. In the case of SE2, TBL determined that a SIS was appropriate. The federal Open Access Transmission Tariff establishes the method for SIS. Specifically, a SIS is designed to “identify any system constraints and redispatch options, additional system or Direct Assignment Facilities or Network Upgrade

1 required to provide the requested service.” The SIS will determine if requested  
2 service is consistent with FERC, NERC, WSCC, NWPP, RTA and BPA requirements,  
3 standards and criteria, and Good Utility Practice. In performing the study, computer  
4 model powerflow, transient stability and short circuit simulate the system performance  
5 under normal and outage conditions. Generally, a SIS looks at summer and winter  
6 seasons and many different plausible outage, contingency and operating conditions  
7 with the goal to identify equipment and line overloads, voltage excursions and stability  
8 issues. If the SIS determines system upgrades, enhancements or additions are not  
9 necessary, the requester can contract for the requested service with TBL. If the SIS  
10 determines system upgrades, enhancements or additions are necessary, a study may be  
11 performed to develop detailed costs for the upgrades, enhancements or additions to be  
12 charged to the requester. TBL has completed its analyses for the SIS on SE2's firm  
13 transmission request and issued a preliminary report reflecting its results. The final  
14 report should be complete near the end of July 2000. The final SE2 SIS report will  
15 not include system upgrade or enhancement projects other than those identified in the  
16 preliminary report.  
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35 **Q. In her testimony, Ms. Hirsh states that BPA's System Impact Study found that**  
36 **"there may not be sufficient long term firm available transfer capability to**  
37 **accommodate SE2's transmission request for 660 MW from Custer Substation to**  
38 **John Day and Big Eddy substations after January 2003." Please comment on**  
39 **this testimony.**  
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45 A. On July 7, 2000, TPL posted a question and answer page on its website that clarifies  
46 and elaborates its SIS preliminary report regarding SE2's firm transmission request  
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(called "SE2 Q and A" (Q&A)). A copy of TPL's "SE2 Q and A" is included as Exhibit \_\_ (MS-2) to my testimony. In this Q&A, TPL clearly indicates that

Q. Can transmission b  
firm BPA transmission request?

A.

Q. Are there any major lines needed for SE2?

No.

The Q&A also describes the minor upgrades and enhancements necessary to

mentioned in the SIS preliminary report summary are planned for two different needs other than SE2, the Down Stream Benefits return and load service in the Puget Sound

**Q. Ms. Hirsh also testifies that th  
as to whether there is capacity on the Intertie in 2002 due to previously planned  
construction outages." Can you explain this testimony?**

TPL's recent Q&A clarifies that SE2's requested transmission capacity will be

from operating. Construction outages are generally required for construction projects that involve energized facilities, and are a fairly routine occurrence. They are generally

maintain reliability and load service, and are used to prevent personnel injury,

equipment damage, and allow for work on the energized facilities. They can reduce

EXHIBIT \_\_\_\_ (MS-RT) –

REBUTTAL TESTIMONY 4

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ERKINS C LLP  
1201 Third Avenue, Suite 4800

(206) 583-8888

1 the system transfer capacity and, in the case of SE2, could at worst curtail the amount  
2 of power SE2 could transfer for certain periods during the construction project.

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4 Because of the critical need for very high system reliability and service continuity the  
5 duration of outages for any reason is typically minimized.  
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10 I believe that the planned construction outages Ms. Hirsh mentions relate to the  
11 Northern Intertie (NI), Westside. The Northern Intertie, Westside consists of two 500  
12 kV transmission lines the connect the BC Hydro (BCH) Ingledow Substation, located  
13 just north of the US/Canadian border, to the BPA Custer Substation, north of  
14 Bellingham Washington and extend into the Seattle area to the BPA Monroe  
15 Substation. The NI has been the focus of a significant studies process by its owners,  
16 BPA and Puget Sound Energy, since at least as early as 1998. The goal of the studies  
17 is to identify and implement system upgrades, enhancements and additions to increase  
18 or maintain the transfer capacity of the NI in the both the N-S and S-N directions. A  
19 significant number of upgrade, enhancement and system addition projects have been  
20 implemented over the past several years by the NI owners and more are planned for  
21 the coming years. BPA is continuing to identify and address issues associated with the  
22 NI with the Northern Intertie Long Range Study currently in progress. As TPL states  
23 in the Q&A, the Northern Intertie Long Range Study addresses upgrades,  
24 enhancements and system additions needed for the Down Stream Benefits return (also  
25 called the Canadian Entitlement) and load service in the Puget Sound Area. The NI  
26 owners are undertaking the NI Uprating Project regardless of whether SE2 is  
27 constructed.  
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**Q. Bonneville and the applicant to establish a more complete picture of the transmission constraints**

A. SE2 has complied with all FERC and BPA requirements to assess transmission necessary. The TBL personnel that performed the SE2 SIS are intimately familiar with the high voltage grid being studied, its operating requirements and limits, constraints for support of their own development, development of other utilities and performing they may have overlooked any large impacts caused by SE2. Also, as discussed briefly been performed as a part of the NI Upgrading Project, including the current Northern Intertie Long Range Study. These studies included operating arrangements for any system weaknesses that need to be addressed in the area.

**Q. , Mr. White testifies that "there is no existing study that describes how this transmission might impact Bonneville's ability to meet its**

A. The SE2 SIS considered potential impacts Entitlement (also called the "Down Stream Benefit" (DSB)) under the Columbia River Treaty. The summary of the SIS preliminary report stated that SE2 had neither a

1 detriment or benefit on a system planning basis," and explains that SE2's requested  
2 transmission "could benefit the DSB return by preventing curtailments that may  
3 otherwise be imposed during periods of transmission facility outages that reduce the  
4 south to north transfer capability." In addition, the Northern Intertie Long Range  
5 Study currently in progress will also evaluate overall system impacts relating to the  
6 DSB return. According to the Q&A, the results of this study will be available by late  
7 summer 2000.  
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17 **Q. Mr. White also testifies that "[w]ithout a study showing whether available**  
18 **transmission capacity is adequate to support Bonneville's power sales obligation**  
19 **and potential new sales created by SE2's proposed project, Bonneville is**  
20 **concerned about its ability to meet its power sales obligations both in terms of**  
21 **the continued availability of transmission capacity and the cost of such**  
22 **capacity." Is this a valid concern?**  
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28 **A.** The SIS for SE2 verified that unsubscribed capacity exists to fulfill the SE2 request.  
29 This is stated in the Q&A.  
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34 It should be noted that Mr. White who is articulating concerns regarding BPA's ability  
35 to meet the Canadian Entitlement and to support BPA's power sales obligations and  
36 prospects is most likely not a representative for all of BPA. BPA has many different  
37 and separate arms. The Power Business Line (PBL) is responsible for the power  
38 supply and sells power; it is a business. The Transmission Business Line (TBL) is  
39 responsible for maintaining and operating the transmission system and sells energy  
40 services; it is a separate business. And there are others. I believe that Mr. White is  
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about meeting the Canadian Entitlement and sales obligations, are not being voiced by the TBL. The TBL performed the SIS and has stated that transmission is available for

**Q. Mr. White testified that "to the extent that any currently uncompleted studies Bonneville's ability to return the Canadian Entitlement], Bonneville would expect SE2 to request and pay for Bonneville's Transmission Business Line to whether there are any impacts on Bonneville's ability to return the Canadian Entitlement." Is this a valid expectation?**

The SE2 SIS does address this issue. The SIS and the Q&A indicate that SE2 would cause no detriment to the Canadian Entitlement return and may benefit it. As I

are complete and will not change in the final report in any significant respect. (In addition, the Northern Intertie Long Range Study is addressing this issue.) To the

Impact studies for which SE2 is responsible and required to perform consistent with BPA and FERC regulations are complete.

**In his revised testimony, Mr. White testifies that "if the study shows that there will be negative impacts or there is otherwise not enough available transmission**

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**power sales contacts, and any new sales resulting from SE2's proposed project, Bonneville would expect SE2 to request and pay for construction of any additional transmission and related facilities and services to allow these various obligations to be met." Is this a reasonable requirement for construction of the SE2 facility?**

A. The SIS considered the issue Mr. White raises, and identified the upgrades and enhancements necessary to fulfill SE2's transmission request. If it chooses to contract for the transmission service, SE2 will pay the costs of those upgrades and enhancements in accordance with BPA and FERC policies. The Q&A points out that the Northern Intertie Long Range Study already identifies two major additions planned for the Canadian Entitlement/DSB return and load service in the Puget Sound Area, and specifically indicates that these additions are "planned for two different needs other than SE2." The allocation of costs associated with additions, upgrades and enhancements for these needs is defined by FERC policy.

**END OF REBUTTAL TESTIMONY**

I declare under penalty of perjury that the foregoing testimony is true and correct to the best of my knowledge.