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BEFORE THE STATE OF WASHINGTON
ENERGY FACILITY SITE EVALUATION COUNCIL

IN RE APPLICATION NO. 99-1

EXHIBIT _____(BC-RT)

SUMAS ENERGY 2 GENERATION
FACILITY

APPLICANT'S PREFILED REBUTTAL TESTIMONY

WITNESS : BURT CLOTHIER

Q. Please reintroduce yourself to the Council.

A. My name is Burt Clothier. I am a hydrogeologist with Robinson & Noble, Inc. A copy of my resume was previously provided to the Council as Exhibit __ (BC - 1).

Q. Which testimony is the subject of your rebuttal?

A. I have been asked to respond to testimony concerning certain wetlands issues and water use issues raised in portions of the prefiled testimony of Eric Stockdale, Curt Leigh, Peter Sagert, and John Sproul.

BASE FLOW SUPPORT

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3 **Q. Mr. Stockdale testifies the proposed SE2 site is "likely providing important base**
4 **flow support to Johnson Creek." Do you agree with this statement?**
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7 A. I do not agree that baseflow support occurs from soils impacted by the SE2 project.
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9 Mr. Stockdale offers this statement without any supporting data or rationale. My
10 investigations and analyses of the site indicate that Mr. Stockdale's assumption is
11 incorrect. "Baseflow support" is defined as the retention of wet-season water and
12 slow release to surface water during some or all of the dry season. (See Stockdale's
13 comments on page 20.) Because of the low-permeability material forming the soils
14 (i.e. floodplain deposits of silt- and clay-rich sediments), most water falling on the site
15 is shed as runoff or is stored only for very short terms (in on-site ponding). Mr.
16 Stockdale likens the sediments of wetland areas to a sponge, soaking up and storing
17 water. This case is not true for the SE2 site (or indeed, most of the Sumas River
18 valley). The surface materials are too fine-grained and impermeable to act as a sponge.
19 Rather, the soils at the site "store" water only as surface water in the shallow ponds
20 that form during wet seasons. Drainage from this on-site "storage" only occurs during
21 the wet winter months when the creek does not need support. (See response to the
22 following question.) During the dry summer months, the soils at the SE2 site cannot
23 store enough water to provide baseflow support to Johnson Creek. This means that
24 changes or alterations of the surface hydrology of the site will result in no net change
25 to baseflow functions.
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1 **Q. Both Mr. Stockdale and Mr. Leigh refer to storm water runoff functions of**
2 **wetlands. Mr. Stockdale specifically testifies the proposed SE2 site is likely**
3 **"moderating peak flows." Do you agree with this statement?**
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7 A. Stormwater is temporarily stored on the site in shallow ponds. These ponds are a
8 result of low spots in the topography and the low-permeability of the soils, which
9 prevent the water from soaking into the ground very fast. The ponds are small and
10 shallow. Consequently, the volume of water that can be stored as surface water is
11 small. In addition, surface water drainage and evapotranspiration will remove the
12 water quickly. Moderation of peak flow from the site is therefore minimal. I
13 understand that SE2 has designed a storm water system to mitigate for storm water
14 storage on the project site. The storm water design is discussed in the rebuttal
15 testimony of Margaret Curtis.
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27 WATER USE ANALYSES

28 **Q. In his testimony, Mr. Sproul recommends that the results of Whatcom County's**
29 **pending Watershed Management Plan for the Water Resource Inventory Area 1**
30 **(WRIA) be used as a future evaluation tool for the SE2 facility and EFSEC**
31 **condition approval of the SE2 project on periodic reevaluations under the**
32 **WRIA findings and conclusions. Is this a reasonable recommendation?**
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38 A. No. Mr. Sproul seems to be suggesting that the proponent monitor the water use for
39 the SE2 project in conjunction with an as-yet-uncompleted watershed planning project
40 by Whatcom County. Since SE2 does not own, operate or maintain the water source
41 for their project, this is an unreasonable request. SE2 is purchasing water from the
42 City of Sumas, not the county. The City of Sumas made the decision to provide *its*
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1 water for the SE2 project in accordance with its established comprehensive planning
2 and based on a valid water right. Sumas Energy has no say in how water is used by
3 the City; it merely requested, and was granted, service like any other rate-payer. In
4 addition, it appears inappropriate to implement an as-of-yet unwritten county-wide
5 plan on a single project applicant. A county-wide process would be more
6 appropriately implemented county-wide.
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14 **Q. Mr. Sproul testifies that no project evaluation analyses have been performed**
15 **regarding the SE2 proposal to determine the overall advantages and**
16 **disadvantages of competing water use alternatives. Is this statement correct?**
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20 **A.** No. Mr. Sproul's testimony ignores the fact that the City of Sumas has provided a
21 certificate of water availability to SE2. In accordance with state mandates, the City
22 completed a Comprehensive Water System Plan. This formed the basis for the
23 determination of water availability. It is my understanding that, in creating the plan,
24 the City administration and the City Council made exactly the determinations Mr.
25 Sproul implies have not been undertaken. In addition, the fact that the City of Sumas
26 provided SE2 with a certificate of water availability implies that the City evaluated at
27 least some of the benefits of engaging that customer. Whether the City sells water to
28 SE2 or some other concern is solely up to the City managers.
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41 **Q. Mr. Sagert states that the proposed SE2 site is "an area with a limited water**
42 **availability." Do you agree with this statement?**
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45 **A.** No. There is more than sufficient water availability in the Sumas Aquifer to support
46 the planned withdrawals. The City of Sumas has sufficient water rights to allow full
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use of its existing wellfields (plus planned expansion as necessary). The Comprehensive Plan completed by the City outlines the 20-year planning projections for use of the City’s water rights. (Both of these details are covered more fully in my pre-filed testimony.)

END OF REBUTTAL TESTIMONY

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