Q. Please introduce yourself to the Council.
A. My name is Thomas R. Anderson, and my business address is 1705 Trigg Rd Ferndale, WA. 98248.

Q. What is your occupation and title?
A. I am the General Manager of Public Utility District #1 of Whatcom County (PUD). The PUD, which has been in existence since 1937, is a special purpose district formed under the laws of the State of Washington (Chap. 54 RCW) with water,
electric and wholesale telecommunication authority. The PUD’s primary activity involves operating the electric and water utilities that provide service to the Cherry Point Heavy Industrial Area of Whatcom County. I have been General Manager since January 1990. I have a degree and professional license in mechanical engineering.

Q. **What is the subject of your testimony?**
A. My testimony will address issues relating to the water supply for the proposed BP Cherry Point Cogeneration (Cogen) Facility.

Q. **By way of background, can you explain generally to whom the PUD provides water and under what water rights?**
A. The PUD operates a municipal purpose water supply system that provides water for commercial, domestic, municipal, manufacturing, industrial, and irrigation uses on a county-wide basis, subject to the service area limitations defined in the Whatcom County Coordinated Water System Plan (CWSP). As noted earlier, the PUD’s primary water customers are the industries located within the Cherry Point Heavy Industrial Area. Those customers include British Petroleum (BP), Intalco, Tenaska, and Conoco/Phillips. Over the last two years, almost all of the PUD’s industrial customers have executed new, multi-year water supply contracts. In addition to providing supply for manufacturing/industrial uses, the PUD also provides wholesale municipal water supply to the City of Ferndale, irrigation water supply to local farms, and commercial/domestic water supply to small office and light industrial parks.
The PUD holds three (3) primary, certificated surface water rights that authorize it to divert water from the Nooksack River for municipal/manufacturing/irrigation purposes. PUD Water Right 1 (S1-00707) authorizes the diversion of water at PUD Plant 1 which is located in the lower Nooksack River at Rivermile (RM) 5.3. Under this water right, the PUD may divert an instantaneous quantity (Qi) of 50 cfs/32.2 mgd and an annual quantity (Qa) of 27,667 af/yr. Of the total Qa figure cited, 22,067 af/yr is dedicated to municipal purposes, including potable, domestic manufacturing, and industrial uses. Approximately 5,600 af/yr is dedicated to seasonal irrigation uses.

PUD Water Right 2 (S1-00708C) authorizes the diversion of water at PUD Plant 2 which is located on the Nooksack River at RM 9.2. Under Water Right 2, the PUD may divert an instantaneous quantity (Qi) of 28 cfs/18.1 mgd and an annual quantity (Qa) of 18,544 af/yr. Of the total Qa figure, 17,880 af/yr is dedicated to municipal purposes, including potable, domestic manufacturing, and industrial uses. Approximately 664 af/yr is dedicated to seasonal irrigation uses.

PUD Water Right 3, which the PUD refers to as the “BP right” (S1-6000), authorizes the diversion of 5 cfs/3.23 mgd (Qi) at the former BP intake located on the lower Nooksack River at RM 5.3. The BP (originally Mobil Oil) water right certificate cites no annual quantity (Qa) figure. However, the Qa for this right has been determined by BP and the PUD to be approximately 3,620 af/yr, based on the historic beneficial use of the Refinery. The BP water right and related water system
assets were assigned by BP to the PUD in January, 1991. Subsequent to the
assignment, the PUD installed a low pressure intertie allowing water diverted at the
former BP intake to be routed to PUD Plant 1 for metering, clarification, and
customer distribution purposes. Under the terms of the assignment, the PUD is
required to hold for BP, or its successor in interest, a first priority right (vis-à-vis
other PUD customers) to the quantities authorized under Water Right 3 (S1-6000).

Q. How much water on average is diverted from the Nooksack River by the PUD
on a daily basis and in what manner does this occur?

A. During the normal course of daily operations, PUD Plant 1 and Plant 2 divert an
instantaneous quantity (Qi) ranging up to 20 mgd/13 cfs (Qi). On average in 2000,
the PUD diverted 17.2 mgd/19,264 af/yr (Qa) on a continuous, daily basis. Plants 1
and 2 were intertied in 1999 in order to increase the PUD’s operational efficiency
and flexibility, and to enhance the overall reliability of the PUD’s service to its
customers within the Cherry Point Heavy Industrial Area. The intertie now allows
the PUD to shift customer demand between the Plant 1 and 2 intakes when the need
arises, subject to the terms of Water Right 1 and 2 and the respective capacity of the
two plants.

Q. Do you know how much water the proposed BP Cogeneration (Cogen) Facility
will require?

A. Yes. The average amount of water that will be required for the BP Cogen Facility,
and more specifically its cooling system, is less than 4 mgd.
Q. Has the PUD agreed to supply this water to the proposed BP Cogen project?

A. Yes, pursuant to water supply contracts with both Intalco and BP and a three party reuse agreement being executed with BP, the PUD, and Intalco.

Q. Would you please explain how the Intalco Water Reuse Project would work?

A. As I said earlier, the average amount of water that will be required for the BP Cogen Facility, and more specifically its cooling system, is less than 4 mgd. This amount is equivalent to or less than the amount of water that Intalco has used within recent years as once-through cooling for its plant’s air compressors. It is also far less than Intalco’s maximum historic use which reached approximately 20 mgd. Currently, the water simply passes through the cooling system at the smelter and is discharged into the Strait of Georgia. The discharged water is essentially the same as that provided by the PUD, except it is a few degrees warmer.

The PUD makes a market for water supply capacity in the form of contract rights. BP will purchase conditional contract rights for water supply from the PUD that had been formerly held by Intalco. The conditional nature of this transaction, which is specified in a reuse contract involving BP, the PUD, and Intalco, in addition to a revised water supply contract with Intalco, will allow Intalco to use up to 4 mgd of water for cooling and then return it to the PUD.

The Reuse Project will re-pressurize once-through cooling water (i.e. 4 mgd) from Intalco’s Ferndale facility when it is operating its smelter and inject the water back into the PUD’s industrial water transmission system. More specifically, the
recovered Intalco water will be inspected, stored, and re-pressurized at facilities
constructed by the PUD in close proximity to the Intalco plant, and then conveyed by
the PUD to BP or its assigns for use by the BP Cogen Facility, or by other PUD
industrial customers, including the BP Refinery. If the smelter is not operating, the
PUD will supply the water under contract directly to the Cogen. This arrangement
allows both the Cogen Facility and the smelter to operate without causing a net
increase in water diversions compared to the quantities historically used with only
the smelter operating.

Q. Does the water supply required for the proposed BP Cogen Facility fall within
the amounts authorized under the PUD’s water rights?
A. Yes. The 4 mgd required for the Reuse Project represents only a small fraction of
the PUD’s total authorized water rights (53.5 mgd/Qi – 46,211 af/yr – Qa).

Q. Will the supply of water required to serve the proposed BP Cogen Facility cause
current PUD diversions from the Nooksack to increase?
A. No increase in the PUD’s historic diversions from the Nooksack River is anticipated
as a result of the Reuse Project. As noted above, the PUD has historically provided
approximately 4 mgd of water to Intalco for industrial cooling purposes. Under the
Reuse Project and as described above, Nooksack River water currently diverted by
the PUD for this use will be recovered, inspected, repressurized, and redirected to
the BP Cogen Facility via use of the Reuse Project facilities.
Q. What would be the effect, if any, upon PUD water diversions from the Nooksack River for the proposed BP Cogen Facility if Intalco shut down?

A. A shutdown of the Intalco plant would have no practical effect upon PUD water diversions from the Nooksack River. As noted earlier, the water intended for the Reuse Project represents water already applied to beneficial use, and perfected by Intalco’s historic industrial use. In the event operations at the Intalco plant were suspended or shut down, Reuse Project water would be transmitted directly to the BP Cogen Facility instead of transiting through the Intalco cooling systems and Reuse Project facilities constructed by the PUD. In fact, since the average amount of water required for the Cogen is less than the approximately 4 mgd historically used by Intalco, and the extra reuse water not required for the Cogen will be used to serve other PUD customers in lieu of diverting additional water for them, there will be less need to divert water from the Nooksack River whether or not the Intalco facility is operating.

Q. Will the provision of water to the proposed BP Cogen Facility preclude the PUD from supplying water to other new industry or development in the area?

A. No. As noted above, the water intended for the BP Cogen Facility is currently used and obligated under contract to Intalco. Thus, the Reuse Project water is not “new” water the PUD can unilaterally make available to potential new customers. However, Intalco has the contractual right to assign its contract demand to BP or potential new entities that may choose to operate within the Cherry Point Heavy Industrial Area, subject to water quality, pressure zone, storage, and other related engineering and contractual limitations.
Q. Do you have any further comments about the Cogen’s water use plan?

A. The PUD is very excited about this project. The PUD has had numerous discussions with various industrial customers over the years about conservation and reuse possibilities. This is the first time that we have gotten this close to an actual project. It is important to the PUD that we find ways to extend our existing water supply to continue to support industrial growth in the county. BP and Intalco have been great partners in working towards the goal of this reuse project. BP’s initiative in working with the PUD to develop and finance this water reuse project is a great example of how cooperation between industrial users and the PUD can extend water supplies and support new industrial growth.

END OF TESTIMONY