

**EXHIBIT NO. KRK-4**  
**DOCKET NO. UE-10\_\_\_\_\_**  
**WITNESS: KARL R. KARZMAR**

**BEFORE THE**  
**WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION**

**In the Matter of the Petition of**

**PUGET SOUND ENERGY, INC.**

**For a Declaratory Order Regarding the  
Transfer of Assets to Jefferson County  
Public Utility District.**

**Docket No. UE-10\_\_\_\_\_**

**THIRD EXHIBIT (NONCONFIDENTIAL) TO THE PREFILED DIRECT  
TESTIMONY OF  
KARL R. KARZMAR  
ON BEHALF OF PUGET SOUND ENERGY, INC.**

**JULY 15, 2010**

**FINAL REPORT**  
**Preliminary Feasibility Study**  
**Public Utility District No. 1 of Jefferson County**  
**Electric System Acquisition**

October 24, 2008

Prepared for  
**Public Utility District No. 1 of Jefferson County**  
**Port Hadlock, Washington**

by



## Public Utility District No. 1 of Jefferson County

### Preliminary Feasibility Study Acquisition of Electric System Facilities

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## Public Utility District No. 1 of Jefferson County

### Preliminary Feasibility Study Acquisition of Electric System Facilities

#### Executive Summary

##### Introduction

Electric service is currently provided to the residents and businesses in Jefferson County (County) by four electric utilities: Puget Sound Energy (PSE), an investor-owned utility headquartered in Bellevue, Washington, Mason County Public Utility District (PUD) #1, Clallam County PUD and Grays Harbor County PUD. Although PSE serves only about 14% of the total area of Jefferson County, most of the population within the county resides in and around Port Townsend in the area served by PSE.

With uncertainty over the future of PSE and significant local citizen concern over foreign ownership and privatization, the Public Utility District No. 1 of Jefferson County (Jefferson County PUD or the District) has undertaken a feasibility study related to the District acquiring the electric facilities of PSE in the County and providing electric service to those businesses and residents currently served by PSE. D. Hittle & Associates, Inc. was retained by the District in June 2008 to provide a study of the various technical and economic issues associated with the District acquiring PSE-owned electric facilities and providing electric service within Jefferson County.

##### PUD Electric Service

Public utility districts (PUDs) are nonprofit, community-owned and community-governed utilities that provide electricity, water, wholesale telecommunications and sewer service. They are municipal corporations of the State of Washington. The citizens in each Washington County have the right to form a PUD. In Washington, there are 28 operating PUDs in 27 counties which in total provide electric service to approximately 900,000 customers and water service to approximately 115,000 customers in their respective service areas. The District was organized in 1939 and it does not presently provide electric service.

Accountability to the citizen-owners of a PUD rests with the elected PUD commissioners, providing far more direct and local accountability between the customers and the operators of an electric utility than exists with most investor-owned utilities. A PUD combines the public interest benefit of a nonprofit operation with low cost financing methods similarly available to a municipality or city. In the Pacific Northwest, PUDs have the ability to purchase power from the federal Bonneville Power Administration. PUDs establish rates for electric service based on the actual costs of operating and maintaining the utility.

Although PUDs do not pay income taxes like investor-owned utilities, in Washington they do pay the public utility tax and a privilege tax in lieu of property taxes. Local municipal taxes charged on utility bills are collected and paid by PUDs in amounts similar to investor-owned utilities. Taxes received by the aggregate of government taxing entities are roughly the same and there are special state laws to insure that when a PUD purchases the assets of an investor-owned utility (such as PSE) that certain taxing districts are protected from any lost tax revenues.

A comparison of certain organizational and service issues with a PUD and an investor-owned utility is provided in the following table.

PUD	Investor-Owned Utility
Non-profit municipal corporation of the State of Washington, rates at cost	For-profit corporation, rates are cost plus a margin for profits
Operated for the benefit of the customers/owners	Operated for the benefit of stockholders
Governed locally	Regulated in Olympia and distant board room
Governing & regulatory meetings are open to the public	Board meetings are not public meetings and much WUTC rate case testimony is hidden behind Confidentiality Agreements
Governing Board elected by the voters	Governing Board selected by company owners
Equity in electric facility assets accumulated on behalf of customer/owners which leads to lower rates	Equity accrues to stockholders who look to dividends and increases in the value of their stock

### Establishing an Electric PUD in Jefferson County

A major element in establishing electric service by the District would be the acquisition of electric facilities in Jefferson County presently owned by PSE. These facilities would include buildings, substations, overhead and underground distribution lines, transformers, service drops, meters and streetlights. In order to effectively deliver power to the PSE distribution substations within Jefferson County, the District would acquire PSE's transmission lines within the County. PSE does not transmit power through Jefferson County to any other areas it serves and as such, there will be no need to provide "wheeling services" to PSE over the lines the District would acquire.

In Jefferson County, there are various transmission lines owned by PSE, Clallam Co. PUD, the Port Townsend Paper Company mill and the federal Bonneville Power Administration (BPA). It

is expected that the District would acquire the PSE lines but the other entities would retain the lines they own. With the high-voltage transmission lines acquired from PSE, the District will have the ability to interconnect with BPA's system, receive bulk power deliveries and transmit the power to substations in the County for eventual distribution to the residences and businesses in the County.

As with most Pacific Northwest electric utilities, the most significant annual operating expense that the District's electric system will incur is the cost of wholesale power. Upon fulfillment of certain criteria primarily related to establishing ownership of its distribution system, the District will be entitled to purchase power from the Bonneville Power Administration (BPA) as a preference customer. BPA markets the power generated by the federal Columbia River power system. The District can reasonably expect to purchase a significant portion of its power supply from BPA at BPA's lowest cost of power. BPA has indicated that beginning October 2011, its preference customers may need to acquire a portion of their power supply from other sources.

### **Estimated Cost to Acquire Facilities**

The price that the District would pay to acquire the PSE facilities is subject to a number of factors and cannot be precisely defined at the present time. Based on experience with other utility acquisitions and a review of various issues related to the estimated original cost of the facilities in Jefferson County and PSE depreciation allowances, it is estimated that for the real estate, buildings, transmission, substation, and distribution facilities, the range of acquisition costs would be between \$34.9 million and \$69.8 million.

For the purpose of the base case analysis included in this study, we have assumed that the District would pay \$47.2 million for the real estate, buildings, transmission substations and distribution facilities. While we consider this estimated cost to be reasonable for this analysis, it potentially represents a premium over the amount being received by PSE in the proposed sale of the whole company to Macquarie.

### **Total Initial Financing Requirements**

The estimated initial financing requirements for the District's electric system include the costs of acquiring the existing electric facilities from PSE, constructing certain new facilities related to separation of the District's system from that of PSE, legal and consulting fees, startup costs and working capital. It is assumed that the District would finance the initial acquisition costs with the issuance of revenue bonds that would not be tax-exempt. Costs of constructing new facilities for separation, purchases of equipment, inventories, supplies and other related costs are assumed to be financed with loans carrying tax-exempt interest rates. Certain costs associated with the issuance of revenue bonds, such as the funding of a bond reserve fund, would also be incurred.

The total initial financing requirement is estimated to be \$66.1 million to acquire the transmission and distribution facilities, pay legal and consulting fees, pay the costs of system separation and pay various startup costs. Preliminary discussions with investment bankers

indicate that the District could reasonably expect to finance a bond issuance of this magnitude in the time frame contemplated.

## Estimated Benefits with the PUD

The economic feasibility evaluation is based on a ten year cost comparison of the cost of continued electric service with PSE compared to the cost of electric service from the District assuming the District were to begin operation in 2011 and establish rates sufficient to pay all its operating costs, taxes, debt service and fund on-going renewals and replacement expenditures. This study is not a “best estimate” rate projection of each utility. If it were, then less conservative assumptions would be used. PSE has indicated that it intends to increase electric rates an average of about 7.1% on November 1, 2008. Acknowledging this announced increase and providing for modest future increases in PSE rates and certain other conservative assumptions, it is estimated that the District could provide electric service at rates that are slightly higher than PSE’s rates in the first three years of operation. The rates would be expected to decrease noticeably in the fourth year of operation when low cost BPA power becomes available to the District. In reality, alternate debt service schedules, better coordination with BPA of the electric service starting date and a more realistic PSE asset acquisition cost would likely result in lower rates for PUD electric service in all years.

Although a number of factors would affect electric rates, over time the District’s charges for electric service are estimated to be lower than PSE’s charges. Based on the assumptions used in our analysis, it is estimated that the total present value savings in total charges for District provided electric service in Jefferson County over the first ten years of District operation are estimated to be \$22.5 million. This indicates that even with relatively conservative assumptions used in the analysis, a PUD electric system is economically viable.

For a new electric utility like the District, a significant cost will be interest and principal payments on the debt undertaken to buy the electric facilities and startup the electric utility operation. Electric PUDs that have been in operation for many years generally have lower outstanding debt burdens and, as such, have significantly lower costs and lower electric rates as a result.

It is estimated that if it were to undertake electric operation, the District would eventually have an electric utility staff of about 67 people. This staff would for the most part be expected to live and work in Jefferson County. Similarly, all levels of management of the PUD electric utility would be local. An estimate of the economic impact to Jefferson County of the increased employment has been included as part of this study as Appendix D. The economic impact study indicates that due to different cost structures and local employment impacts, moving electricity services from an investor-owned utility to a locally operated PUD would have favorable impacts on the economy of Jefferson County. Local employment is projected to increase by 347 jobs by the 10th year of operation of the PUD. Total impacts on business revenues in the county would increase by a net present value of \$89.5 million.

PSE announced recently that it would be reinstating the residential exchange credit for its residential customers effective November 1, 2008. The exchange credit will provide a 1.055 cents per kWh reduction in the retail price for electricity for PSE's residential customers. The exchange credit does not apply to commercial or industrial customers. The estimated effects of the exchange credit have been included in the analysis provided in this report assuming it continues at the recently announced level.

## Other Considerations

With electric service provided by a PUD, all aspects of utility operation are controlled locally. Regular meetings of the PUD commissioners are open to the public. Local control has in the past been a significant factor in the decision by other communities to establish consumer-owned electric utilities. There have been a number of new consumer-owned electric utilities established nationwide in the past 25 years. (See Appendix B).

One example of a new municipal electric utility established recently in the Pacific Northwest is the City of Hermiston, Oregon. Hermiston acquired its electric facilities from PacifiCorp, an investor-owned utility, in 2001 and began operation late that year. In the six years since establishing its electric utility, Hermiston has undertaken a significant program to replace various underground and overhead distribution lines and has improved the facilities that deliver bulk power to the community. At the same time, the Hermiston electric utility has been able to build reserve funds to pay for future improvements to the system and pay the costs of emergency repairs, if needed. At the present time, a typical residential electric customer in Hermiston consuming 1,000 kWh per month is paying about 20% less than they would if served by PacifiCorp. Electric rates in Hermiston were initially established to be approximately the same as PacifiCorp.

Two important points need to be made in regards to this feasibility study and the approach being taken by the District. The first is that even if the District decides to undertake providing electric service, it would likely take at least two years from the time such a decision is made until power is provided to Jefferson County customers. The second point is that there will be many decision points between now and such a potential day of service. In that time there could be changes in economic or technical factors that could cause the District to decide not to pursue providing electric service.

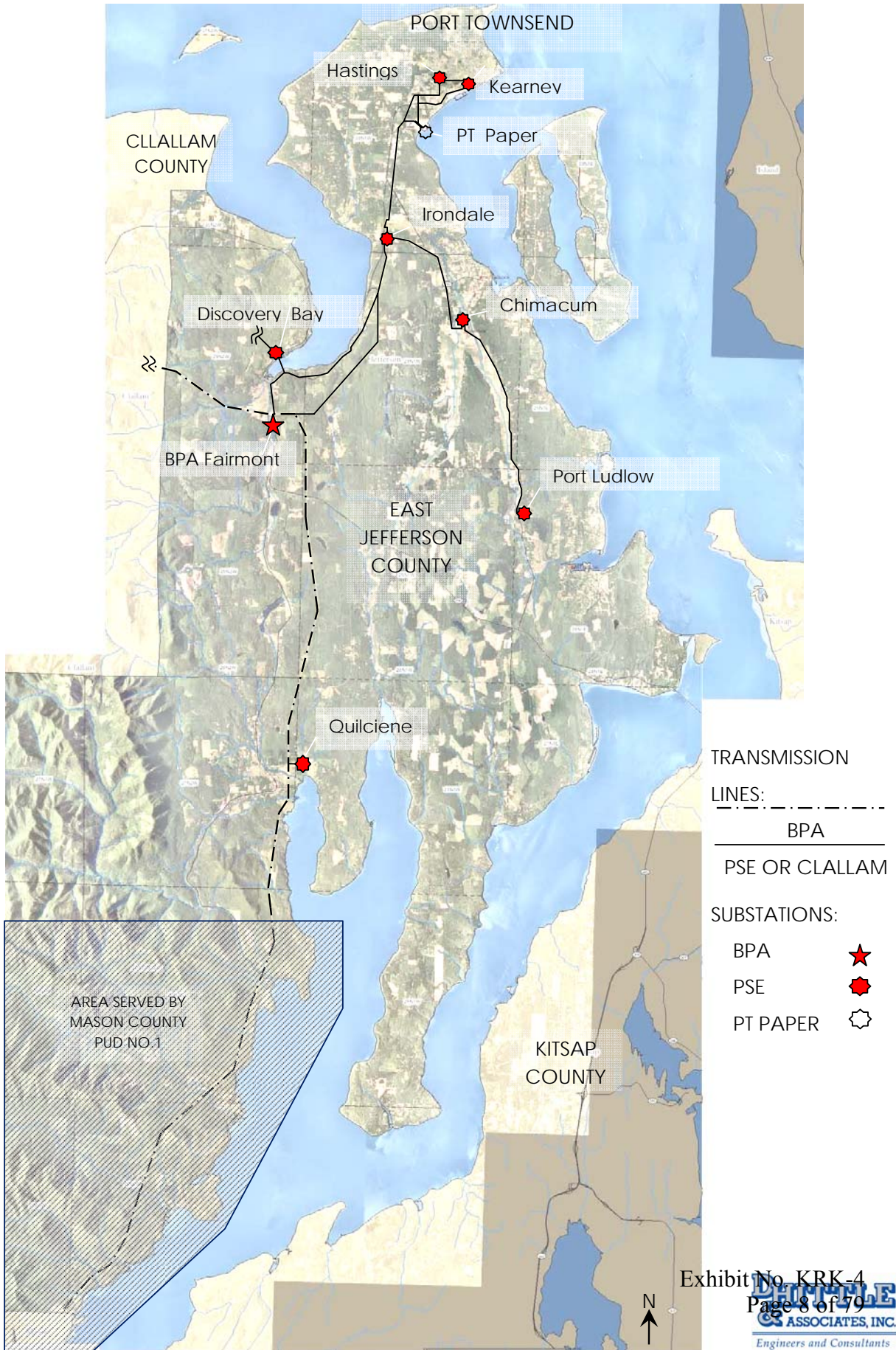
It is important to note that a number of assumptions and estimates were made during the preparation of this study. As conditions change or more information becomes known, the PUD should evaluate the potential changes these factors may have on the results of the study.



# EAST JEFFERSON COUNTY

## EXISTING SUBSTATIONS AND TRANSMISSION LINES

### PROPOSED PUD ELECTRICAL SERVICE AREA



## Section 1 Introduction and Conclusions

### Introduction

#### Background

Electric service is currently provided to the residents and businesses in Jefferson County (County) by four electric utilities: Puget Sound Energy (PSE), an investor-owned utility headquartered in Bellevue, Washington, Mason County Public Utility District (PUD) #1, Clallam County PUD and Grays Harbor County PUD. Although PSE serves only about 14% of the total area of Jefferson County, most of the population within the county resides in and around Port Townsend in the area served by PSE. Electric service in the City of Port Townsend (City) is provided by PSE pursuant to a ten-year franchise agreement that terminates December 31, 2010<sup>1</sup>. The population of Jefferson County is presently estimated to be approximately 28,800.

Public Utility District No. 1 of Jefferson County (the “District,” Jefferson County PUD or the “PUD”) provides water and sewer service to approximately 3,000 connections in certain locations in Jefferson County. The District does not presently provide electric service. Rather, electric service to the residents and businesses in the County is provided in four separate service areas by PSE and the three adjacent county PUDs. In addition, the Port Townsend Paper Corporation (the “Mill”) has been a direct service industrial customer of the federal Bonneville Power Administration (BPA) and takes delivery of power directly from the BPA Fairmount Substation over power lines owned by Clallam County PUD and the Mill. The Mill also has some of its own generation. It is expected that the Mill will continue to arrange its own electric service.

The District has evaluated the possibility of providing electric service in the past, most recently in 2000 (D. Hittle & Associates) and it evaluated local employment and economic impacts in 2005 (Paul Sommers), but has not undertaken any related action since the last study effort. In 2007, the City conducted a study to evaluate electric service options in preparation for the termination of the existing PSE franchise agreement. Among the options considered by the City was potential electric service from Jefferson County PUD.

PSE announced in October 2007 that it was being sold to a consortium of foreign investors. This has resulted in significant community concern over the future of electric service and the ability of local citizens to influence future PSE decisions critical to residents of the County. With uncertainty over the future of PSE and significant local citizen concern over foreign ownership and privatization, the District has undertaken a feasibility study related to the District acquiring the electric facilities of PSE in the County and providing electric service to those businesses and residents currently served by PSE. D. Hittle & Associates, Inc. was retained by the District in June 2008 to provide a study of the various technical and economic issues associated with the District acquiring PSE-owned electric facilities and providing electric service within Jefferson County. This report summarizes the results of this feasibility study.

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<sup>1</sup> City of Port Townsend Ordinance No. 2820 dated December 16, 2002.

It is important to note that even if the District decides to undertake providing electric service, it would likely take at least two years from the time such a decision is made until power is provided to Jefferson County customers. When Grays Harbor County PUD was formed it took approximately 14 months between a vote of the people to form an electric utility and initiation of retail electric service. The creation of Grays Harbor PUD involved completing a condemnation proceeding, issuing bonds, and providing electric service to customers. Currently the District exists, it has staff, and it has procedures in place for issuing contracts, issuing bonds, and other important functions. The District staff and Commission are also educating themselves on a variety of electric service issues through this and past studies. As such, the District will be ready to act and study the potential implementation of electric authority, should it receive voter approval in November.

As the District moves toward potentially establishing an electric utility, there will be many decision points along the way. There could be changes in economic or technical factors that could cause the District to decide not to pursue providing electric service. As such, it is not prudent to make significant study investments at this point in time until more information is known and various risks are evaluated.

The prudent approach will be to use an iterative process that incrementally investigates future options as future conditions reveal themselves. The analysis within this report is therefore preliminary in nature and designed to capture sufficient information to move forward to the next decision point.

### **What is a PUD?**

Public utility districts (PUDs) are nonprofit, community-owned and community-governed utilities that provide electricity, water, wholesale telecommunications and sewer service. They are municipal corporations of the State of Washington. The citizens in each Washington County have the right to form a PUD. In Washington, there are 28 operating PUDs in 27 counties which in total provide electric service to approximately 900,000 customers and water service to approximately 115,000 customers in their respective service areas. Jefferson County Public Utility District was organized in 1939, and although it has considered providing electric service in the past, it does not presently do so. Jefferson County PUD does however, perform many functions similar to those found within an electric utility such as issuing utility bills, paying various utility taxes, managing maintenance programs, issuing bonds, preparing budgets, hiring attorneys and consultants, and performing engineering studies.

The District is governed by three commissioners that are elected by the residents of Jefferson County. The commissioners of the PUD establish policy, approve budgets and expenditures, establish rates for services, retain the utility management and provide oversight of the utility. PUDs are self-regulated and as such, are not regulated by the Washington Utilities and Transportation Commission (WUTC). Accountability to the citizen-owners of the PUD rests with the elected PUD commissioners, providing far more direct and local accountability between the customers and the operators of an electric utility than exists with most investor-owned

utilities. A PUD combines the public interest benefit of a nonprofit operation with low cost financing methods similarly available to a municipality or city.

PUDs are governed by the Revised Code of Washington (RCW) Title 54 and other laws of the State of Washington. Pursuant to RCW 54.08.070, “at any general election held in an even-numbered year, the proposal to construct or acquire electric facilities may be submitted to the voters of the district by resolution of the public utility district commission or shall be submitted to the voters of the district by the county legislative authority on petition of ten percent of the qualified electors of such district ...” Earlier this year, citizens of Jefferson County filed the necessary petition requesting a referendum related to PUD electric service to be submitted to the voters in the general election this coming November and it is to be included on those ballots.

### **Potential PUD Electric Service in Jefferson County**

A major element in establishing electric service by the District would be the acquisition of electric facilities in Jefferson County presently owned by PSE. These facilities would include buildings, substations, overhead and underground distribution lines, transformers, service drops, meters and streetlights. In order to effectively deliver power to the PSE distribution substations within Jefferson County, the District would acquire PSE’s transmission lines within the County. PSE does not transmit power through Jefferson County to any other areas it serves and as such, there will be no need to provide “wheeling services” to PSE over the lines the District would acquire.

In Jefferson County, there are various transmission lines owned by PSE, Clallam Co. PUD, the Mill and the federal Bonneville Power Administration (BPA). It is expected that the District would acquire the PSE lines but the other entities would retain the lines they own. With the high-voltage transmission lines acquired from PSE, the District will have the ability to interconnect with BPA’s system, receive bulk power deliveries and transmit the power to substations in the County for eventual distribution to the residences and businesses in the County. It is not anticipated that any customers now served by Clallam, Mason #1 or Grays Harbor County PUDs would be served by the District.

Other than in a couple locations, there should be very little new construction needed to complete the separation of the District’s and PSE’s electric systems following the acquisition by the District. The principal separation costs can be handled one of two ways. If PSE continues to require the submarine cables at Shine Beach and Hazel Point to serve Kitsap County PSE loads, the PUD will likely involve install primary metering at the submarine cable crossings near Shine Beach and Hazel Point on the Toandos Peninsula. If PSE does not require these connections, the PUD will likely reconductor and reconfigure some of its distribution lines acquired from PSE.

### **PUD Power Supply Overview**

As with most Pacific Northwest electric utilities, the most significant annual operating expense that the District’s electric system will incur is the cost of wholesale power. Upon fulfillment of certain criteria primarily related to establishing ownership of its distribution system, the District

will be entitled to purchase power from the Bonneville Power Administration (BPA) as a preference customer. BPA markets the power generated by the federal Columbia River power system and as such, provides the majority of the power used by the Northwest's publicly owned electric utilities<sup>2</sup> and approximately 45 percent of all electric power used in the Pacific Northwest.

In addition to BPA, a number of other opportunities for near-term power supply could be available to the District including power purchases from other utilities, independent generating facilities or power marketers. In the future, the District will most likely continue to purchase power from BPA but will also be able, to participate jointly with other utilities in new generation facilities, contract to purchase power from other suppliers and construct new generating facilities of its own including solar, wind and other renewable resources in Jefferson County.

### **Utility Industry Restructuring**

It is important to note that restructuring of the electric utility industry in the United States over the past two decades prompted many utilities to evaluate their respective competitive positions. As a result, many investor-owned utilities were sold, acquired or merged with other utilities. In the Pacific Northwest, Enron purchased Portland General Electric Company (PGE) in 1997 and after subsequent failed attempts by Enron to sell PGE, PGE became independent in 2006. In 1999, PacifiCorp was acquired by Scottish Power and then sold to MidAmerican Energy Holdings in 2006. Following a 1997 deregulation bill passed by the Montana legislature, Montana Power Co. sold its hydroelectric generating facilities to Pennsylvania Power & Light Co. and eventually sold its transmission and distribution facilities to Northwestern Corporation of Sioux Falls, South Dakota.

The restructuring movement has prompted cities and other municipal entities nationwide to evaluate electric service in their communities. In order to assure reliable, cost effective electric service, as well as allow for local community-focused input as to how electric service is provided in their communities, many of these entities have studied the potential acquisition of the electric system facilities from the existing utility. Appendix B attached to this report is a list provided by the American Public Power Association of new consumer-owned electric utilities that have been formed since 1973. The list includes 83 publicly owned electric utilities.

### **Study Methodology**

The purpose of this study has been primarily to provide an initial or preliminary assessment of the potential costs and benefits over a ten year projection period to the electric consumers in Jefferson County if the District were to provide electric service in the area currently served by PSE, so as to evaluate economic feasibility. In general, the study estimated the costs of acquiring certain electric facilities and operating an electric utility, determined what the District

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<sup>2</sup> Publicly owned electric utilities in the Pacific Northwest, referred to as BPA preference customers, purchasing all or a portion of their respective power supply requirement from BPA include 28 PUDs, 41 municipal electric utilities and 56 electric cooperatives.



would need to charge for electric service to recover revenues sufficient to pay all of its costs and compared the District's estimated cost of electric service to continued service from PSE.

### **Data Sources**

Most of the data used in the study is from publicly available reports and other sources. Recently a study of potential consumer-owned electric service in Jefferson County sponsored by PSE and performed by UtiliPoint International, Inc. was released. The UtiliPoint report contains some specific numbers in regards to customers and sales information and other information. Some of the basic data included in the UtiliPoint report has been used in our analysis as appropriate.

Should the District's Commissioners move forward to either a negotiated or contested acquisition of PSE's facilities, a much more detailed assessment of facility quantities and costs would be derived in subsequent studies and analyses. If the development of the District's electric utility proceeds and access to PSE's customer sales and facility inventory records can be obtained, a detailed inventory and age identification of various PSE assets within Jefferson County would potentially be developed.

For the purpose of this study, the determination of electric facilities to be acquired was based on a cursory review of PSE's transmission and distribution system in and around Jefferson County. The length of transmission lines was estimated and the number and capacity of substations was quantified. For the purpose of evaluating the investment in distribution feeders, service drops, meters and other distribution facilities, PSE's average investment in its distribution system on a per customer basis was applied to the number of customers estimated to be located in the District. It is expected that the District would finance the initial acquisition and startup costs with the issuance of a combination of taxable<sup>3</sup> and tax-exempt revenue bonds.

A total count of the number of electric customers located in Jefferson County was obtained from the UtiliPoint report and reasonably substantiated by another PSE summary report. The total power requirements of the electric customers in Jefferson County at current levels have been estimated based on the values within the UtiliPoint report. After 2009, power requirements are assumed to increase at a relatively modest rate of 2.0% per year.

The estimated costs the District would experience for power purchases, system operation and maintenance, customer accounting and administration included in the analysis have been based on costs experienced by other publicly-owned electric utilities in the Pacific Northwest. It is assumed that the District would conduct its own billing and accounting activities and would provide in-person customer service for bill paying, hookup requests and other services. These billing and accounting functions should integrate well with the District's current water customer accounting and customer service system. In addition to operating expenses, annual debt service

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<sup>3</sup> Although the District would normally be able to issue tax-exempt bonds, federal tax laws would preclude the use of tax-exempt financing to fund the acquisition of existing electric facilities previously owned by an investor owned utility. Tax-exempt bonds would be desirable because they would have a lower interest rate. It may be possible for the District to refinance the taxable bonds with tax-exempt bonds at some point after starting operation.

payments and funds for annual capital improvement expenditures were included in the projected revenue requirements.

### **BPA Power Supply Issues**

It is within the Bonneville Power Administration (BPA) Administrator's discretion to decide and establish the applicable standards for service to a new utility. BPA has traditionally made its determination regarding compliance with BPA standards for service on a case-by-case basis. One of BPA's long standing standards for purchasing Federal power requires a customer to own the distribution facilities necessary and used to serve such customer's retail consumers. This standard applies to public body, cooperative, and privately owned utilities selling to the general public and to federal agencies.

In 2000, BPA defined its criteria for qualification to purchase power from BPA as a "preference customer"<sup>4</sup>. This criteria is presently in effect, however, significant discussion is underway in the region with regard to both BPA power availability and power sales rates in the future. The recently released "Long-Term Regional Dialogue Policy" indicates BPA will supply up to 250 average megawatts at its lowest cost firm power rate (Tier 1) to new public utilities for the term of its next power sales contracts. The policies for implementation of the provisions of the Regional Dialogue are still being finalized but are expected to be in place later this year so that BPA can offer new power sales contracts to its customers starting in December of 2008.

For the purpose of estimating the cost of power to the District in this analysis, it has been assumed that the District would purchase its entire power supply requirement from BPA. Under current BPA policy and past BPA precedents, a power purchase from BPA would entail both Tier 1 power and more expensive Tier 2 or market priced power. Past history would indicate that all preference customers, new and old, are treated equally. As a result, and consistent with load "phase-in" examples in the BPA Regional Dialogue and Tiered Rate Methodology, toward the end of the forecast period within the study, the District is assumed to be able to purchase most of its power at the BPA preference rate similar to all other preference customers. The District should be able to plan its initial operation accordingly to minimize higher Tier 2, targeted adjustment charge (TAC), or market priced power rates<sup>5</sup>.

Projections of operating costs, debt service and other costs for the District's electric system have been made on an annual basis for the first ten years of electric utility operation. For the purpose of this analysis, it has been assumed that the first year of operation would be 2011. Although specific projected values would change, it is not expected that the overall outcome of the analysis would vary significantly if the assumed first year of operation were different.

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<sup>4</sup>United States Department of Energy, Bonneville Power Administration, Policy Decision Regarding Bonneville Power Administration's Standards for Service dated January 13, 2000.

<sup>5</sup> Depending on the timing of the BPA rate cycle and initial operation, power purchased from BPA by a new preference customer may be priced at the priority firm rate plus the targeted adjustment charge (TAC), the combination of which is estimated to be approximately the rate for firm power on the open market.

It should be noted that this study has not addressed legal issues that may affect the District's ability to pursue electric utility ownership and operation.

## Conclusions

The costs of the District establishing and operating an electric utility have been estimated in accordance with the methodology and assumptions described in this report. Based on these estimated costs, the cost of power to electric consumers in the District with a District-owned electric utility has been projected and compared to the projected cost of continued electric service from PSE. Results of the study and the accompanying cost analysis are summarized as follows:

1. It is estimated that the District would have 18,150 electric connections in its proposed service territory and would have a total annual energy requirement of 323,400 MWh, or 37 average MW (MWa) at 2009 levels. The number of connections served by the District is estimated to increase at an average annual growth rate of approximately 2.0% per year. Peak demand is estimated to be about 64 MW.
2. Various transmission lines, substations, distribution lines and other facilities presently exist and if acquired, would provide a means by which the District can interconnect its proposed electric system with BPA's regional transmission system. The District will then be able to purchase power from outside sources and provide service to its customers in Jefferson County.
3. The estimated net book value of the electric facilities presently owned by PSE and needed by the District to provide electric service in its proposed service territory is \$34.9 million. The cost to acquire these electric facilities is estimated to be between \$34.9 million and \$69.8 million. In 2007, the Washington State Department of Revenue (DOR) indicated that the value of PSE's electric facilities in Jefferson County was \$30 million.
4. Certain costs may need to be incurred to separate the District's electric system from PSE's remaining system in Kitsap County adjacent to the District. These costs are not expected to be significant, however, and the District would be expected to fund these costs as well as any other costs related to separation.
5. Most of the publicly-owned electric utilities in the Pacific Northwest rely upon BPA for much, if not all, of their power supply requirements. The District will need to meet certain criteria established by BPA to qualify to purchase power as a preference customer; however, it is reasonably expected that the District will be able to meet the requirements to purchase all of its net power supply from BPA. This does not mean that the District is precluded from developing its own local or green power resources or from making non-federal power purchases as long as they are properly identified in the BPA Purchase Power Agreement.
6. In its assumed initial year of operation, 2011 for purposes of this analysis, the average cost of power to consumers provided by the District is estimated to be approximately 11.1 cents per kWh on average. The District's rates would be expected to decline over



the first few years as lower cost BPA power becomes available. Cumulative savings in total charges for electric service over the first ten years of District electric utility operation are estimated to be \$41.3 million. The present value to 2009 of the cumulative savings over the first ten years of District electric utility operation is estimated to be \$22.5 million using a 5 percent discount rate. The estimated savings amount is dependent on a number of factors including future changes in PSE electric rates.

7. Alternative purchase power costs, system acquisition costs and financing costs can significantly affect the results of the analysis. If the District's Commissioners decide to pursue electric service and in an iterative process move forward to a negotiated or contested acquisition, a more detailed engineering assessment should be conducted at that time. Additional information and alternative assumptions should be factored into any subsequent feasibility studies and engineering reports.

## Section 2

### Estimated Cost of Electric Facilities

#### Electric Facilities to be Acquired and Separation of Systems

The District's electric utility would serve the portion of Jefferson County currently served by PSE. The electric facilities located within the proposed service territory include transmission lines, substations, overhead and underground distribution lines, poles, transformers, vaults, service drops, meters, streetlights and any ancillary distribution system facilities. PSE's transmission system in Jefferson County includes 115-kilovolt (kV) lines. There are seven PSE substations within the County that have been identified as necessary to transform power from transmission voltage to distribution voltage to provide service in the District.

We have examined one-line system diagrams of the electric systems in Jefferson County, certain Jefferson County comprehensive plan information, the recent UtiliPoint report, and made selected on-site visits to portions of the electric system within Jefferson County. Based on this information we have determined the quantities and approximate sizes of transmission and substation facilities that PSE now has in place within Jefferson County.

Based on this information, we estimate that the optimal approach for the District to serve eastern Jefferson County would be to establish points of delivery with BPA system at BPA's Fairmont substation and at the Quilcene substation from a tap of the 115-kV BPA transmission line. Under this concept, the District would acquire all PSE transmission, substations, distribution and other property within Jefferson County, with the exception of PSE's two submarine cables across Hood Canal. Two separation points would be made at the location of these submarine cables.

The first area of system separation would be the submarine cable operated at a distribution voltage that formerly served the Shine Beach substation. The Shine Beach substation has been abandoned and replaced with voltage regulators to compensate for what are likely to be very high distribution losses across the submarine cable. While this submarine cable was originally constructed to supply transmission support to Jefferson County by PSE, it has deteriorated over the years to the point that it is only capable of limited distribution support. As such the District will need to construct other lines so as to provide back-up power support to this area within Jefferson County. Should for some unlikely reason, PSE need to retain the Shine Beach submarine connection to serve its Kitsap County loads, a primary metering package could be placed at Shine Beach to record power wheeled by the District to PSE.

The second area of system separation would be the submarine cable that crosses from the Kitsap Peninsula to Hazel Point on the Toandos Peninsula. Again, the District will need to construct or reconductor distribution line back-up for this area as part of the separation of the system. Should PSE's system require the Hazel Point submarine connection to serve its Kitsap County loads, a primary metering package could be placed at Hazel Point to record power wheeled by the District to PSE. There may also be a need to construct some additional distribution lines for the District to serve the loads currently served over the submarine cables. The total cost of

modifying the acquired PSE facilities within Jefferson County associated with potential loss of the two PSE submarine cable connections is estimated to be approximately \$1.2 million.

There are no other known areas of system separation that should involve PSE. There are interconnections with Clallam County PUD at Gardner Beach Road, at the Discovery Bay substation and from the lines that connect to the Mill. We have assumed that the District will not purchase these Clallam County PUD facilities initially.

For our analysis we have also assumed that the District will not acquire the transmission lines serving the Mill's loads. The analysis also does not assume any change in Jefferson County loads served by Mason County PUD #1, Grays Harbor County PUD or Clallam County PUD.

It is assumed that the District would acquire PSE's other real and personal property within Jefferson County. We have further assumed that the Port Townsend Paper Company generation being sold to PSE will either be acquired by the PUD or that the PUD will furnish wheeling if needed to the BPA Fairmont substation to assist the Mill in continued sales to PSE.

## Estimated Cost of Electric Facilities

An appraisal of the value of electric facilities to be acquired by the District for its electric system has not been conducted. Such an appraisal would rely upon a detailed description of the facilities to be acquired and will potentially be needed if the District proceeds towards acquisition of the PSE system in its service territory. For the purpose of this analysis, the cost the District would pay for the acquired facilities is estimated to be between the original cost less depreciation (OCLD) value and the reproduction cost new less depreciation (RCNLD) value of the electric facilities. OCLD is defined as the original cost of the property when it was first put into service as a public utility, less accrued depreciation. The OCLD value is an estimate of the net book value of property, which in general, is approximately the rate base value of the property for ratemaking purposes. For regulated properties such as the facilities to be acquired by the District, the rate base value generally is the portion of the original investment cost which the utility has not yet recovered through rate charges paid by its customers.

RCW 54.16.020 states that "in a condemnation proceeding, the court shall submit to the jury the values placed upon the property by the taxing authority for taxation purposes, and in respect to property, plants, and facilities of persons using public highways for furnishing public services without franchises, shall consider in determining the value thereof the fact that the property, plants, and facilities are subject to be removed from the highways by reason of being so operated without a franchise." The Washington State Department of Revenue (DOR) has estimated that the equalized taxing value of PSE real and personal property within Jefferson County, adjusted for market conditions in 2007 was \$30,047,802. This DOR value should be higher than the OCLD value. It is important to note that DOR performs a complex review of various assets and information provided to it and then makes adjustments to price the real and personal property at approximately a market value. It is also important to understand that this DOR value includes buildings, transmission lines, substations, distribution facilities, land rights, computer software, etc.

Jefferson County Public Utility District  
 Section 2  
 Estimated Cost of Electric Facilities

For the purpose of this analysis, it has been assumed that PSE’s total investment in distribution facilities in Jefferson County on a per customer basis is proportional with investment in these facilities throughout PSE’s entire system. Note this distribution value includes PSE substation facilities since under FERC accounting they are classified as part of the distribution system. PSE’s Total Electric Plant in Service as of December 31, 2007 was \$5.6 billion. The investment in Distribution Plant was \$3.0 billion or \$2,900 per customer based on the total number of electric customers in PSE’s system of 1,048,400.

We have estimated that approximately 31 miles of 115-kV transmission lines currently owned by PSE would be acquired by the District. Since we do not have precise inventory information from PSE or know what the original cost of these specific facilities was, we have estimated the original cost based on estimated current transmission line costs deflated to the cost at an assumed average installation date.

An allowance of 40% for accumulated depreciation on PSE transmission and distribution plant is considered a reasonable assumption based on data from previous PSE reports including a recent depreciation analysis, experience with other utility systems and our general observations of the electric distribution facilities in the District. Based on the estimated plant investment per customer shown above and 40% accumulated depreciation, the OCLD value of the distribution and transmission facilities to be acquired by the District is shown in Table 1.

**TABLE 1**  
**Estimated Original Cost Less Depreciation of Distribution and**  
**Transmission Facilities to be Acquired by the District <sup>1</sup>**

	Assumed Average Install Year	Average Service Life (Yrs)	Percent Depr.	Original Cost (\$000)	Original Cost Less Depreciation (\$000)
Distribution Plant	1990	45	40%	\$ 52,700	\$ 31,600
Transmission Lines	1988	50	40%	5,500	3,300
Subtotal				\$ 58,200	\$ 34,900

<sup>1</sup> Based on estimated 18,150 total customers and assumed 40% accumulated depreciation on system facilities.

In total, the estimated cost of the facilities to be acquired based on the assumed OCLD, or net book value, method of valuation is \$34.9 million. We have further estimated that the RCNLD value of the transmission and distribution facilities is approximately \$69.7 million. Based on past experience with other municipal buyouts of utility systems, the cost of acquisition as agreed to through negotiation or set by condemnation is typically between the OCLD and RCNLD values. Assuming a representative 35% premium<sup>6</sup> over the OCLD value, the cost of the transmission and distribution facilities would be \$47.1 million.

<sup>6</sup> The City of Hermiston, Oregon paid approximately two times the net book value of the electric facilities it acquired from PacifiCorp in 2001 to establish its municipal utility. UtiliPoint International indicated in an article

As previously indicated, PSE's electric facilities in Jefferson County are reported by DOR to be valued at \$30 million in 2007. This amount would include all transmission, distribution and general facilities and is the basis for determining the property taxes paid by PSE in Jefferson County.

If the District were unable to acquire the existing electric facilities at a fair price it could pursue development and construction of an all new electric system in Jefferson County, potentially in stages. Based on our preliminary evaluation of the current electric system in the County, we have estimated that new facilities to provide service to the current PSE customers in the County would cost approximately \$128 million. This amount includes the costs to build new transmission lines, substations and distribution lines. Benefits of a new system would include a system designed to today's needs in the County, lower maintenance costs and greater reliability. Construction of new facilities would also provide sales tax benefits and construction employment in the County.

The price that the District would pay to acquire the PSE facilities cannot be precisely defined at the present time. Rather, we have estimated a range of the acquisition cost based on net book value, or OCLD, on the low end and the RCNLD value on the high end without the benefit of any detailed inventory of plant data. Based on the analytical approach we have taken, the RCNLD value is approximately two times the net book value. For the transmission and distribution facilities, this range would be between \$35 million and \$70 million. For the purpose of the analysis included in this study, we have assumed that the District would pay a 35% premium over net book value for the transmission and distribution facilities. This amount would be \$47.1 million. While we consider this estimate reasonable for this analysis, alternative estimates have also been used for comparison of results. The District would probably seek a potentially lower valuation of PSE's assets during any acquisition process.

### Going Concern Costs

The final acquisition price established either through negotiations or through litigation will be based upon the above methodologies and may include additional components such as a going concern value, stranded costs, and/or separation costs. The value, if based on litigation will include those items that Washington State law and past precedent says are appropriate and that will be influenced by the method of valuation chosen. We have not included an explicit going concern value as we are showing a complete range of costs and the going concern value would only be appropriate under certain circumstance. The range we have examined along with the premium over OCLD should include a reasonable going concern amount.

### Stranded Costs

Similarly, stranded costs have not been explicitly included, as they are likely to be zero. Specifically, FERC has defined stranded costs to compensate utilities for the loss of customers

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dated July 25, 2001 that the high price agreed to for the facilities by Hermiston was a factor that contributed to PacifiCorp's willingness to negotiate a sale rather than continue to fight Hermiston's municipalization effort.

that would jeopardize utility investment in generation or transmission facilities due to FERC's implementation of transmission open access policy. PSE has stated in many forums that it will need to add or upgrade significant amounts of generation and transmission to its system to meet future loads. Therefore, a loss of customer load and revenues from the creation of a PUD electric utility in Jefferson County will reduce the need for new generation to be added by PSE. This means that no PSE generation will be shut down or underutilized based on reduced loads in Jefferson County and consequently, no generation will be "stranded" because of FERC's open access transmission policy.

Furthermore, the FERC definition of "Stranded Cost" is based on a complex formula. One of the components in the formula is the length of time that PSE could have reasonably expected to have served its customers within Jefferson County. Since it will most likely take a few years to establish a new PUD, PSE will have been put on notice for that time period and the resulting adjudicated time value is likely to be zero or a very small number. In this kind of situation it is likely that there could be benefits to PSE if the District forms an electric utility and frees PSE from the need to acquire additional generation in the future.

## Separation Costs

As previously indicated, separation of the electric systems of the District and PSE is expected to be relatively simple. If PSE requires the two submarine cable connections it could involve the installation of some primary metering at the termination points of the two submarine cables so that PSE can continue to serve some loads in Jefferson County and Kitsap County. It is expected that the District would pay the costs of these metering installations. If the submarine cables are disconnected, then the District will need to modify some distribution lines in the Shine Beach and Toandos Peninsula areas. A detailed separation plan will be needed to establish full physical separation of the PSE and District systems. For this analysis, an allowance of \$1.2 million is assumed to accomplish this preliminary separation approach.

## Section 3

### Estimated Initial Financing Requirements

The estimated initial financing requirements for the District’s electric system include the costs of acquiring the existing electric facilities from PSE, construction of any new facilities needed for separation of the District’s system from that of PSE, legal and consulting fees, startup costs and working capital. It is assumed that the District would finance the initial acquisition costs with the issuance of revenue bonds that would not be tax-exempt. Costs of constructing new facilities for separation, purchases of equipment, inventories, supplies and other related costs are assumed to be financed with loans carrying tax-exempt interest rates. Certain costs associated with the issuance of revenue bonds, such as the funding of a bond reserve fund, would also be incurred.

Although bond issuance is assumed for the purpose of this analysis, there are other alternatives that may be more appropriate when factored in to the overall financial structure of the District. PUDs and municipally owned utilities generally use tax-exempt bonds and loans to fund the capital costs associated with their systems. Federal tax laws generally prohibit the use of tax-exempt loans for the funding of municipal acquisition of electric systems owned by investor-owned utilities. Taxable revenue bonds have a higher interest rate than tax-exempt rates. Further, the 30-year repayment period for the initial bond issuance, as assumed for this analysis, could be shortened if desired. A shorter repayment period would require higher annual debt service payments during the repayment period but would allow for earlier retirement of the bonds. It is important that legal and financial advisors be consulted with regard to the structuring of bond issues to fully evaluate financing alternatives. Various exceptions and special conditions could exist that would allow more access to tax-exempt securities to fund the initial financing requirement.

Table 2 shows the estimated initial financing requirements for the District’s electric system assuming that the purchase price of the existing facilities is \$47.2 million. Included in Table 2 is \$7.8 million for startup costs to purchase vehicles<sup>7</sup>, equipment, materials, stores, buildings and warehouse space, among other items including legal and engineering fees and the modification of the District’s customer information system. Certain separation and startup costs shown in Table 2 will not necessarily be incurred at the outset of electric utility operations.

**TABLE 2**  
**District Electric System**  
**Estimated Total Initial Costs <sup>1</sup>**

Initial System Acquisition	\$	47,200,000
Separation Costs		1,200,000
Startup Costs		<u>7,800,000</u>
Total Initial Costs	\$	56,200,000

<sup>1</sup> Certain separation and startup costs are expected to be incurred over a two year period following initial operation.

<sup>7</sup> It is estimated that the District would need to acquire 36 total vehicles including automobiles, pickup trucks, vans, line trucks and other equipment.

Jefferson County Public Utility District  
 Section 3  
 Estimated Initial Financing Requirement

As the District proceeds towards acquisition of facilities and startup of electric utility operation, a detailed plan of finance will be developed in coordination with the District's legal and financial advisors. The District will potentially have multiple bond issues carrying different interest rates and different terms. Table 3 provides the estimated initial financing requirements for a taxable and tax-exempt revenue bond issuance. Both bond issues are assumed to have a 30 year term and include the funding of a debt service reserve fund equal to one-year's annual debt service. Financing costs at 1.5% of the bond size are also included. Recent interest rates reported for 30-year revenue bonds are approximately 6.0% for taxable debt and 4.5% for tax-exempt debt<sup>8</sup>. Long-term, fixed rate, level debt service bonds have been assumed for this analysis.

There are other financing alternatives that could be considered as the District gets closer to the bond issue date. Some examples include debt service that may be based on interest only in the first several years of operation. Principal payments can be made in the later years operating savings will be higher. Another debt alternative that the District may explore, but only after obtaining expert financial advice on market conditions would entail the use of short-term borrowings with variable interest rates for a portion of its total financing requirement. We have chosen for preliminary analysis to assume long term, fixed rate, level debt service revenue bonds.

**TABLE 3**  
**District Electric System**  
**Estimated Total Initial Financing Requirements**

	Bond Issue A (Taxable Rate)	Bond Issue B (Tax-exempt Rate)
Initial Acquisition Costs	\$ 47,200,000	\$ -
Separation, Startup, Legal Costs <sup>1</sup>	-	\$ 8,600,000
Working Capital <sup>2</sup>	-	5,000,000
Contingency Reserve	-	-
Subtotal	\$ 47,200,000	\$ 13,600,000
Financing Expense <sup>3</sup>	515,000	148,000
Debt Service Reserve <sup>4</sup>	3,738,000	910,000
Total Financing Requirement	\$ 51,453,000	\$ 14,658,000

<sup>1</sup> Amount shown is for first year costs. Certain costs are expected to be incurred over a two year period following initial operation.

<sup>2</sup> Based on approximately two months estimated operating costs.

<sup>3</sup> Estimated at 1.5% of total bond issue.

<sup>4</sup> Based on one years level debt service assuming 6.0% taxable and 4.5% tax-exempt interest rates and 30 year repayment period.

<sup>8</sup> Interest rate assumptions have been provided by public utility financial advisors.



## Section 4

### Estimated Number of Customers, Energy Sales and Power Requirements

Electric utilities generally classify their customers based on general characteristics of service. Typical customer classifications are residential, commercial, industrial, irrigation and streetlights. The number of customers in the District's service territory has been estimated to serve as the basis for estimating energy sales and overall power requirements of the District system.

Based on data provided in the UtiliPoint report, it is estimated that the number of customers served by PSE in the County will be 18,151 in 2009. This represents 1.7% of PSE's total 1,048,400 electric customers in 2007. Of this total, 15,309 or 84% are residential customers.. The remaining customers to be served by the District are primarily commercial and industrial customers. Total annual energy sales in 2009 in the County are estimated to be 302,500 megawatt-hours (MWh). This amount represents about 1.4% of PSE's total annual energy sales in 2007.

Assuming 6.5% energy losses and assumed annual load growth of 2.0%, the total annual energy requirement of the District's electric system is estimated to be 336,500 MWh (38 average megawatts) in 2011. Based on an assumed load factor (the ratio of average to peak demand) of 58%, the peak demand of the District's electric system is estimated to be 66 megawatts (MW) in 2011.

Table 4 shows the estimated number of electric customers, annual energy consumption per customer, annual energy sales, annual energy requirements and peak demand for the five-year period, 2011 through 2015. The number of customers shown in Table 4 is assumed to grow at a rate of 2.00% per year. Strictly speaking, we have shown the estimated number of connections and/or meters. Technically, several such connections may be located at a single location and placed on a single bill. The details of this technical difference will be evaluated in future feasibility studies and when greater inventory information is either provided by PSE, provided by court order, or compiled by the District. For this report we will use the terms connections, meters and customers interchangeably.

Jefferson County Public Utility District  
 Section 4  
 Estimated Customers and Energy Sales

**TABLE 4**  
**District Electric System**  
**Estimated Number of Customers, Energy Sales and Power Requirements**

	2011	2012	2013	2014	2015
<b>Number of Customers</b>					
Assumed Growth Factor	2.00%	2.00%	2.00%	2.00%	2.00%
Residential	15,927	16,246	16,571	16,902	17,240
Commercial	2,810	2,866	2,923	2,981	3,041
Industrial	99	101	103	105	107
Other	48	49	50	51	52
Total Customers	18,884	19,262	19,647	20,039	20,440
<b>Annual Energy Use per Customer (kWh)</b>					
Residential	13,457	13,457	13,457	13,457	13,457
Commercial	34,450	34,450	34,450	34,450	34,450
Industrial	30,635	30,635	30,635	30,635	30,635
Other	10,925	10,925	10,925	10,925	10,925
<b>Energy Sales (MWh)</b>					
Residential	214,300	218,600	223,000	227,400	232,000
Commercial	96,800	98,700	100,700	102,700	104,800
Industrial	3,000	3,100	3,200	3,200	3,300
Other	500	500	500	600	600
Total Energy Sales	314,600	320,900	327,400	333,900	340,700
Losses and Own Use	21,900	22,300	22,800	23,200	23,700
<b>Total Energy Reqs. (MWh)</b>	336,500	343,200	350,200	357,100	364,400
Loss % of Total Reqs.	6.5%	6.5%	6.5%	6.5%	6.5%
<b>Total Energy Req. (AveMW)</b>	38	39	40	41	42
Annual Loadfactor	58%	58%	58%	58%	58%
<b>Peak Demand (MW)</b>	66	68	69	70	72

## Section 5

### Projected Revenue Requirements

#### Overview of Power Supply Options

Many of the publicly-owned electric utilities in the Pacific Northwest rely upon BPA for their power supply needs. BPA markets power to the region's utilities from federal hydroelectric projects and certain other facilities. The ability of BPA to continue to supply all the power demands placed on it by its customers in the future is uncertain. As a result, discussions have been conducted in recent years with regard to how the low cost power from the federal hydroelectric projects should best be allocated among BPA's customers, existing and new. These discussions are generally referred to as the Regional Dialogue. In July of 2008 BPA published a Long Term Regional Dialogue Final Policy.

Over time BPA has established certain criteria that must be met before an entity may qualify for service from BPA<sup>9</sup>. For a new preference customer, such as the District to comply with the existing standards for service, it must:

1. Be legally formed in accordance with state and federal laws;
2. Own a distribution system and be ready, willing and able to take power from BPA within a reasonable period of time;
3. Have a general utility responsibility within the service area;
4. Have the financial ability to pay BPA for the federal power it purchases;
5. Have adequate utility operations and structure; and
6. Be able to purchase power in wholesale, commercial amounts.

Upon compliance with these standards for service and upon application to BPA under the provisions of Section 5(b)(1) of the Northwest Power Act, the District will be entitled to purchase power from BPA as a preference customer. The cost of BPA power to the District will be governed by the BPA Power Sales Contract and various other BPA policies. New large loads placed on BPA's system may be subject to a surcharge related to the cost of power supply, potentially at market rates that BPA may need to acquire on behalf of the new load. In the case of the District, the Port Townsend Paper Mill loads already have their own dedicated resources that would be assigned to the loads to the extent that they or portions of the loads are determined to be new large single loads that BPA requires to be included within the District's BPA power sales contract.

The current Regional Dialogue contracts have been offered and provide for the purchase of BPA power between fiscal year (FY) 2012 (October 2011) and FY 2028. These contracts are quite complex, but allow for new preference customers, such as the District to be formed and receive power under certain terms and conditions. The Regional Dialogue specifically references new

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<sup>9</sup> Bonneville Power Administration, Final Policy on Standards for Service – Administrator's Record of Decision, December 22, 1999.

public utilities that serve what were previously investor-owned utility customers. BPA refers to this as “annexed loads” of new preference customers.

A new feature to these contracts will be tiered rates where some preference customers can purchase a portion of their load at the lowest cost PF BPA Tier 1 power. Power needs above the Tier 1 amount are determined by a “High Water Mark” calculation using actual loads in a specific year adjusted for certain conditions. This additional power can be served with market priced power, non-federal resources, utility owned generation or contracts and a variety of BPA Tier 2 power products. For simplicity we will assume market priced power as recorded in PSE’s May 2008 Average System Cost filing with BPA. The forecasted price for market power is estimated to be \$50.31 per MWh in 2009 increasing to \$56.92 in 2014. These market priced power values are comparable to market priced power numbers contained within BPA’s September 2008 Look Back Study that examined the Residential Exchange Program benefits to investor owned utilities. The values are also similar to those used in west coast regional planning generation dispatch models.

While the current Regional Dialogue has been finalized, the contract templates, the tiered rate methodology and certain issues regarding the calculation of High Water Mark and Tier 1 amounts of power are still in the process of being resolved and potentially litigated. This means that there is some uncertainty at the moment regarding the exact amount and price of power that a preference customer will pay for BPA power. However, these areas of uncertainty will be quickly resolved in time for the District’s Commissioners to evaluate any decisions associated with the formation of a new electric utility if given such authority by the voters of Jefferson County in November of 2008.

Some have interpreted the language that has yet to be implemented by BPA to mean that a new preference customer must wait until it is fully operational and then wait an additional three years after that before it is eligible to take any BPA Tier 1 power. This interpretation is based on a literal reading of the finalized Regional Dialogue. The Tiered Rate Methodology has similar language to that finalized in the Administrator’s Record of Decision on the Regional Dialogue. Current indications are that a new preference customer may have to wait between at least 15 months and three years before it can get Tier 1 power depending upon the size of the utility and other factors.

Past BPA precedent has been to work with new preference customers to schedule a time when they can take BPA’s lowest cost PF power to coincide with the start of their initial operations and service to customers. Therefore, the assumption that a new utility will have to take market priced power for three or more years prior to any Tier 1 PF power is inconsistent with past BPA actions. To insure we do not overestimate the benefits of a new public utility we assumed the District taking three years (2011, 2012 and 2013) of market priced power prior to receiving any Tier 1 power. D. Hittle & Associates, Inc. believes that this assumption overstates 2011, 2012, and 2013 average revenue requirements for a Jefferson County PUD electric system and understates the likely benefits associated with the formation of an electric system under the existing PUD.

We have reviewed the Regional Dialogue, Tiered Rate Methodology, and Contract Templates. Under Tiered Rates and the High Water Mark allocation of Tier 1 Power. A new public utility will probably not receive its entire net requirements, which is defined as its electrical load (including electrical losses) less owned generation, with Tier 1 power. Under the Regional Dialogue and Tiered Rate Methodology BPA is reserving 250 MWa for new preference customers and will make this available generally in 50 MWa blocks for each of the first five 2-year rate periods starting in BPA fiscal year (FY) 2012. While BPA is reserving 40 MWa of this 250 MWa block of power for new tribal electric utilities, if few such tribal utilities are formed any excess within that 40 MWa block of power would be available for other new public utilities.

A new public utility will receive an initial block of 10 MWa (87,600 MWh per year) plus a pro-rata share of up to an additional 40 MWa in each of the first five 2-year rate periods until 250 MWa of new preference customer load is used or unless that amount is reduced by a percentage associated with the cap on other preference customers loads being served with Tier 1 power. While a complex allocation method will be used, new preference customers like the District that are in excess of 10 MWa, are required to have their load phased-in over a number of rate case periods. Generally, the more additional new preference customers that are formed, the less of the 250 MWa available for each customer.

While the formulae are quite complex, we have made some assumptions to estimate the general impact of the Tiered Rate Methodology on a new preference customer such as the District. We assumed that starting in 2012 there will be two other new preference customer of BPA with a combined load of 220 MWa. In 2016 we have assumed another 10 MWa preference customer is added. This set of assumptions means that the District will be competing against three other new preference customers having a total combined 230 MWa of load for the BPA reserved 250 MWa of Tier 1 power. After the November election results are known and after other PUDs make their intentions known, this assumption can be revised.

For our base case, it is assumed that Tier 1 power will not be available to the District or the other new preference customers until 2014. In 2014 approximately 21 MWa of BPA lowest cost Tier 1 power is estimated to be available to the District. The availability of Tier 1 power to the District is estimated to increase to about 44 MWa in 2020. That would mean that the District would need higher cost market power of about 20 MWa in 2014, dropping to 2 MWa in 2020. The amount of market priced power as a percentage of total load is about 49% in 2014 and drops to about 2% in 2020.

It is important to understand that this is one of many scenarios that could happen. We do not know how many new preference agencies will be formed over the next ten years, nor do we know their size or other characteristics. None-the-less, we have constructed a base case to estimate potential power costs based on the formation of several new preference customers that will cause the District to have to compete for the BPA reserved 250 MWa of Tier1 power. As the new Regional Dialogue Contracts are offered in December of 2008 and as customers accept them and as we learn if new preference customers are formed in other parts of BPA's service area, this scenario can be refined.

At the present time, the estimated cost of BPA Tier 1 power to the District, if it were a preference customer, is approximately \$32.10 per MWh or 3.2 cents per kWh<sup>10</sup> on an annual basis, including BPA network transmission charges. BPA has stated that starting in 2010 it will review and adjust its power rates every two years. It is not certain what the BPA rates will be in the future, however, it is not expected that the price for BPA priority firm power will change much in the next ten years.

In addition to BPA, the District could pursue purchases of power from other utilities and suppliers. Power could also be purchased under short-term or long-term arrangements through power marketers or independent power producers. In the future, the District will most likely continue to purchase power from BPA but could also construct new generating facilities of its own, participate jointly with other utilities in new generation facilities and contract to purchase power from other suppliers. Among the options for new generating facilities the District could develop are solar, wind and other renewable resources, potentially to be located in Jefferson County. Residents and businesses in Jefferson County could also develop generating resources that could sell power to the District. There are several competent firms, such as TEA, that can be hired to schedule the District's power supply and transmission resources.

### Estimated Cost of Power Supply and Transmission

For the purpose of this analysis, the cost of preference power from BPA is considered to be a reasonable estimate of Tier 1 power supply costs for the District. BPA power rates are assumed to increase 3% every two to three years. The District's energy requirement is assumed to occur 65% in heavy load hours and 35% in light load hours, a typical distribution for BPA preference customer loads. Estimated transmission costs are based on BPA's Network Integration 2008 (NT-08) rates with appropriate ancillary service charges. Transmission rates are assumed to increase 3% every three years. Currently, PSE relies upon BPA transmission lines to deliver power to its service area in Jefferson County. As a result, it will not be necessary for the District to contract with PSE for use of PSE transmission lines in the future.

In addition to Tier 1 power, the District would need to supplement its power supply with power purchases at market rates. For the purpose of this analysis, market power prices to be paid by the District are assumed to be based on market power price projections included in PSE's recent average system cost estimate filed with BPA. There are other alternatives that the District may consider including local renewable generation, special BPA Tier 2 "vintaged generation projects" and green or low carbon foot-print resources. Grays Harbor County PUD is exploring a joint generation project with a local pulp/paper mill as a way of both providing additional power and for local economic development benefits. Jefferson County PUD could explore a similar such venture or explore purchasing or expanding the Port Townsend Paper Mills existing generation. BPA has also stated that it will explore providing its preference customers with a variety of Tier 2 products which will range from a low cost mix of resources, to green power resources. The estimated cost of supplemental power above Tier 1 allocated amounts and the

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<sup>10</sup> Cost shown is based on PF-07 rates for non-slice customers. Includes cost of BPA network transmission.

cost of transmission to the District's electric system for the five year period, 2011 through 2015, is shown in the following table:

**TABLE 5**  
**District Electric System**  
**Estimated Annual Cost of Power and Transmission Services**

	2011	2012	2013	2014	2015
<b>Energy Requirements and Resources (MWh)</b>					
Total Energy Reqs. <sup>1</sup>	336,500	343,200	350,200	357,100	364,400
Energy Resources					
Purchased Power					
BPA Tier 1	-	-	-	183,460	185,108
Other	<u>336,500</u>	<u>343,200</u>	<u>350,200</u>	<u>173,640</u>	<u>179,292</u>
Subtotal - Purchases	336,500	343,200	350,200	357,100	364,400
Total Energy Resources	336,500	343,200	350,200	357,100	364,400
<b>Estimated Cost of Power (\$000)</b>					
Purchased Power <sup>2</sup>	17,786	18,594	19,448	15,610	16,441
Network Transmission <sup>3</sup>	<u>1,468</u>	<u>1,510</u>	<u>1,533</u>	<u>1,604</u>	<u>1,647</u>
Total Cost of Power	\$ 19,254	\$ 20,104	\$ 20,981	\$ 17,214	\$ 18,088
Total Cost (\$/MWh)	\$ 57.22	\$ 58.58	\$ 59.91	\$ 48.21	\$ 49.64
Total Cost of Purch. Power (\$/MWh)	\$ 52.86	\$ 54.18	\$ 55.53	\$ 43.71	\$ 45.12

<sup>1</sup> See Table 4.

<sup>2</sup> Estimated cost of Tier 1 power assumes overall District energy use is 65% during BPA-defined heavy load hours and 35% during light load hours. Includes Load Variance charges. Cost of other power purchases based on assumed market power prices. Total cost shown decreases over time as more of the overall purchase amount becomes Tier 1 power.

<sup>3</sup> Includes base charge and ancillary service charges for load shaping, scheduling, system control and dispatch services and reactive and voltage control services.

## Projected Revenue Requirements

Publicly-owned electric utilities generally establish rates to recover revenues through the sale of power sufficient to pay all operating expenses, taxes, and debt service as well as provide a margin from which to fund renewals, replacements and additions to the system. The total of all these cost obligations on an annual basis are referred to as the annual revenue requirement. Operating expenses of the electric system will include purchased power, purchased transmission services, transmission and distribution system operations and maintenance (O&M), customer accounting, and administrative and general expenses.

Many publicly-owned electric systems also collect additional revenues through their electric rates to make tax payments, franchise fee payments and payments in lieu of taxes to local governmental agencies. Operating expenses for the District's electric system, other than power

supply costs, have been estimated based on recent experience of other Washington PUDs. It is expected that the District will either contract for O&M services or hire its own staff to perform these functions. At the time of initial operation it would most likely be necessary to contract at least some of the O&M services to other utilities or regional electrical contractors used by other PUDs and by investor owned utilities. In the past, when new publicly-owned utilities have acquired electric facilities from an existing utility, some of the employees of the acquired utility have been hired by the new utility. This provides both continued local employment for the workers and provides the new utility with necessary skilled workers familiar with the local electric system.

We have prepared an estimate of the staffing requirements for the District if it were to establish a workforce capable of fully managing, maintaining, operating and administering an electric utility. The total staffing requirement is approximately 67 employees of which about 47 would be expected to be IBEW members or represented by an appropriate bargaining unit.

Annual debt service requirements are based on level debt repayment of bonds issued to finance initial acquisition and startup costs at assumed annual interest rates of 6.0% and 4.5% over a 30 year repayment period. Depending upon future financial conditions this range is in the potential range for both taxable and tax exempt PUD revenue bonds. The District will incur annual expenses for renewals, replacements and additions to the system, assumed to be approximately \$2.0 million per year. Annual expenditures for capital replacements and additions are projected to be funded out of annual revenues. In developing the District's estimated annual revenue requirement, it has been assumed that the District will pay 6.5% of its total revenues in public utility and privilege taxes. The projected annual revenue requirements for the District for the first five years of operation, assuming a startup date of January 2011 are shown in the following table:



Jefferson County Public Utility District  
 Section 5  
 Projected Revenue Requirements

**TABLE 6**  
**District Electric System**  
**Projected Annual Revenue Requirements**  
**(\$000)**

	2011	2012	2013	2014	2015
Assumed Inflation	2.50%	2.50%	2.50%	2.50%	2.50%
Cost Escalation Factor <sup>1</sup>	2.00%	2.00%	2.00%	2.00%	2.00%
<b>Operating Expenses</b>					
Power Production <sup>2</sup>	\$ -	\$ -	\$ -	\$ -	\$ -
Purchased Power <sup>3</sup>	17,790	18,590	19,450	15,610	16,440
Network Transmission <sup>4</sup>	1,470	1,510	1,530	1,600	1,650
Delivery Charge <sup>5</sup>	-	-	-	-	-
Trans. Oper. & Maint. <sup>6</sup>	170	170	180	190	200
Dist. Oper. & Maint. <sup>6</sup>	2,850	2,960	3,080	3,200	3,330
Customer Accounts <sup>6</sup>	1,460	1,520	1,580	1,650	1,710
Admin. & General <sup>6</sup>	2,400	2,500	2,600	2,710	2,820
Taxes <sup>7</sup>	2,270	2,350	2,440	2,200	2,280
Total Operating Exp.	\$ 28,410	\$ 29,600	\$ 30,860	\$ 27,160	\$ 28,430
<b>Debt Service</b>					
Initial Loans <sup>8</sup>	\$ 4,600	\$ 4,600	\$ 4,600	\$ 4,600	\$ 4,600
Subsequent Loans <sup>9</sup>	60	60	60	60	60
Total Debt Service	\$ 4,660	\$ 4,660	\$ 4,660	\$ 4,660	\$ 4,660
<b>Renewals, Repl. &amp; Adds.</b>					
Funded from Revenues <sup>10</sup>	\$ 1,880	\$ 1,920	\$ 1,960	\$ 2,000	\$ 2,040
Funded from Debt	-	-	-	-	-
Total Ren., Repl, Adds.	\$ 1,880	\$ 1,920	\$ 1,960	\$ 2,000	\$ 2,040
<b>Less: Wheeling Revs. <sup>11</sup></b>	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Less: Interest Earnings <sup>12</sup></b>	\$ (160)	\$ (160)	\$ (160)	\$ (160)	\$ (160)
<b>Total Sales Rev. Required <sup>13</sup></b>	\$ 34,790	\$ 36,020	\$ 37,320	\$ 33,660	\$ 34,970
<b>Total Energy Sales (MWh) <sup>14</sup></b>	314,600	320,900	327,400	333,900	340,700
Unit Revenue Req. (¢/kWh) <sup>15</sup>	11.1	11.2	11.4	10.1	10.3

<sup>1</sup> Estimated at 80% of assumed annual inflation of 2.5%.

<sup>2</sup> The District will have no District-owned generation initially and consequently no related production expenses..

<sup>3</sup> Estimated cost of power purchases. See Table 5.

<sup>4</sup> Estimated cost of BPA network transmission services. See Table 5.

<sup>5</sup> Estimated cost of power delivery to the District's substations pursuant to existing BPA policy.

<sup>6</sup> Includes assumed cost escalation.

<sup>7</sup> Estimated at approximately 6.5% of total revenue requirement.

<sup>8</sup> Interest and principal on initial acquisition bond issues shown in Table 3. Assumes level debt service, 6.0% taxable and 4.5% tax-exempt interest rates and a 30 year repayment period.

<sup>9</sup> Interest and principal on bond issues used to fund certain future capital requirements. . Assumes level debt service, a 4.5% tax-exempt interest rate and a 30 year repayment period.

<sup>10</sup> Assumed to be full amount of annual Renewal, Replacement and Additions expenditures..

<sup>11</sup> No wheeling revenues are expected to be received.

<sup>12</sup> Estimated interest earnings on invested reserve fund balances at a 3.5% interest earnings rate.

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Projected Revenue Requirements

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<sup>13</sup> Sum of Total Operating Expenses, Total Debt Service, Total Renewals, Replacements and Additions funded from Revenues.

<sup>14</sup> See Table 4.

<sup>15</sup> Total Revenue Required divided by Total Energy Sales.

Debt service coverage is required by bond underwriters and is typically set at a minimum of 1.25 of annual debt service for publicly-owned distribution electric utilities. Publicly-owned utilities usually establish policy concerning the percentage of capital improvements to be funded from borrowings and the amount to be funded from current revenues. The policy may be driven to some extent by limits on the amount of debt that banks and financial institutions will reasonably allow particular utilities to incur.

Aside from certain amounts received as other operating revenues and interest income, the District's main source of revenue for the electric utility will be through the sale of power to its customers. Table 6 shows the estimated revenue requirements for the period, 2011 through 2014. As can be seen in Table 6, the total unit revenue requirement in the first year (2011) of the projections is estimated to be 11.1 cents per kWh. The unit revenue requirement, which is the average unit revenue that the District would need to collect through energy sales to its customers, is projected to remain relatively constant through the projection period shown in Table 6.

Rates could be established that would reflect the actual cost to serve certain customer classifications (i.e. residential, commercial and industrial). The rates could also include multiple components such as monthly customer charges (e.g. \$7.00 per month), demand charges and energy charges. The total amount received through these various rate components, however, would need to total the Total Revenue Required shown in Table 6 on an annual basis.

In addition to the case shown in Table 6, an alternative scenario was developed that assumes that the District could acquire its entire power supply from BPA at the Tier 1 rate from the time the District begins its initial operation. In this scenario, the first year average unit revenue requirement is estimated to be 8.3 cents per kWh representing a 24.7% decrease from the base case. This indicates the significant importance of power supply costs in establishing the benefits of electric service from the District.

## Section 6

### Comparison of Costs

At the present time, electric consumers in the District are receiving electric service from PSE. PSE's FERC Form No.1 for 2007 indicates that the average unit revenue from its customer classes in 2007 were as follows:

**TABLE 7**  
**PSE Average Unit Revenue in 2007 for Representative Customer Classes**  
**(Compiled from PSE 2007 FERC Form No. 1)**

	Revenue (¢/kWh)
Residential <sup>1</sup>	8.75
Commercial <sup>2</sup>	8.12
Industrial <sup>3</sup>	7.71
Street and Highway Lights	17.21
Total for all Sales	8.45

<sup>1</sup> Includes Residential Service and includes reduction in January, February and March for BPA Residential Exchange benefits.

<sup>2</sup> Includes Farm General Service and Commercial Schedules 24, 25 and 26 and other commercial tariffs.

<sup>3</sup> Combined industrial revenues

After the BPA residential exchange credit was suspended in early 2007, the average charge paid by PSE's residential customers increased. Further, other adjustments were made by PSE to the rates that effectively increased the average charge to an estimated 9.3 cents per kWh for typical residential customers in Jefferson County. PSE announced that it will increase its rates November 1, 2008. Recently, it was indicated that an agreement between PSE, the State Public Counsel, WUTC staff and certain consumer groups had been reached and that PSE's rates would be going up about 8.4% for most of PSE's customers, according to WUTC staff, before acknowledging the BPA residential exchange credit.

With the recent reinstatement of BPA's residential exchange program, the WUTC announced that the net effect of the rate increase with the exchange credit applied is a 3% reduction in residential rates on average. PSE indicated on October 1, 2008 that the residential exchange credit will be 1.0551 cents/kWh. The BPA exchange does not apply to commercial customers and it is assumed that commercial rates will increase approximately 7% on November 1, 2008, based on discussions with WUTC staff. Based on the unit revenues shown in Table 7 with adjustments for current charges and the announced PSE rate increases and the estimated energy sales in the District service area as shown in Table 3, the total cost of electric service to residents and businesses in the County with continued service from PSE has been estimated for a ten year projection period.

We are unaware of any published projections of PSE retail rates so, for the purpose of this comparison, PSE average rates have been assumed to increase at 3.55% per year beginning in 2010. This rate of increase has been estimated based on certain data included in PSE's May and July 2008 average system cost filing made to BPA adjusted to reflect the significant investment that PSE projects it will need to make in its electric system over the next five years. This is potentially a conservative assumption that probably underestimates PSE's retail rates in light of PSE stockholder information (US SEC Schedule 14A proxy information dated February 16, 2008) where estimates of PSE income before taxes and depreciation will increase by 66.8% between 2008 and 2013.

The cost of continued electric service with PSE is compared to the cost of electric service from the District assuming the District were to establish rates to recover the estimated revenue requirement shown in Table 6. The comparison of charges is shown in Table 8 for the five year period, 2011 through 2015. It is important to note that the average unit revenues shown in Table 8 for PSE are reflective of the estimated sales by customer class. Further, no attempt has been made to adjust estimated PSE revenues for potential changes in BPA Residential Exchange credits that could occur in the future. If the Exchange credits change from the present situation, the unit revenues estimated for PSE in Table 8 would show a corresponding change.

In discussions with BPA staff we have been told that even if the PSE average system cost increases greatly in the future that the Regional Power Act 7(b)(2) rate test used to protect public agency customers of BPA will likely reduce future PSE exchange benefits. Further, we have been told that some preference customers are likely to litigate the recent BPA residential exchange process, which could reduce PSE exchange benefits in the future. In the BPA press release announcing the resumption of exchange benefits and the end of the Average System Cost portion of the BPA rate case closing, the BPA Administrator Steve Wright said, "Despite this rate case coming to a close, there still remains considerable uncertainty for the parties as to how the Residential Exchange Program issues may evolve in the future. ...I continue to urge the parties to work toward a lawful settlement that will provide greater long-term certainty and, because it will be defined by the parties based on the law, greater political equity than that which any single administrator, acting within the confines of the law, can provide. BPA will work with any parties that want to pursue this path."

**TABLE 8**  
**Comparative Charges for Electric Service and Estimated Savings**  
**with District Electric Service**

	2011	2012	2013	2014	2015
<b>Energy Sales (MWh)</b>					
Residential	214,300	218,600	223,000	227,400	232,000
Commercial	96,800	98,700	100,700	102,700	104,800
Industrial	3,000	3,100	3,200	3,200	3,300
Other	500	500	500	600	600
<b>Total Energy Sales (MWh)</b>	<b>314,600</b>	<b>320,900</b>	<b>327,400</b>	<b>333,900</b>	<b>340,700</b>
<b>Estimated PSE Revenues from Energy Sales in the District</b>					
Assumed Increase in Rates	3.55%	3.55%	3.55%	3.55%	3.55%
Revenues (\$000) <sup>1</sup>	\$ 30,200	\$ 31,900	\$ 33,700	\$ 35,600	\$ 37,700
Unit Revenues (¢/kWh) <sup>2</sup>	9.60	9.94	10.29	10.66	11.07
<b>Estimated District Revenues from Energy Sales</b>					
Revenues (\$000) <sup>3</sup>	\$ 34,790	\$ 36,020	\$ 37,320	\$ 33,660	\$ 34,970
Unit Revenues (¢/kWh) <sup>2</sup>	11.06	11.22	11.40	10.08	10.26
<b>Savings with PUD (\$000)</b>	\$ (4,590)	\$ (4,120)	\$ (3,620)	\$ 1,940	\$ 2,730
<b>Savings with PUD (¢/kWh)</b>	(1.46)	(1.28)	(1.11)	0.58	0.80
<b>Savings with PUD (%) <sup>4</sup></b>	-15.2%	-12.9%	-10.7%	5.4%	7.2%
<b>Cumulative Savings with District Electric Service - First 10 Years (\$000)</b>					\$ 41,259
<b>Net Present Value of Savings - First 10 Years (\$000) <sup>5</sup></b>					\$ 22,535

<sup>1</sup> Calculated using average customer class revenue and estimated customer class loads with assumed increase in rates applied uniformly to each customer class.

<sup>2</sup> Revenues divided by Total Energy Sales.

<sup>3</sup> Estimated Total Revenue Required for the District Electric system as shown in Table 6.

<sup>4</sup> Relative to estimated PSE revenues.

<sup>5</sup> Cumulative present value to 2008 of estimated savings with District electric service over the first ten years of operation, 2011 through 2020. Assumes a 5% discount rate.

Table 8 shows that the residents and businesses served by PSE in the District would collectively pay \$4.6 million or 1.46 cents per kWh more in total for electric service in 2011 with service from the District given the relatively conservative assumptions within the analysis. By 2014, however, when Tier 1 BPA power is assumed to become available to the District, total annual savings of \$1.9 million or 0.58 cents/kWh are estimated with service from the District. The savings increases to \$15.8 million or 31.9% in 2020. The total present value savings in total charges for District provided electric service over the first ten years of District operation is estimated to be \$22.5 million assuming a 5% annual discount rate.

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 Comparison of Costs

Again, the above yearly projections were made to test economic feasibility, which is based on a ten year cost comparison and the associated net present value. The study is not a “best estimate” rate projection of each utility. If it were, then less conservative assumptions would be used. Specifically, such an approach would utilize and alternate (lower initial years non-levelized) debt service schedule for the PUD electric system bonds, better coordination with BPA of the electric service starting date (to reduce initial Tier 2 purchases), more realistic (i.e. higher) PSE future rate increases, and a more realistic (i.e. lower) PSE asset purchase price. For the purpose of feasibility evaluation, they were all judged to conservative assumptions associated with the uncertainty of a ten year comparison.

In addition to the above feasibility base case, there were a number of scenarios which were also run to test various assumptions and determine the level of significance of the different principal variables.

For the alternative scenario assuming that the District can obtain Tier 1 power from the time of its initial operation, the present value of savings for the first 10 years of operation is estimated to be \$62.3 million. Several other scenarios were also evaluated assuming different costs of facility acquisition, different interest rates and different market power prices. The net present values of savings, assuming a 5% discount rate, over the first ten years of District electric utility operation are shown in Table 9.

**TABLE 9**  
**Estimated Savings with District Electric Service**  
**For Alternative Scenarios**  
**Cumulative Net Present Value Savings over First 10 Years of District Operation**

Case	Acquisition Price	Power Cost	Interest Rates	Present Value of Net Savings with PUD over first 10 Years
1 (Base)	Transmission and distribution at OCLD+35%	PF and Base Market price	6% taxable, 4.5% tax-exempt	\$22,535,000
2	Transmission and distribution at OCLD	PF and Base Market price	6% taxable, 4.5% tax-exempt	\$29,069,000
3	Transmission and distribution at OCLD+35%	PF	6% taxable, 4.5% tax-exempt	\$62,261,000
4	Transmission and distribution at OCLD+35%	PF and Base Market price	8.0% taxable, 6.0% tax-exempt	\$7,766,000
5	Transmission and distribution at OCLD+35%	PF and Base Market price + \$10/MWh	6% taxable, 4.5% tax-exempt	\$16,352,000
6	Transmission, distribution at 2.0 times net book value	PF and Base Market price	6% taxable, 4.5% tax-exempt	\$9,542,000

The results shown in Table 9 indicate that the cost of power supply to the District is a very significant factor. In order to achieve maximum benefits for the electric consumers of Jefferson County, the District will want to pursue every opportunity to obtain power at the lowest cost available. This may involve arrangements with BPA to establish initial utility operation at a time when preference power can first be acquired by the PUD. It could also involve acquiring power from other PUDs that have generation available.

In order to improve the benefits from establishing PUD electric service, the PUD would want to acquire the electric system facilities at the lowest possible cost. The scenario analysis also shows that while important, the cost the PUD would pay for PSE's assets is important but not as important as one would initially think.

## Section 7

# Non-Economic Impacts Associated With Formation of a Local Public Power Electric Utility

### Non-Economic Benefits

There are many benefits to a community to own their local electric power system. The benefits of local control exceed just the economic benefits quantified previously in this report. As pointed out by the City of Port Townsend Energy Management Committee, there is value to "...enabling key decisions to be made by elected representatives of the persons most affected – local consumers of electricity...We can make these decisions as a community, not beg for them from a large corporation whose primary allegiance is to faraway if not foreign investors."

We have seen such local determination in action in other public power communities. For example, small electric utilities can work with commercial and industrial customers to set rates or provide services in a "win-win" way that does not subsidize the customer and yet provides the customer with the flexibility that it needs to start or expand operations. In Whatcom County for example, PSE was initially reluctant to help industries such as Georgia Pacific and Bellingham Cold Storage gain rate flexibility due to expressed concerns over not setting precedents and over the difficulty of getting rates approved by the WUTC. A PUD or municipality would not have had the same restrictions. In Kittitas County, Anderson Hay Ranch, an important local employer came to the PUD as a last resort after failing to gain any accommodation from PSE in negotiating electric service issues.

A similar aspect to local determination and "community benefits" can be seen in both the Town of Steilacoom and the City of Blaine. In both of these communities the public power municipal utility governing board has established resolutions favoring the expansion of underground distribution lines. Both Steilacoom and Blaine have mostly underground distribution systems and the rates have been held low by a careful policy of incrementally replacing overhead with underground facilities. This contrasts to cities, like Olympia, that has requested PSE to underground facilities, but has been challenged by PSE with paying the incremental costs of underground construction, even though PSE's rates are much higher than surrounding public power utilities.

Furthermore, some communities have taken the BPA conservation rebate funds and used them to either focus on specific customer sectors or areas within the service territory so that community benefits are maximized. A locally owned PUD would be able to focus its conservation funds, if it so desired, on publicly owned buildings to reduce the cost of local government. Some PUDs and public power utilities have also focused assistance with special problems. For example, Grays Harbor County PUD has had a power quality program where special high quality surge protection devices have been made available to consumers because that was a recognized community need. Likewise, Peninsular Power & Light Company (a consumer owned electric utility headquartered in Gig Harbor) had a program of supplying auxiliary gas/diesel generators



for customers who desired backup power. At Ferry County PUD, they have installed off-grid photovoltaic solar installations in financial cooperation with some remote homeowners. Some PUDs in their conservation programs focus on different community needs as well. These are all possibilities that a locally controlled PUD can investigate in cooperation with its owners.

Another aspect to local control is security and responsiveness in outage restoration. When the people that plan and operate the utility in a certain geographic area also have their families served by the same utility, there are implicit benefits. These implicit benefits can include reporting danger trees, identifying distribution poles that appear to have excessive lean and are in danger of falling over in a storm, or even spotting transformers that are discolored and may be overloaded. Utility staff members often do significant amounts of informal “patrolling for problems” as they drive to and from work at a PUD. Utility staff whose families are affected by outages are also good at defending the benefits associated with local generation sources and redundant methods of supplying power to an area. When most utility employees live outside of a service area, like with PSE, these benefits can often be reduced.

Local accountability is an important characteristic of public power and PUDs. We have heard many PUD managers and commissioners express concern about what their neighbors and friends will say to them should there be an extended electrical problem or high electrical rates. Local accountability is much like “peer pressure” and helps to keep PUDs focused on meeting community needs. Such local accountability may not be present with a utility where the engineers, line workers, and other staff may be located in other communities. The chance of standing next to the PUD employee who designs, constructs or operates the electrical facilities within Jefferson County at the local grocery store check-out line and asking them questions is far greater than if the employee lives outside the community.

In a like manner, most PUDs have sufficient line workers to handle typical outage events and normal levels of construction. As such there is typically a ready supply of people available in an emergency storm work who are dedicated to the local community. This group of workers is also immediately familiar with the area and the service issues as they work in the area all year long. Most public power utilities in Washington State have mutual aid agreements with each other, where if a natural disaster hits one utility, others will come to their assistance on an “at cost” basis. This allows even small utilities such as the Town of Steilacoom to seek help from larger consumer-owned neighbors like Tacoma City Light and Peninsula Power.

Another area of non-economic benefit has to do with the ability of a local PUD to provide for community support. Such support can take many forms. It can range from the fact that most employees of PUDs are required to have a fairly high level of first aid skills, which can aid in accidents within the community. It can also include other forms of community support. Most PUDs participate with United Way, blood bank drives and other civic events. Similarly, each year the Washington PUD Association honors PUD employees who contribute to the development of the local community. Many of these recipients manage to combine full time PUD jobs with volunteer activities within their community that promote both economic development and the quality of life locally. As such, a local major employer with family wage jobs (such as a PUD) when contrasted with a distant employer with few employees in the

community it serves, provides benefits to the local community far and above just the salary and purchases it makes.

PUDs can also quickly adapt to change, while meeting local needs. PUD commission meetings are public meetings and customer-owners can attend these meetings and request changes in utility policy and programs. The ability to meet with the “decision makers” and the “regulators” of an investor owned utility, especially one that will not be publicly traded, such as PSE if the merger/sale is approved, is even more difficult and would entail long trips to distant locations where such decision makers and regulators normally work. Because a customer-owner also has a voter-constituency relationship with the decision makers and regulators at a PUD, the ability to be heard and have policy and program changes considered is greater than in an investor owned electric utility.

A good example of the difference in approaches between PSE and a PUD can be demonstrated by contrasting PSE’s net metering approach to Chelan County PUD’s on-site renewable generation or SNAP program. For PSE eligible systems include solar photovoltaic, wind generators, fuel cells, small-scale hydro, and biomass. Net metered systems may be less than 1 kilowatt and up to 100 kilowatts. Eligible customers must receive electric service from PSE. These customers are governed by PSE’s WUTC approved rate schedule 150 and limit the total net metering participation to a maximum among all of PSE’s customers to 11.2 MW of cumulative nameplate generation.

There are two features of PSE’s net metering program that trouble some renewable resource sponsors. The first is that according to PSE’s rate schedule 150, generated and excess generation are to be subtracted from the meter with the lowest energy charge first and only then from meters with higher energy charges, unless the customer requests that the generated energy be applied equally to all meters. This tends to mean that the highest cost electricity purchased is not completely offset by the customer’s on-site renewable generation. Another feature of PSE’s net metering Rate Schedule 150 is that at the end of any program year (May 1 through April 30) any generation in excess of customer usage is “set to zero.”

The Chelan County PUD Sustainable Natural Alternative Power (SNAP) program is limited to smaller generators (25 kW or less), but has potentially higher benefits to those that install the facility. Chelan County PUD acts as a facilitator, collecting funds from SNAP purchasers and using that money to pay SNAP producers. No subsidies or rebates are offered. The PUD pays the SNAP producers both their share of SNAP contributions and the market value of the power they contribute to the grid. It pays the producers annually. Under the SNAP program producers have been paid by Chelan County PUD between \$0.21/kWh to \$0.25/kWh for the past three years. This is far higher than PSE’s typical payments. This is also exclusive of State production incentive payments and tax credits. Perhaps more importantly, the payment is for all power produced, not just that over and above the amount consumed. While Jefferson County PUD may or may not wish to adopt a SNAP-like program, it does go to show the differences in approach that are possible if the local customer/owners desire a more aggressive renewable program.

The City of Port Townsend Energy Management Committee found many benefits associated with either a municipal utility or a PUD. Several of those local benefits have been described above.

## Frequently Asked Questions

There are many questions associated with formation of a PUD. We have in the past reviewed some of these questions. At this time, however, we feel certain questions should be addressed first in light of statements attributed to PSE and the Citizens Against Proposition 1, formed by a Seattle political consulting firm hired by PSE (see September 6, 2008, Peninsula Daily News article "PSE-financed Jefferson County PUD Power Opposition Surfaces"). In a recent Peninsula Daily News article, a PSE paid representative (Karen Waters of Strategies 360) was quoted as indicating that PSE felt the following were important issues:

### **1. If voters approve Proposition 1, do they give Jefferson PUD "a blank check?"**

No, the approval of Proposition 1 is not a blank check, it simply authorizes the PUD to have the authority and ability to evaluation and should it find it feasible to acquire or construct electric facilities.

First, PSE has stated that the reason they are asking PSE stockholders permission to de-list PSE from the New York Stock Exchange and be purchased by a series of foreign infrastructure investors is because PSE needs several billion dollars to invest in new transmission and generation facilities. These new facilities are needed to replace old facilities, replace expiring generation contracts and to help meet future PSE load growth. PSE states that it will need to invest \$5 billion within the next five years.

No citizen of Jefferson County is allowed to vote on whether this PSE expenditure should be allowed or not. In fact, if a group of citizens of Jefferson County wanted to actively participate before the WUTC in a rate case, they would typically have to sign confidentiality agreements that would not allow them to discuss with their neighbors many of the details related to the information they learn about PSE or its rate making before the WUTC.

In contrast, if a PUD is formed, it will be governed by elected PUD commissioners who are members of the community and are elected to 6-year terms. There is a PUD Commissioner up for election every two years. This means that those who will determine if bonds are issued, for example, will be local elected officials who are accountable to the residents of the County. This is a much clearer line of accountability and responsibility than the "blank check" that PSE now has using the rates paid by Jefferson County electric customers.

Again, the approval of Proposition 1 to give the PUD electric authority is not a blank check that requires to the PUD to form an electric utility. It is a piece of enabling legislation

approved by the voters that allows the PUD Commissioners 10 years in which to study and evaluate conditions to see if formation of an electric utility is warranted.

At past meetings, the Jefferson County PUD Commissioners have indicated their intent to study this question carefully and gradually take steps as conditions warrant to proceed with investigating electric utility formation.<sup>11</sup> Those steps will be shared with the public and actions will be taken in meetings generally open to the public. As such, the public and the press will be able to monitor the process and interact with the commission, as the public feels appropriate. Approval of Proposition 1 therefore starts a process and is not a “blank check.”

**2. PUDs are not regulated by the UTC. Won't all the regulation of PSE which exists to protect consumers be lost with a PUD?**

PUDs are self-regulated by their local commissions, an approach that has worked very well across the state to keep electric rates low while maintaining high service standards. PUDs are regulated and decisions are made at public meetings held locally. State law requires agendas to be publicly announced in advance of the meeting. PUDs must conform to the requirements of the Revised Code of Washington. PUDs are also audited by the State Auditor's office to insure compliance with state laws and PUD policy. In addition, PUDs and their elected officials are held accountable by the voters of the County. Commissioners as elected officials must also disclose financial holdings, sources of income and campaign contributions as part the Public Disclosure Commission records associated with running for elected office.

Another check and balance upon PUD operations is imposed by “the market.” Specifically, the ability to issue bonds requires the PUD to apply for a credit rating by the major bond rating agencies and for there to be a review of the underlying economics on how the bonds will be repaid. These are important checks on the ability of PUDs to over-extend themselves. It should be noted that all PUDs in Washington State have significantly higher credit ratings than the Standard and Poor's BBB- rating of PSE.

In PSE's indication of concern over the fact that PUDs are not regulated by the Washington Utility and Transportation Commission (WUTC), it is implied that the WUTC will effectively control PSE's rates. According to a WPUDA study, PSE's rates have gone up “...nearly 25% since 2002, or nearly twice the national average.” The report further states that, “PSE has the highest rates of any electric utility in Washington, with the exception of a small utility serving the islands of San Juan County...”

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<sup>11</sup> Commissioner Wayne King said, “there was no rush to get the PUD into the power business. They're (PSE) acting like we have to get right into it.” July, 30, 2008 Peninsula Daily News; “Commissioner Kelly Hays, who had originally been skeptical of the idea of offering electrical service now believes it should be considered.” April 4, 2008 Peninsula Daily News; Commissioner Dana Roberts said, “even if voters approve PUD electric service authority, the agency is not bound by law to proceed under any particular time-frame, or even take it on at all.” February 17, 2008 Peninsula Daily News.

PSE’s question is effectively, who will do a better job of regulating electric utility rates that are to be paid in Jefferson County? Will a distant and legalistic regulatory process in Olympia where the ultimate decision makers are appointed by the Governor, be more effective than PUD commissioners from Jefferson County elected from within the community?

For 23 other PUDs in Washington State with electric authority, the citizens of those counties have found that the PUD model does provide for public accountability. It would be surprising if the resulting conditions in Jefferson County are found to be any different than they are in the other counties where PUDs are a valuable local method of supplying cost effective electricity.

In the question of regulation of PSE rates, an important issue not addressed publicly by PSE or within the UtiliPoint report is future PSE electric power rates. PSE projections of future electric rates and revenues are part of the current WUTC rate case, but are hidden from public view by Confidentiality and Higher Confidentiality agreements. Ratemaking at the WUTC is not transparent and has limited public disclosure, unlike PUD proceedings. In its report, UtiliPoint expressed significant concern over the potential for higher electric rates with a PUD, but at the same time provides no prediction of future rates for PSE.

However, a very important public document that PSE has supplied to its stockholders is the SEC Schedule 14A document dated February 16, 2008. On page 41 of this document, a projection of “Earnings Before Income Tax and Depreciation Adjustment” or EBITDA between 2007 and 2013 is shown as follows:

<b>PSE Schedule 14A Projections</b>						
Year	2008	2009	2010	2011	2012	2013
EBITDA (in millions)	\$751	\$854	\$891	\$1,044	\$1,082	\$1,253
Percent annual increase	0.94%	13.72%	4.33%	17.17%	3.64%	15.80%
Cumulative increase from 2008		13.72%	18.64%	39.01%	44.07%	66.84%

Earnings within the forecast include both natural gas and electric revenues. PSE’s electric revenues are much greater than their natural gas revenues. Over time one would expect that

the sales of electricity and natural gas would increase slightly each year. PSE has stated publicly that it needs to invest several billion dollars on new generation and transmission for its electric system. The timing of this new generation is principally due to expiring wholesale power contracts, old generation that is being replaced, and load grow within other counties served by PSE. A report prepared by Hardy Associates funded by PSE, states, "These NPUD (new public utility districts) efforts are not new, but have received added impetus from PSE's pending merger with the Macquarie Consortium and the prospect of future power price escalation given PSE's need to acquire new generating resources."

Therefore, even with reasonable levels of expected growth in sales there will still need to be a significant increase in the basic electric and natural gas rates that PSE charges its customer between now and 2013. The Schedule 14A projections imply the PSE anticipates WUTC approval of regular, every other year double-digit rate increases. Yet this level of potential rate increases is not being discussed publicly by PSE, UtiliPoint, or the WUTC and a much more modest level of increase (3.55% per year) is being assumed in this report.

### **3. Won't municipalization cost \$77 million, as estimated by UtiliPoint International?**

The value of the assets to be acquired will be either a negotiated value or a value determined by litigation. A likely range of value for the facilities to be acquired is typically defined as being between the Original Cost Less Depreciation (OCLD) and the Replacement Cost New Less Depreciation (RCNLD). These values are generally considered by some to be too low and too high respectively. It is estimated that the OCLD and RCNLD values are \$35 million and \$70 million, respectively. As another check of value, the Washington State Department of Revenue (DOR) market value estimate of PSE assets in Jefferson County is about \$30 million.

The UtiliPoint study uses just one of several methodologies to determine a theoretical value for the PSE assets within Jefferson County. If the PUD were given electric authority, one of the first steps it would likely undertake would be to negotiate with PSE over the purchase of certain or all of PSE's assets in Jefferson County. Only if negotiations failed would condemnation be pursued. Historically, many electric municipalization asset sales have taken place just prior to a condemnation verdict being rendered. That means that even if a condemnation proceeding is started, the asset valuation could be the result of negotiations.

If it is necessary for the asset valuation to be determined by a condemnation judgment, then that process will take part in a court of law and allow for discovery and cross examination of expert witnesses. There are several different methods used to value utility assets and UtiliPoint has chosen only one such method. The method that UtiliPoint has chosen is one that historically has resulted in valuations higher than other recognized valuation methods.

#### 4. Isn't PSE the largest investor in renewable energy in the state?

PSE is the largest electric utility in the State of Washington and so it should be a large investor in renewable energy. Because the Renewable Energy Initiative I-937 omitted hydropower from qualifying as a "renewable resource," PUDs can appear less involved in I-937 defined renewables, such as wind and solar. However, many of the Pacific Northwest PUDs have leadership positions in the development of landfill gas, biomass, wave energy, wind energy, and solar energy facilities.

If one looks at carbon-foot print, then PSE's current ownership and use of coal fired generation is a significant negative, when compared to typical PUDs carbon based generation. The PUDs in Washington State have a much higher percentage of non carbon-based and sustainable or renewable energy use than PSE, because of their investment in hydropower and their preference access to Bonneville Power Administration hydropower. As such, a new Jefferson County PUD will likely supply its customers with a higher percentage of sustainable and non-greenhouse gas producing energy than PSE.

There are other questions that are frequently asked by voters when considering whether to vote for PUD electric authority. We have listed some of the additional commonly asked questions below.

#### 5. How do PUDs pay taxes?

A recently prepared study authored by Mike Shay, retired auditor/controller for Snohomish County PUD (July 31, 2008) evaluated the local and state taxes paid by PUDs in comparison to investor owned utilities (IOU), such as PSE. That study found that both a PUD and PSE would pay essentially the same Public Utility Tax (PUT), Sales/Use Tax, and Municipal Taxes. The main difference was that PUDs pay a privilege tax in lieu of property taxes and PSE pays a property tax. When one compares the amount of money paid in privilege tax, it is equal to or greater on average than the property taxes that PSE pays.

The report goes on to further state that, "In fact, RCW 54.28.120 provides that privilege taxes paid by a PUD on acquired IOU property will not be less than was paid prior to the IOU properties acquisition. There are also details to protect local taxing districts within RCW 54.28.080 related to bonded indebtedness of school districts and RCW 54.28.110 related to property taxes paid to any taxing entity for removal of property from tax rolls."

An interesting finding of the report for small geographic areas, such as Jefferson County, is that there could be a substantial increase in the total amount of taxes paid locally as a result of the formation of a PUD. This is due to the fact that sales taxes are registered with the location where the products are shipped or delivered. For example, if PSE purchases and warehouses office paper in King County or has poles shipped to a pole yard in Silverdale

(Kitsap County), but eventually uses that paper or the poles in Jefferson County the sales/use tax may be credited to King or Kitsap County rather than Jefferson County. With a PUD that has all of its purchasing and warehousing functions within Jefferson County there would be no “leakage” of sales tax revenues from local government. Considering the structure of PSE’s operations, this could be a significant consideration for voters within Jefferson County.

## **6. What is a PUD’s ability to financially support local civic organizations?**

Recent newspaper stories document that PSE provides some support to local Jefferson County civic organizations, such as, United Way, the Northwest Maritime Center, the Wooden Boat Foundation and the Port Ludlow Arts Council. As discussed earlier, a PUD that encourages its employees to participate in a United Way Campaign is also supporting United Way of Jefferson County in potentially as strong or a stronger way than PSE. Similarly, many PUDs have found ways to purchase advertising at Little League fields or in brochures used by various non-profits as a way of promoting PUD sponsored conservation programs and other programs. While there are prohibitions about the lending or giving away of public funds, if the non-profit can provide a viable advertising benefit for PUD programs, then reasonable advertising fees are allowed.

Similarly, an important point often forgotten in PUD/IOU debates is that if a PUD is formed it will ultimately have lower electric utility rates. As such, the portion of the non-profit’s operating budget devoted to paying for electricity will be less. Furthermore, if the PUD’s rates are ultimately lower, then the disposable community income that is available for donations is greater and if the combined salary of PUD employees within Jefferson County is greater than the combined income of PSE employees living in Jefferson County, then the non-profit is likely to have greater donations, all things being equal.

Finally, as stated earlier, an important source of talent for local non-profit organizations is volunteers. PUD employees have skills that are found to be valuable to non-profits in many other PUD service territories.

## **7. Will hiring competent staff be difficult (prevailing wages, union staff, RCW 54 take over provisions)?**

PUDs across the State of Washington hire employees and provide services. It would be hard to believe that there is something unique about Jefferson County that would prevent competent staff from being hired. While there is a national shortage of certain electrical worker skills, many electrical workers prefer to work for small electric utilities, where the amount of travel to distant locations is minimized and where family and community ties are encouraged. Initially it would probably be necessary to contract certain employee services and possibly obtain temporary assistance from neighboring PUDs to assist with initial operation.



In 2000, an earlier study of the potential for a Jefferson County PUD found that there were numerous IBEW Local 77 members who lived in Jefferson County. Now there are less than a handful. This is potentially because of PSE closing its major facilities in Jefferson County and people needing to move elsewhere for jobs. It is possible that there are some linemen now working for Potelco and other firms who live elsewhere that would gladly return to the communities in Jefferson County that they left.

All of the electric PUDs in Washington have electrical workers represented by unions. PUDs are required in construction projects to pay prevailing wages and so, both PUD constructed projects and projects contracted by PUDs are performed by union workers. This implies a high level of compensation for employees. PUDs have another advantage when compared to contracting companies that require their employees to move several hundred miles to go to different jobs or even with large IOU's that pressure their employees to accept transfers to different communities. While a PSE employee may need to move from the Burlington Service Center to Bellevue to advance their career, an employee of a local PUD never has to worry about having to move to a different county if they want to stay and advance with their employer.

A related question that is sometimes asked is if skilled PSE employees would be welcomed at a newly formed PUD and how they would be treated. There are three relevant provisions within the Revised Code of Washington (RCW) that may encourage some PSE employees to apply for work with a new PUD as follows:

***RCW 54.04.130 Employee benefit plans when private utility acquired--Rights, powers and duties as to existing private employee benefit plans.*** Whenever any municipal corporation acquires by condemnation or otherwise any utility which at the time of acquisition is in private ownership and the employees of such private utility have been for at least two years and are at the time of acquisition covered by any plan for individual annuity contracts, retirement income policies, group annuity contracts, group insurance for the benefit of employees, or any other contract for the benefit of employees, such district shall, when the personnel is retained by the district, assume all of the obligations and liabilities of the private utility acquired with relation to such plan and the employees covered thereby at the time of acquisition; or the municipal corporation may by agreement with a majority of the employees affected substitute a plan or contract of the same or like nature. The municipal corporations acquiring such private utility shall proceed in such manner as is necessary so as not to reduce or impair any benefits or privileges which such employees would have received or be entitled to had such acquisition not been effected. The district may pay all or any part of the premiums or other payments required therefore out of the revenue derived from the operation of its properties. [1961 c 139 § 1.]

***RCW 54.04.140 Employee benefit plans when private utility acquired--Admission to district's employee plan--Service credit--Contributions--Benefits.*** Any person affected by RCW 54.04.130 who was employed by the private utility at the time of acquisition may, at his option, apply to the district and/or appropriate officers, for admission to any

plan available to other employees of the district. Every such person who was covered at the time of acquisition by a plan with the private utility shall have added and accredited to his period of employment his period of immediately preceding continuous service with such private utility if he remains in the service of the municipal corporation until such plan for which he seeks admission becomes applicable to him.

No such person shall have added and accredited to his period of employment his period of service with said private utility unless he or a third party shall pay to the appropriate officer or fund of the plan to which he requests admission his contribution for the period of such service with the private utility at the rate provided in or for such plan to which he desires admission, or if he shall be entitled to any private benefits, as a result of such private service, unless he agrees at the time of his employment with the district to accept a reduction in the payment of any benefits payable under the plan to which he requests entry that are based in whole or in part on such added and accredited service by the amount of benefits received. For the purposes of contributions, the date of entry of service shall be deemed the date of entry into service with the private utility, which service is accredited by this section, and the amount of contributions for the period of accredited service shall be based on the wages or salary of such person during that added and accredited period of service with the private utility.

The district may receive such payments from a third party and shall make from such payments contributions with respect to such prior service as may be necessary to enable it to assume its obligations.

After such contributions have been made and such service added and accredited such employee shall be established in the plan to which he seeks admission with all rights, benefits and privileges that he would have been entitled to had he been a member of the plan from the beginning of his immediately preceding continuous employment with the private utility or of his eligibility. [1961 c 139 § 2.]

***RCW 54.04.150 Employee benefit plans when private utility acquired--Agreements and contracts--Prior rights preserved.*** The municipal corporation may enter into any agreements and contracts necessary to carry out the powers and duties prescribed by RCW 54.04.130 and 54.04.140, but nothing in RCW 54.04.130 through 54.04.160 shall be so construed as requiring without consent the modification of the obligation of any contract or as requiring any third party to modify the rights, privileges or obligations acquired or incurred under a prior agreement. [1961 c 139 § 3.]

## **8. What is the availability of Bonneville Power Administration (BPA) power?**

BPA is required by statute to sell power to preference customers, such as PUDs. PUDs have a preferential right to the hydroelectric power from the federal hydroelectric projects on the Columbia and Snake Rivers and certain other power plants and contracts.

Currently BPA is preparing to offer new 20-year power contracts to its preference customers. It is in the process of finalizing some of the provisions of its offer. Generally for new preference customers BPA is indicating that it will reserve approximately 250 average megawatts (MWa) of electric energy for new preference customers and will make that power available generally at 50 MWa in fiscal year (FY) 2012, then 100 MWa in FY 2014, 150 MWa in FY 2016, 200 MWa in FY 2018 and 250 MWa in FY 2020. All new public utilities and government agency customers will be allocated shares of this reserved lowest cost power under a complex formula that takes into account the size of the utility, the total amount of power requested, special Indian tribal power allocations and the allocations of power to BPA's other preference customers.

BPA has effectively two policies. One for small new publicly owned utility customers under 10 MWa and one for larger new publicly owned utility customers. Jefferson County PUD would fall into the larger new publicly owned or preference customer policy.

BPA has stated that once a customer meets its six standards for service it will accept a request for a power contract under the new contract terms that will allow the new preference customer access to an amount of BPA's lowest cost power preference power. The six standards for service require planning of certain actions on the part of a new PUD. However, they are not difficult as they have been met by other utilities. We have assisted the City of Hermiston in meeting the six standards for service and feel that Jefferson County PUD should be able to meet these standards for service also.

Once a new PUD meets the standards for service, BPA has an obligation to provide new preference customers with power. Therefore, there is not a question on the availability of BPA power, but only on its price. BPA has indicated that it will provide such power over and above any available Tier 1, or lowest preference priced power, at either a Targeted Adjustment Charge (TAC) or Tier 2 rate. TAC and Tier 2 rates are assumed to be priced at BPA market priced power purchase rates. There has been some discussion that the rates for these BPA power products could actually be less than market rates, depending upon final BPA policy determinations in various future rate cases.

In BPA Average System Cost proceedings, certain investor owned utilities have argued that BPA can purchase market priced power for about 15% less than they can purchase it because of the size of the BPA system and because of the ability of BPA to use its hydro system in the purchase of such power. Even if new PUDs don't get all of their power at BPA's lowest Tier 1 rate, they still will have an advantage in wholesale power costs by being a BPA customer when compared to PSE wholesale power costs.

While BPA's lowest cost power may or may not be available on the first day of operation by a new electric PUD, power should be available from BPA at attractive rates. As time progresses and BPA's Tier 1 allocation load phase-in proceeds, the amount of lowest cost power available to a newly formed PUD will increase with time, making the PUD even more price competitive with an IOU, such as PSE.

If one talks to BPA, one will find that there will be power available for a new PUD, it will just be a question of price. Because of BPA's hydro system cost structure this is an important benefit associated with choosing a PUD as the electric power delivery system for Jefferson County.

**9. The PUD study uses valuation techniques that create unrealistically low estimates of PSE's utility system value.**

Most condemnation valuation cases are fought between experts arguing whether OCLD or RCNLD is the appropriate valuation of the utility assets. Historically, across the country the result has been a valuation somewhere in between usually averaging around 1.35 times OCLD. Washington State RCW 54 has a unique feature in that the jury must be instructed as to the tax value (which is significantly less than 1.35 times OCLD) and that this value should be reduced if there is not a franchise in place (which would be much lower than 1.35 times OCLD). The Hittle report assumes a PSE asset value of 1.35 times OCLD. Potentially, the PSE assets could be acquired for less. Even if they can not be acquired for less, our sensitivity studies show that the asset acquisition price has only a small impact on financial feasibility.

**10. The study assumes low power market rates that do not exist today and may never exist tomorrow.**

Market priced power is much less than the \$80/MWh (UtiliPoint) to \$100/MWh (Hardy) studies imply. The September 30, 2008 average Mid-C Peak price for market power was between 61.18 and 58.92 and the average Mid-C Off-Peak price for market power was between 45.78 and 45.91 (\$/MWh). If we assume 16 hours of peak power and 8 hours of off peak power, then the flat average, average-price for September 30th is \$55.31/MWh. The Hittle study used a market price number ranging from \$50.31/MWh to \$56.92/MWh. Based on DHA discussions on October 1, 2008 with a major power trading firm, if we look out at a current forward curve price for 2011, 2012, and 2013 for flat Mid-C power it is about \$63.50/MWh and that includes significant risk premium for unknown future conditions and inflation. While ancillary services would need to be added to this, the point is that market priced power is still far less than the \$80/MWh (UtiliPoint) and \$100/MWh (Hardy) numbers that have been quoted. The Hittle report also included a scenario for having market power \$10/MWh higher and that scenario also showed economic feasibility. The market price of power that is included within the Hittle study comes from BPA market projections that are based on west coast dispatch models that most major utilities use for planning.

**11. The timeline to form a utility is impractical. The study claims Jefferson County PUD could form the new electric utility in two years. They base this conclusion on the 1938 formation of Grays Harbor PUD. Basing an analysis on the formation of a PUD that happened in 1938 is unreasonable; you have to look at modern cases which have typically taken at least 5 years.**

This is a false statement. The Hittle Draft Report states "*...it would likely take at least two years from the time such a decision is made until power is provided to Jefferson County customers.*"

Furthermore, when the vote to form Grays Harbor County PUD occurred, a viable PUD was just a goal in the voters' minds. Grays Harbor County PUD starting from the November 1938 vote of the public had to go through many steps including: forming an electric utility, issuing bonds, winning a condemnation case, hiring staff, getting a power contract and serving its customers starting in January of 1940. It took 14 months, which is considerably less than two years. Jefferson County PUD exists; it has elected Commissioners, staff, contracts with attorneys and it has experience in issuing bonds, responding to customer telephone calls and issuing bills and collecting funds. Jefferson County PUD will have a fewer steps to go through than Grays Harbor County PUD had to go through.

UtiliPoint's Comparison is based on condemnation proceedings in Iowa, Florida and other non-public power states and then it extrapolates those conditions to Washington State. The laws of Washington favor public utility districts as demonstrated by the 28 active PUD's, 23 of which have electric authority. Neither Iowa nor Florida are known as public power states. It could take longer to form an electric utility in either of those states. Specifically, RCW 54.08.050 severely limits challenges as to the validity of a PUD. Similarly, RCW 54.16.020 also limits defenses that can be used within a condemnation proceeding. These and other such statutory elements of Washington PUD laws provide PUD's with a more streamlined process than is found in other states.

## **12. Why is there such an increase in the number of employees from the DHA 2000 to 2008 study?**

In the DHA previous study in 2000, DHA assumed more outsourcing, hence fewer employees. Getting workers within Jefferson County was a higher priority for the PUD this time due to historic recent poor PSE reliability and the need to have crews local to respond better to outages. PSE's reliability when DHA did the study in 2000 was much better than it is now. PSE's recent reliability as measured by SAIDI is relatively poor (see Appendix C). This implies that the electric system in the Jefferson County area has deteriorated. That also means that there needs to be lots of capital replacement of worn out equipment. DHA also included \$1.2 million in separation construction costs on the part of the PUD for building new PUD distribution lines, which would also be performed by PUD crews.

On a comparison basis, DHA indicated that a Jefferson County PUD electric utility would have about 67 incremental employees, which compares to Appendix A values as follows:

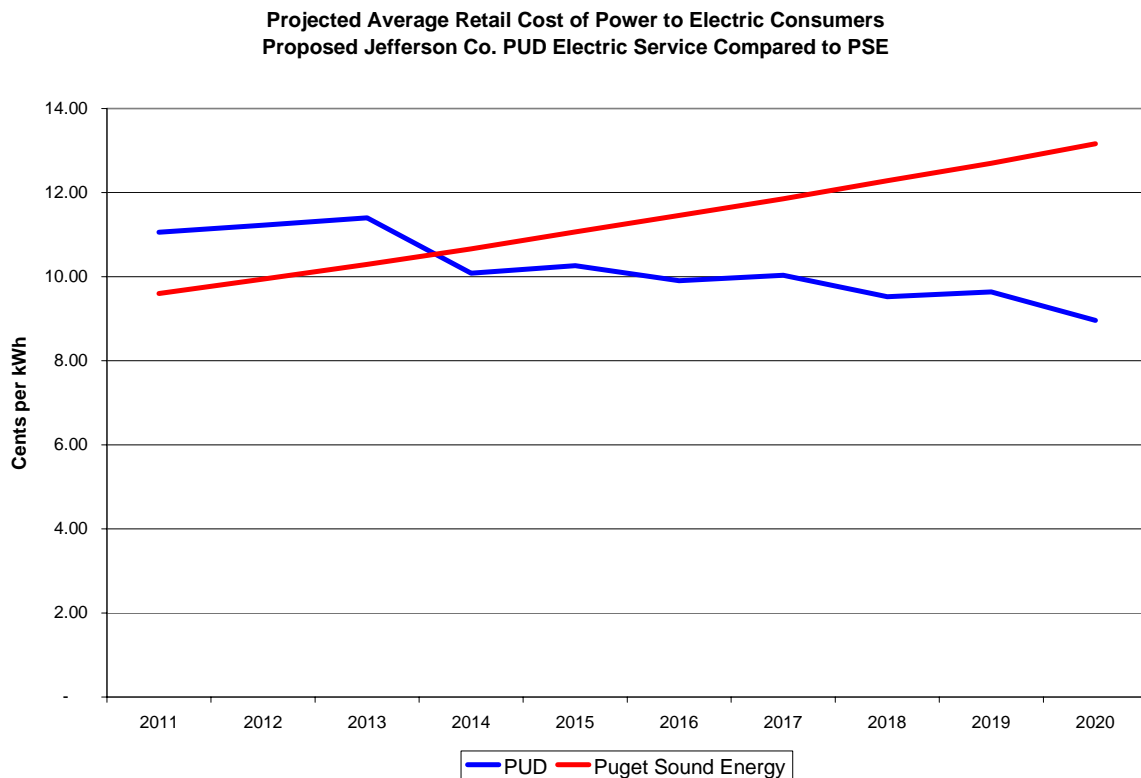
- Jefferson Co PUD--(est-2011)--18,884customer--67 incremental employees
- Pacific County PUD-----16,723 customers---56 employees
- Klickitat County PUD-----11,398 customers--68 employees
- Franklin County PUD-----21,464 customers--85 employees

**13. The PUD sponsored report shows that in the first year of operation that PSE’s rates will be lower than those of a Jefferson County PUD electric utility.**

This report is not saying that the PUD’s rates will be higher than PSE’s rates. Rather, using a relatively conservative set of assumptions, it is estimated that the PUD’s rates could potentially be higher for a relatively short period of time. When BPA Tier 1 power becomes available to the PUD, estimated to be two to three years after formation, the PUD’s rates could drop significantly and should be lower than PSE’s rates. Some of the assumptions used in this analysis that significantly affect the early year costs of operation for the PUD are as follows:

- level debt service on initial borrowings,
- waiting three years until BPA Tier 1 power is assumed to be available,
- paying a premium for the PSE assets,
- estimating that PSE's rates will only be going up an average 3.55%/year after the next rate increase.

These assumptions result in potentially higher charges for electric service in the first two to three years of PUD electric system operation followed by a noticeable decrease in subsequent years. The following chart shows the projected average unit revenue differential over the first ten years of PUD electric system operation. Note that the first five years of unit revenues shown in the chart are from Table 8 in the report.



If a "most likely" rate scenario would have been the goal of the analysis, a lower cost of PSE asset costs, higher PSE rates and other assumptions would have been factored into the analysis. Further, if the PUD were to initially schedule non-level debt repayment on its revenue bonds, the PUD rates could be less than those of PSE in all years. DHA tried to be conservative and reasonable in its analysis so as to provide a reasonable projection for the PUD. The study also shows that under all scenarios or cases studied that there would be significant net present value savings to electric ratepayers in Jefferson County over the first ten years of PUD electric operation.

**14. Areas like Jefferson County need a big electric utility and its economies of scale during a 1 in a 100 year storm to help restore power. A small utility would not be able to respond effectively.**

Actually, a 1 in a 100 year storm is when you need a local PUD the most. Such a storm in the Pacific Northwest would typically cause outages from the Canadian border to the Columbia River. Historically, in such situations, PSE has prioritized outage restoration with King County being much higher on the priority list than more rural areas such as Whidbey Island, East Jefferson County or rural Skagit County. In such a storm, having local PUD crews focused on your County is what will restore power the quickest.

**15. Are there examples of other public power utilities that have been formed?**

See the list of new public utilities in Appendix B.

**16. What about economies of scale? Is a small electric utility subject to higher costs because of its size?**

PSE has historically raised the question of economies of scale. It normally points out that it is the largest electric utility in the State of Washington and because of its size can command less expensive services and be more efficient in the management of certain utility functions.

While economies of scale are an important economic concept, they clearly are not a dominant factor in terms of number of customers in the consideration of choosing between forming a new PUD or not. Specifically, if economy of scale was such an important factor how could very small utilities such as the City of Sumas and Ferry County PUD have lower rates than PSE? Obviously, something more than just economies of scale or number of customers or size of the utility must be at play, when all but one electric utility in Washington State has lower retail rates than PSE and all are smaller than PSE.

One major factor is BPA wholesale power costs. The ability to purchase BPA power and utilize BPA's size in market purchases and historically lower power costs helps, but it is not the only factor. This use of BPA's size in developing and acquiring power supply is a great equalizer for small public utilities.

There are scholarly studies that indicate that in regulated monopolies certain expenses, such as customer expenses may not be dramatically reduced by economies of scale related to total number of customers. There may actually be larger savings associated with small utilities performing both water and electric meter reading and sending out joint bills than economies of scale in customer billing systems. Similarly, smaller utilities may be more flexible and less bureaucratic than a large heavily regulated IOU. This flexibility may further allow a PUD to capture lower costs. Often in small public power utilities, there is greater staffing flexibility and more flexible work rules among employees that results in higher productivity.

### **17. What about FERC stranded costs?**

FERC stranded costs are a complex and evolving topic. In its simplest form the Federal Energy Regulatory Commission (FERC) determined it would provide open transmission access on the major electric utility transmission lines. By doing so, it was creating a situation where some utilities that had made long term investments (principally transmission and generation) would have to “compete” to serve certain customers. The utility would need to compete with others that might have less expensive generation. In so doing, FERC hoped to use free market competitive pressure to force electric utilities to become more cost effective.

And yet, FERC should not “take” or destroy the value of the transmission investment to a utility by imposition of an open access policy. Thus the concept of stranded cost was created. Stranded cost is to be a temporary measure that compensates utilities for loss of their monopoly transmission rights because of the implementation of FERC’s open access policy. The stranded costs are designed to compensate a utility for lost revenues when its transmission lines or generation facilities are by-passed and not as fully utilized as planned. This is not the situation at Jefferson County PUD.

PSE has stated repeatedly that it needs to buy new generation to replace old generation contracts that are expiring and that it needs new generation for the load growth that it is expecting. A new electric utility run by the PUD will not cause PSE generation to be shut down and “stranded” or not used. An electric PUD will merely shift the generation that PSE currently has to other customers who remain with PSE and the new customers in those other counties that PSE continues to serve. A new electric utility at Jefferson County PUD will also not decrease the loads on PSE’s transmission lines such that they are no longer needed. A Jefferson County electric PUD will just allow PSE to defer transmission investment in some places and use the existing facilities to serve new customers it anticipates.

As such, there should be no FERC transmission or generation stranded costs associated with the formation of an electric utility by Jefferson County PUD.



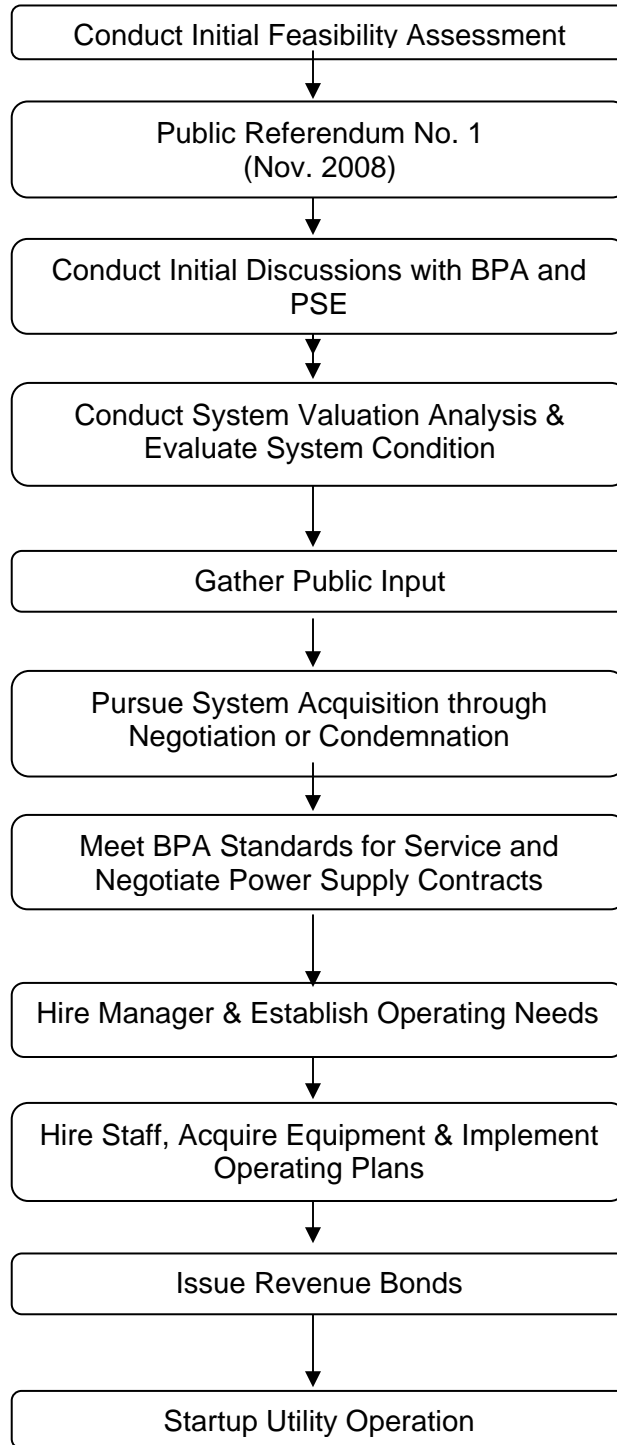
**18. What steps will follow in implementing a PUD electric system?**

If the voters of Jefferson County give the District electric authority and if the Commissioners in their future deliberations find that starting the path toward forming an operating electric utility is viable, then there are a number of factors to be considered. At each point along the path to becoming an electric utility there will be decision points where the publicly accountable, elected PUD Commissioners will weigh the need to perform additional research, define risks and then take appropriate actions to move forward, to stay in position and keep options open, or to stop the process. Getting electric authority does not mean that the District will need to form an electric utility.

See the following chart.

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## Jefferson County PUD Steps to Form a Consumer Owned Electric Utility



## Section 8

### Alternative Consumer-Owned Utility Considerations

The main approach taken in this study has been to evaluate the issues, costs and benefits associated with a proposed PUD to serve all of PSE's existing customers in Jefferson County. This would not preclude the City of Port Townsend from establishing a separate municipally-owned electric utility to serve electric customers in Port Townsend. It is estimated that the City would serve about 4,200 residential customers or about 28% of the total number of customers to be served by the full PUD. The total load of the City system is estimated to be about 10.5 average MW (MWa). PSE's electric facilities in the City are estimated to be about 27% of the total value of PSE's facilities in Jefferson County according to DOR.

Two separate utilities, a municipal utility serving Port Townsend and a PUD serving the remainder of East Jefferson County, could be jointly operated to save on the costs of operation and maintenance. It would be expected that both the City and the PUD would own their respective electric utility facilities and manage and administer each operation separately. Further, under new BPA Regional Dialogue and Tiered Rate Methodology (TRM), such an alternate service alternative structure may provide certain benefits related to power supply costs.

Specifically, under BPA policy smaller new public utilities are treated more favorably. For example under the TRM policy the amount of Tier 1 power that a utility is given is a function of the size of the utility. That is, a new public utility that is under 10 MWa of energy will get its full 10 MWa Tier 1 allocation limited by the 250 MWa BPA reservation for new publics, potentially reduced by up to 40 MWa for tribal electric utilities and further potentially reduced for new publics requesting more than 50 MWa in any single rate period. Such a new small public utility would receive Tier 1 power in at most 15 months from the time of its application for a Regional Dialogue Contract with BPA.

If that new small public utility had a load between 10 MWa and 34 MWa, the load-phase in provisions of the new public utility would be such that it would receive nearly 10 MWa plus about 33 percent of the load it has over 10 MWa. This means that unless there were more than 50 MWa of new public load applied for in a single rate period that the new utility with a load under 34 MWa would receive nearly a full allocation of Tier 1 BPA power within about 3 rate periods (or 6 years) of getting its Regional Dialogue Contract. For new public utilities over 34 MWa, the remainder of the load over 34 MWa is phased in over five rate periods (i.e. 10 years) all things being equal.

This provides a significant encouragement to making new public utilities smaller in size so that they can collectively get a higher percentage of BPA Tier 1 power more quickly. In the case of East Jefferson County an alternate approach designed to maximize BPA Tier 1 power, might entail the PUD working with the City of Port Townsend to create two electric utilities. With the City load just slightly over 10 MWa and the remaining PUD load at about 23 to 27 MWa, the amount of Tier 1 power for the two separate utilities would be greater than for the PUD alone and could be supplied by BPA more quickly.

A good example of how operating costs could be minimized for two separate utilities, the City of Hermiston, Oregon provides a good example. The City of Hermiston formed its municipally-owned electric utility in 2001 after acquiring the existing electric facilities from PacifiCorp, an investor-owned utility. The City of Hermiston serves nearly the same number of customers as is estimated for Port Townsend. Hermiston's electric utility has only two full time employees. All of the line crew, meter reading, billing, and customer service functions are contracted out to the neighboring electric cooperative, Umatilla Electric Cooperative. The City of Hermiston has met the current BPA standards of service with this arrangement. The City of Hermiston owns the distribution facilities and customer meters and arranged financing to acquire the facilities. The City Council makes all critical decisions with regard to the electric utility operation.

If the Hermiston/Umatilla concept is used in Jefferson County, then the PUD would purchase all of PSE's transmission and most or all of the PSE substations within Jefferson County and provide contract use of those facilities to Port Townsend at cost. The line crews and other functions could be similarly provided to the City under a contract method just as has been done at Hermiston and as BPA has accepted in the past. This alternate method of service would enhance early economics of public power service to east Jefferson County and it would divide the bond funding responsibility among the two existing government agencies. State law also allows the two utilities to combine or consolidate functions as a PUD at some future point in time should that be desired.

While a method of enhancing the economic benefits, it could complicate the negotiations with PSE or a condemnation proceeding. Similarly, although BPA has set precedents in the past with regard to Hermiston and Umatilla Electric Cooperative, BPA could view such an approach today as "gaming" the Regional Dialogue and TRM policies. As such we have not focused on this approach within our analysis. Assuming that the PUD is given electric authority by the voters of Jefferson County, this is an alternative that should be examined and discussed with BPA as part of the formation studies.

APPENDIX A  
 Selected Washington PUD Statistics for 2006

**PUD Electric Distribution Systems**

	CUSTOMERS					Total
	Residential	Industrial	Commercial	Irrigation	Other	
Asotin County PUD	-	-	-	3	-	3
Benton County PUD	37,418	3	4,931	713	1,790	44,855
Chelan County PUD	33,442	30	5,563	1,111	4,285	44,431
Clallam County PUD	25,941	231	2,727	116	-	29,015
Clark Public Utilities <sup>1</sup>	161,911	26	12,251	-	1,297	175,485
Cowlitz County PUD	41,819	87	5,213	-	50	47,169
Douglas County PUD	15,181	-	1,300	571	314	17,366
Ferry County PUD	2,761	3	413	94	1	3,272
Franklin County PUD	18,472	4	1,798	399	791	21,464
Grant County PUD	32,523	18	5,600	4,414	119	42,674
Grays Harbor County PUD	34,431	44	4,373	216	2,350	41,414
Kittitas County PUD	3,317	283	4	141	176	3,921
Klickitat County PUD	9,450	3	1,695	242	8	11,398
Lewis County PUD	24,592	79	4,182	76	657	29,586
Mason County PUD #1	4,575	-	432	-	-	5,007
Mason County PUD #3	29,279	1	2,160	-	89	31,529
Okanogan County PUD	16,105	3	2,344	1,317	31	19,800
Pacific County PUD	14,591	2	1,640	67	423	16,723
Pend Oreille County PUD	7,559	7	806	-	36	8,408
Skamania County PUD	5,005	4	585	-	-	5,594
Snohomish County PUD	278,812	78	27,830	-	312	307,032
Wahkiakum County PUD	1,988	-	348	-	2	2,338
Whatcom County PUD	-	1	-	-	-	1
<b>Totals</b>	<b>799,172</b>	<b>907</b>	<b>86,195</b>	<b>9,480</b>	<b>12,731</b>	<b>908,485</b>

<sup>1</sup> kWh Sales (000) rounded.

APPENDIX A  
 Selected Washington PUD Statistics for 2006

	KWH SALES (000)						Sales For Resale	Total Sales Incl. Resale
	Excluding Sales for Resale							
	Residential	Industrial	Commercial	Irrigation	Other	Total		
Asotin County PUD	-	-	-	386	-	386	-	386
Benton County PUD	632,213	37,456	510,052	368,048	7,941	1,555,710	845,768	2,401,478
Chelan County PUD	706,350	300,027	418,220	39,146	23,923	1,487,666	3,386,000	4,873,666
Clallam County PUD	420,184	155,258	75,099	827	-	651,368	-	651,368
Clark Public Utilities <sup>1</sup>	2,310,000	740,000	1,346,000	-	34,000	4,430,000	389,000	4,819,000
Cowlitz County PUD	791,227	3,471,408	393,524	-	12,128	4,668,286	-	4,668,286
Douglas County PUD	364,330	-	145,343	36,593	29,895	576,160	1,093,793	1,669,953
Ferry County PUD	33,364	10,514	16,092	907	125	61,002	-	61,002
Franklin County PUD	281,972	144,563	287,714	117,128	4,404	835,781	289,820	1,125,601
Grant County PUD	691,436	1,288,483	663,111	476,558	5,297	3,124,885	1,225,950	4,350,835
Grays Harbor County	486,892	241,185	260,459	1,924	2,370	992,831	781,098	1,773,929
Kittitas County PUD	49,721	7,764	4,837	6,625	95	69,042	-	69,042
Klickitat County PUD	129,767	55,273	79,674	25,877	972	291,563	62,857	354,420
Lewis County PUD	421,701	219,644	153,470	1,325	64,917	861,057	-	861,057
Mason County PUD #	51,316	-	15,945	-	-	67,261	-	67,261
Mason County PUD #	389,004	70,416	184,285	-	2,115	645,820	-	645,820
Okanogan County PUD	275,415	49,237	201,686	63,845	1,305	591,488	278,779	870,267
Pacific County PUD	175,303	30,937	60,887	696	25,518	293,341	-	293,341
Pend Oreille County PUD	134,259	771,622	47,624	-	4,284	957,790	248,057	1,205,847
Skamania County PUD	74,691	22,895	33,030	-	5	130,622	-	130,622
Snohomish County PUD	3,306,472	865,568	2,284,338	-	23,883	6,480,261	2,417,671	8,897,932
Wahkiakum County PUD	27,875	-	10,150	-	282	38,306	-	38,306
Whatcom County PUD	-	208,373	-	-	-	208,373	-	208,373
<b>Totals</b>	<b>11,753,492</b>	<b>8,690,623</b>	<b>7,191,539</b>	<b>1,139,886</b>	<b>243,459</b>	<b>29,018,998</b>	<b>11,018,793</b>	<b>40,037,791</b>

APPENDIX A  
 Selected Washington PUD Statistics for 2006

**PUD Electric Distribution Systems**

	ENERGY CONSUMPTION PER CUSTOMER (KWH)					
	Excluding Sales for Resale					
	Residential	Industrial	Commercial	Irrigation	Other <sup>2</sup>	Total
Asotin County PUD	-	-	-	128,800	-	128,800
Benton County PUD	16,896	12,485,333	103,438	516,196	4,436	34,683
Chelan County PUD	21,122	10,000,905	75,179	35,235	5,583	33,483
Clallam County PUD	16,198	672,111	27,539	7,128	-	22,449
Clark Public Utilities	13,844	28,539,284	99,495	-	26,112	24,447
Cowlitz County PUD	18,920	39,901,241	75,489	-	242,552	98,969
Douglas County PUD	23,999	-	111,802	64,086	95,206	33,177
Ferry County PUD	12,084	3,504,660	38,964	9,650	125,196	18,644
Franklin County PUD	15,265	36,140,650	160,019	293,554	5,568	38,939
Grant County PUD	21,260	71,582,389	118,413	107,965	44,517	73,227
Grays Harbor County PUD	14,141	5,481,473	59,561	8,908	1,009	23,973
Kittitas County PUD	14,990	27,434	1,209,204	46,987	539	17,608
Klickitat County PUD	13,732	18,424,333	47,005	106,930	121,500	25,580
Lewis County PUD	17,148	2,780,298	36,698	17,433	98,809	29,104
Mason County PUD #1	11,217	-	36,909	-	-	13,433
Mason County PUD #3	13,286	70,416,000	85,317	-	23,761	20,483
Okanogan County PUD	17,101	16,412,398	86,043	48,478	42,094	29,873
Pacific County PUD	12,014	15,468,600	37,126	10,394	60,325	17,541
Pend Oreille County PUD	17,762	110,231,680	59,087	-	119,005	113,914
Skamania County PUD	14,923	5,723,850	56,461	-	-	23,350
Snohomish County PUD	11,859	11,097,029	82,082	-	76,547	21,106
Wahkiakum County PUD	14,021	-	29,166	-	140,841	16,384
Whatcom County PUD	-	208,373,068	-	-	-	208,373,068
<b>Totals &amp; Averages</b>	<b>14,707</b>	<b>9,581,723</b>	<b>83,433</b>	<b>120,241</b>	<b>19,123</b>	<b>31,942</b>

<sup>2</sup> May include non firm sales

APPENDIX A  
 Selected Washington PUD Statistics for 2006

	OPERATING REVENUES including City occupation tax											
	Excluding Sales for Resale						Total Retail Sales	Sales For Resale	Total Including Resale	Telecom Revenue	Other Elect. System Revenue <sup>3</sup>	TOTAL REVENUE
	Residential	Industrial	Commercial	Irrigation	Other							
Asotin County PUD	\$ -	\$ -	\$ -	\$ 16,385	\$ -	\$ 16,385	\$ -	\$ 16,385	\$ -	\$ -	\$ 16,385	
Benton County PUD	44,778,000	1,444,000	29,259,000	15,485,000	824,000	91,790,000	46,585,675	138,375,675	461,276	6,143,439	144,980,390	
Chelan County PUD	20,988,660	5,600,567	13,479,859	1,057,852	985,795	42,112,733	93,832,884	135,945,617	3,050,541	2,107,967	141,104,125	
Ciallam County PUD	28,863,296	7,510,080	5,044,031	56,996	-	41,474,403	-	41,474,403	237,738	568,169	42,280,310	
Clark Public Utilities	181,412,358	37,973,504	88,399,558	-	3,416,796	311,202,216	19,167,098	330,369,314	-	10,399,408	340,768,722	
Cowlitz County PUD	41,504,458	124,230,332	25,222,927	-	771,772	191,729,489	-	191,729,489	-	4,209,541	195,939,030	
Douglas County PUD	8,286,816	-	3,281,118	665,828	741,947	12,975,709	24,691,196	37,666,905	599,460	210,300	38,476,665	
Ferry County PUD	2,582,581	515,468	1,148,123	62,800	8,498	4,317,470	-	4,317,470	-	76,912	4,394,382	
Franklin County PUD	22,109,556	7,975,689	19,983,009	7,029,139	386,787	57,484,180	14,866,154	72,350,334	273,812	6,950,764	79,574,910	
Grant County PUD	29,535,576	32,568,684	20,039,337	15,049,363	885,633	98,078,593	114,541,349	212,619,942	1,661,947	4,481,333	218,763,222	
Grays Harbor County PUD	36,966,114	11,030,545	17,612,496	154,630	568,469	66,332,253	47,217,315	113,549,568	125,733	10,012,983	123,688,284	
Kittitas County PUD	3,856,207	593,873	194,693	433,489	23,259	5,101,521	-	5,101,521	-	55,926	5,157,447	
Klickitat County PUD	10,183,821	2,385,614	4,933,342	1,333,434	232,613	19,068,824	2,572,753	21,641,577	na	5,284,880	26,926,457	
Lewis County PUD	22,971,466	8,883,171	7,552,897	58,544	2,975,502	42,441,580	-	42,441,580	-	1,834,585	44,276,165	
Mason County PUD	4,104,180	-	1,197,572	-	-	5,301,752	-	5,301,752	-	2,142	5,303,894	
Mason County PUD	26,140,240	2,922,458	11,031,717	-	541,632	40,636,047	-	40,636,047	388,288	2,372,349	43,396,684	
Okanogan County PUD	14,062,644	2,113,442	11,129,572	2,249,687	123,980	29,679,325	9,979,947	39,659,272	615,245	645,541	40,920,058	
Pacific County PUD	12,016,742	1,360,903	4,416,904	97,005	1,847,653	19,739,207	-	19,739,207	116,898	248,384	20,104,489	
Pend Oreille County PUD	6,274,109	18,270,633	1,808,338	-	587,203	26,940,283	10,144,370	37,084,653	497,774	538,756	38,121,183	
Skamania County PUD	4,918,745	1,117,515	1,823,574	-	85,573	7,945,407	-	7,945,407	-	402,102	8,347,509	
Snohomish County PUD	257,682,598	48,437,459	159,383,577	-	9,635,546	475,139,180	105,466,684	580,605,864	-	40,536,229	621,142,093	
Wahkiakum County PUD	2,130,573	-	753,405	-	42,346	2,926,324	-	2,926,324	-	1,243	2,927,567	
Whatcom County PUD	-	8,303,644	-	-	-	8,303,644	-	8,303,644	-	-	8,303,644	
<b>Totals &amp; Averages</b>	<b>\$ 781,368,740</b>	<b>\$ 323,237,581</b>	<b>\$ 427,695,049</b>	<b>\$ 43,750,152</b>	<b>\$ 24,685,004</b>	<b>\$ 1,600,736,525</b>	<b>\$ 489,065,425</b>	<b>\$ 2,089,801,950</b>	<b>\$ 8,028,712</b>	<b>\$ 97,082,953</b>	<b>\$ 2,194,913,616</b>	

<sup>3</sup> May include pole contact charges, wheeling fees, customer load charges, contributions in aid of construction, etc.



APPENDIX A  
 Selected Washington PUD Statistics for 2006

**PUD Electric Distribution Systems**

	ANNUAL REVENUE PER CUSTOMER						Total
	Excluding Sales for Resale						
	Residential	Industrial	Commercial	Irrigation	Other		
Asotin County PUD	\$ -	\$ -	\$ -	\$ 5,462	\$ -	\$ -	\$ 5,462
Benton County PUD	1,197	481,333	5,934	21,718	460	-	2,046
Chelan County PUD	628	186,686	2,423	952	230	-	948
Clallam County PUD	1,113	32,511	1,850	491	-	-	1,429
Clark Public Utilities	1,120	1,460,519	7,216	-	2,634	-	1,773
Cowlitz County PUD	992	1,427,935	4,838	-	15,435	-	4,065
Douglas County PUD	546	-	2,524	1,166	2,363	-	747
Ferry County PUD	935	171,823	2,780	668	8,498	-	1,320
Franklin County PUD	1,197	1,993,922	11,114	17,617	489	-	2,678
Grant County PUD	908	1,809,371	3,578	3,409	7,442	-	2,298
Grays Harbor County PUD	1,074	250,694	4,028	716	242	-	1,602
Kittitas County PUD	1,163	2,098	48,673	3,074	132	-	1,301
Klickitat County PUD	1,078	795,205	2,911	5,510	29,077	-	1,673
Lewis County PUD	934	112,445	1,806	770	4,529	-	1,435
Mason County PUD #1	897	-	2,772	-	-	-	1,059
Mason County PUD #3	893	2,922,458	5,107	-	6,086	-	1,289
Okanogan County PUD	873	704,481	4,748	1,708	3,999	-	1,499
Pacific County PUD	824	680,452	2,693	1,448	4,368	-	1,180
Pend Oreille County PUD	830	2,610,090	2,244	-	16,311	-	3,204
Skamania County PUD	983	279,379	3,117	-	-	-	1,420
Snohomish County PUD	924	620,993	5,727	-	30,883	-	1,548
Wahkiakum County PUD	1,072	-	2,165	-	21,173	-	1,252
Whatcom County PUD	-	8,303,644	-	-	-	-	8,303,644
Totals & Averages	\$ 978	\$ 356,381	\$ 4,962	\$ 4,615	\$ 1,939	\$ -	\$ 1,762

APPENDIX A  
 Selected Washington PUD Statistics for 2006

	REVENUE PER KWH SOLD (IN CENTS PER KWH)						POWER PURCHASES				
	Excluding Sales for Resale					Avg. Retail Rev per kWh	Including Resale Total	From BPA (000 KWH)	Total (000) KWH	% of Total from BPA	Purchased Power <sup>4</sup>
	Resid.	Indust.	Comm.	Irrig.	Other						
Asotin County PUD	-	-	-	4.24	-	4.24	4.24	416	416	100.0%	\$7,183
Benton County PUD	7.08	3.86	5.74	4.21	10.38	5.90	5.76	2,139,338	2,485,126	86.1%	98,556,099
Chelan County PUD	2.97	1.87	3.22	2.70	4.12	2.83	2.79	46,165	377,798	12.2%	86,152,098
Clallam County PUD	6.87	4.84	6.72	6.89	-	6.37	6.37	644,817	651,368	99.0%	22,528,614
Clark Public Utilities	7.86	5.13	6.57	-	10.09	7.02	6.91	2,875,228	2,413,944	119.1%	247,591,665
Cowlitz County PUD	5.25	3.58	6.41	-	6.36	4.11	4.11	4,238,653	4,633,251	91.5%	145,918,957
Douglas County PUD	2.27	-	2.26	1.82	2.48	2.25	2.26	108	1,347	8.0%	19,567,580
Ferry County PUD	7.74	4.90	7.13	6.92	6.79	7.08	7.08	66,245	66,245	100.0%	2,022,087
Franklin County PUD	7.84	5.52	6.95	6.00	8.78	6.88	6.43	1,031	1,182	87.2%	49,535,543
Grant County PUD	4.27	2.53	3.02	3.16	16.72	3.14	4.89	1,568,398	12,158,679	12.9%	98,174,059
Grays Harbor County PUD	7.59	4.57	6.76	8.04	23.99	6.68	6.40	1,357,597	1,817,424	74.7%	77,507,436
Kittitas County PUD	7.76	7.65	4.03	6.54	24.54	7.39	7.39	74,437	74,590	99.8%	2,102,139
Klickitat County PUD	7.85	4.32	6.19	5.15	23.93	6.54	6.11	282,879	318,067	88.9%	13,942,201
Lewis County PUD	5.45	4.04	4.92	4.42	4.58	4.93	4.93	911,208	915,374	99.5%	29,289,183
Mason County PUD #1	8.00	-	7.51	-	-	7.88	7.88	72,280	74,254	97.3%	2,298,333
Mason County PUD #3	6.72	4.15	5.99	-	25.61	6.29	6.29	679,712	684,660	99.3%	22,304,441
Okanogan County PUD	5.11	4.29	5.52	3.52	9.50	5.02	4.56	567,919	912,871	62.2%	22,734,508
Pacific County PUD	6.85	4.40	7.25	13.93	7.24	6.73	6.73	307,536	309,720	99.3%	10,181,026
Pend Oreille County PUD	4.67	2.37	3.80	-	13.71	2.81	3.08	335,574	1,222,753	27.4%	24,715,879
Skamania County PUD	6.59	4.88	5.52	-	1,710.78	6.08	6.08	137,371	-	0.0%	4,367,761
Snohomish County PUD	7.79	5.60	6.98	-	40.35	7.33	6.53	7,217,148	9,247,165	78.0%	343,720,837
Wahkiakum County PUD	7.64	-	7.42	-	15.03	7.64	7.64	41,819	41,819	100.0%	0
Whatcom County PUD	-	3.98	-	-	-	3.98	3.98	222,969	222,969	100.0%	6,457,096
<b>Totals &amp; Averages</b>	<b>6.65</b>	<b>3.72</b>	<b>5.95</b>	<b>3.84</b>	<b>10.14</b>	<b>5.52</b>	<b>5.22</b>	<b>23,788,848</b>	<b>38,631,020</b>	<b>61.6%</b>	<b>\$1,329,674,725</b>

<sup>4</sup> Includes power produced by utility-owned generation facilities.

APPENDIX A  
 Selected Washington PUD Statistics for 2006

**PUD Electric Distribution Systems**

	OPERATING EXPENSES					Total
	TAXES					
	State Utility	Privilege	City Occupation	Use/Other		
Asotin County PUD	\$ 614	\$ 375	\$ -	\$ -	\$ 989	
Benton County PUD	3,678,407	1,950,125	4,435,167	33,183	10,096,882	
Chelan County PUD	1,632,958	850,955	1,094,622	55,788	3,634,323	
Clallam County PUD	1,424,884	845,223	360,479	-	2,630,586	
Clark Public Utilities	12,112,340	6,568,095	-	174,853	18,855,288	
Cowlitz County PUD	5,286,110	2,852,956	2,559,650	39,689	10,738,405	
Douglas County PUD	461,365	275,872	67,922	232,736	1,037,895	
Ferry County PUD	107,473	92,561	-	73,987	274,021	
Franklin County PUD	2,445,727	1,301,536	-	459,065	4,206,328	
Grant County PUD	4,216,408	2,079,975	-	1,623,619	7,920,002	
Grays Harbor County PUD	2,603,002	1,301,418	2,580,518	1,010,133	7,495,071	
Kittitas County PUD	177,824	108,572	-	-	286,396	
Klickitat County PUD	685,461	407,571	408,976	26,588	1,528,596	
Lewis County PUD	1,719,594	907,469	17,968	402,866	3,047,897	
Mason County PUD #1	188,932	116,777	-	-	305,709	
Mason County PUD #3	1,596,247	878,294	574,468	797,651	3,846,660	
Okanogan County PUD	1,198,771	634,678	-	379,282	2,212,731	
Pacific County PUD	667,591	423,000	438,520	22,839	1,551,950	
Pend Oreille County PUD	1,066,854	332,169	-	17,708	1,416,731	
Skamania County PUD	298,803	156,000	6,906	-	461,710	
Snohomish County PUD	16,887,943	9,934,033	-	356,773	27,178,749	
Wahkiakum County PUD	93,330	55,777	-	3,205	152,312	
Whatcom County PUD	292,236	177,698	-	152	470,086	
<b>Totals</b>	<b>\$ 58,842,874</b>	<b>\$ 32,251,130</b>	<b>\$ 12,545,196</b>	<b>\$ 5,710,116</b>	<b>\$ 109,349,316</b>	

APPENDIX A  
 Selected Washington PUD Statistics for 2006

	OPERATING EXPENSES								
	Power								Total Expense
	Purchases & Production	Transmission	Distribution	Telecom	Customer Accts/Svcs.	Administrative & General	Depreciation	Taxes	
Asotin County PUD	\$ 7,183	\$ -	\$ -	\$ -	\$ -	\$ 772	\$ 730	\$ 989	\$ 9,674
Benton County PUD	98,556,099	53,432	6,883,927	582,999	4,062,499	5,243,565	10,156,431	10,096,882	135,635,834
Chelan County PUD	86,152,098	739,839	11,146,906	3,482,431	3,062,489	9,569,115	10,227,379	3,634,323	128,014,580
Clallam County PUD	22,528,614	187,040	4,167,781	324,244	2,449,385	3,804,748	4,186,768	2,630,586	40,279,166
Clark Public Utilities	247,591,665	-	10,081,780	-	11,089,402	15,630,078	28,717,686	18,855,288	331,965,899
Cowlitz County PUD	145,918,957	653,170	4,402,774	-	3,207,559	5,449,034	5,487,964	10,738,405	175,857,863
Douglas County PUD	19,567,580	7,053	4,178,990	589,433	722,910	2,842,189	4,203,352	1,037,895	33,149,402
Ferry County PUD	2,022,087	7,481	750,797	-	300,513	617,305	581,928	274,021	4,554,132
Franklin County PUD	49,535,543	-	2,589,028	296,997	1,401,862	4,309,722	4,530,948	4,206,328	66,870,428
Grant County PUD	98,174,059	6,698,940	8,593,989	383,327	4,379,407	9,946,347	37,784,656	7,920,002	173,880,727
Grays Harbor County PUD	77,507,436	7,430,136	8,231,686	189,392	3,270,775	3,806,722	7,360,351	7,495,071	115,291,569
Kittitas County PUD	2,102,139	48	583,482	-	203,832	544,147	564,924	286,396	4,284,968
Klickitat County PUD	13,942,201	25,351	2,160,099	na	705,942	1,739,685	2,945,214	1,528,596	23,047,088
Lewis County PUD	29,289,183	322,017	4,029,169	-	1,302,112	1,247,479	2,840,458	3,047,897	42,078,315
Mason County PUD #1	2,298,333	5,450	888,316	-	332,558	609,554	512,091	305,709	4,952,011
Mason County PUD #3	22,304,441	-	7,195,542	1,191,635	2,258,859	3,047,885	4,259,505	3,846,660	44,104,527
Okanogan County PUD	22,734,508	18,345	3,085,613	424,866	1,348,337	2,657,879	-	2,212,731	32,482,279
Pacific County PUD	10,181,026	-	1,554,744	356,829	519,146	3,064,358	3,160,635	1,551,950	20,388,688
Pend Oreille County PUD	24,715,879	217,982	2,747,489	464,111	733,167	1,603,723	3,172,653	1,416,731	35,071,735
Skamania County PUD	4,367,761	-	1,310,271	-	310,258	901,408	764,712	461,710	8,116,119
Snohomish County PUD	343,720,837	33,413,257	43,382,093	-	24,098,697	33,518,845	34,413,869	27,178,749	539,726,347
Wahkiakum County PUD	-	-	443,891	-	99,258	238,358	331,933	152,312	1,265,752
Whatcom County PUD	6,457,096	188,456	127,393	-	-	244,356	199,255	470,086	7,686,642
<b>Totals</b>	<b>\$1,329,674,725</b>	<b>\$ 49,967,997</b>	<b>\$ 128,535,761</b>	<b>\$ 8,286,264</b>	<b>\$ 65,858,968</b>	<b>\$ 110,637,273</b>	<b>\$ 166,403,442</b>	<b>\$ 109,349,316</b>	<b>\$ 1,968,713,746</b>

APPENDIX A  
 Selected Washington PUD Statistics for 2006

**PUD Electric Distribution Systems**

	Operating Revenues (Including Sales for Resale)	Operating Ratio (Exp.to Rev.)	Total Expense Per KWH <sup>5</sup> (cents/KWH)	Number of Employees (FTEs)	PER EMPLOYEE DATA	
					Customers <sup>7</sup>	Operational Expense <sup>8</sup>
Asotin County PUD	\$ 16,385	0.55	2.31	0 <sup>6</sup>		
Benton County PUD	144,980,390	0.87	5.23	163	275	\$ 103,230
Chelan County PUD	141,104,125	0.83	2.42	222	200	126,130
Clallam County PUD	42,280,310	0.85	5.54	131	221	83,460
Clark Public Utilities	340,768,722	0.89	6.29	310	566	118,714
Cowlitz County PUD	195,939,030	0.87	3.65	146	37	93,921
Douglas County PUD	38,476,665	0.75	1.73	76	229	109,663
Ferry County PUD	4,394,382	0.90	6.51	17	192	98,594
Franklin County PUD	79,574,910	0.78	5.54	85	253	101,148
Grant County PUD	218,763,222	0.62	3.13	370	115	81,087
Grays Harbor County PUD	123,688,284	0.87	6.08	173	239	132,536
Kittitas County PUD	5,157,447	0.72	5.39	13	302	102,424
Klickitat County PUD	26,926,457	0.75	5.67	68	168	68,104
Lewis County PUD	44,276,165	0.89	4.56	86	344	80,242
Mason County PUD #1	5,303,894	0.84	6.60	16	313	114,742
Mason County PUD #3	43,396,684	0.92	6.17	114	277	120,122
Okanogan County PUD	40,920,058	0.79	3.73	83	239	90,784
Pacific County PUD	20,104,489	0.86	5.87	56	299	98,126
Pend Oreille County PUD	38,121,183	0.84	2.65	48	175	120,135
Skamania County PUD	8,347,509	0.88	5.63	17	329	148,349
Snohomish County PUD	621,142,093	0.81	5.68	842	365	159,635
Wahkiakum County PUD	2,927,567	0.32	2.44	8	292	97,688
Whatcom County PUD	8,303,644	0.90	3.59	3	0	224,082
<b>Totals &amp; Averages</b>	<b>\$ 2,194,913,616</b>	<b>0.82</b>	<b>4.50</b>	<b>132</b>	<b>298</b>	<b>\$ 119,247</b>

<sup>5</sup>Does not include depreciation.

<sup>6</sup>Contracts with others for services.

<sup>7</sup>Omitted because data not comparable.

APPENDIX A  
 Selected Washington PUD Statistics for 2006

	OPERATING COSTS PER CUSTOMER				Gross Utility Plant <sup>9</sup>	MILES OF LINE OWNED				System Maximum Demand (non-coincidental, in kW)
	Distribution Expense	Customer Accts./Srv. Expenses	Administrative & General Expenses	Total Expenses Excl. Deprec. & Power Exp.		34.5 KV and Less		Over 34.5 KV	Total	
						Overhead	Underground			
Asotin County PUD	\$ -	\$ -	\$ 257	\$ 587	\$ 79,724	-	3	-	3	0 <sup>10</sup>
Benton County PUD	153	91	117	600	220,542,676	789	679	89	1,557	372 <sup>10</sup>
Chelan County PUD	251	69	215	712	288,242,582	870	785	323	1,978	421,000
Clallam County PUD	144	84	131	467	131,226,037	866	980	146	1,992	158,760
Clark Public Utilities	57	63	89	317	552,609,453	3,077	3,191	397	6,665	902,000 <sup>10</sup>
Cowlitz County PUD	93	68	116	518	177,763,836	639	1,087	123	1,849	633,445
Douglas County PUD	241	42	164	540	153,233,690	886	283	23	1,192	158,850
Ferry County PUD	229	92	189	596	20,114,697	788	57	56	901	17,340
Franklin County PUD	121	65	201	597	139,074,790	691	352	45	1,088	197,446
Grant County PUD	201	103	233	889	610,793,403	2,726	863	422	4,011	579,000 <sup>10</sup>
Grays Harbor County PUD	199	79	92	735	253,317,506	1,129	415	224	1,768	220,000
Kittitas County PUD	149	52	139	413	20,088,908	487	171	-	658	16,030
Klickitat County PUD	190	62	153	540	121,622,039	1,410	236	150	1,796	51,956
Lewis County PUD	136	44	42	336	129,503,391	1,333	899	-	2,232	182,899 <sup>10</sup>
Mason County PUD #1	177	66	122	428	18,671,373	221	253	-	474	16,313
Mason County PUD #3	228	72	97	556	152,099,503	658	1,010	30	1,697	157,000
Okanogan County PUD	156	68	134	492	97,311,785	1,293	284	104	1,681	147,000
Pacific County PUD	93	31	183	421	73,369,828	290	405	30	725	67,312
Pend Oreille County PUD	327	87	191	854	86,973,058	799	233	58	1,090	164,217
Skamania County PUD	234	55	161	533	23,156,095	232	500	-	732	0
Snohomish County PUD	141	78	109	526	1,028,915,012	3,285	2,287	301	5,873	1,304,700
Wahkiakum County PUD	190	42	102	399	11,714,813	180	73	-	253	10
Whatcom County PUD	127,393	-	244,356	1,030,291	6,993,359	-	-	13	13	26,976
<b>Totals &amp; Averages</b>	<b>\$ 141</b>	<b>\$ 72</b>	<b>\$ 122</b>	<b>\$ 520</b>	<b>\$ 4,317,417,557</b>	<b>22,649</b>	<b>15,046</b>	<b>2,534</b>	<b>40,228</b>	<b>5,422,626</b>

<sup>9</sup>Gross utility plant includes construction work in progress.

<sup>10</sup>Coincidental.

APPENDIX B

Publicly Owned Electric Utilities  
 Established 1973-2007

83 new public power utilities began operating between 1973 and 2007; 39 of the new systems were formed in service areas of investor-owned utilities; the others were formerly served by non-utility businesses, federal agencies or local publicly owned utilities. This list does not include communities that were previously served by investor-owned utilities or rural electric cooperatives and instead joined existing public power systems.

New Utility Formed	State	Year Est.	Previous Supplier
Island Power, Pittsburg, Calif. (400 customers)	CALIFORNIA	2006	Former military base
Winter Park (13,750 customers)	FLORIDA	2005	Progress Energy*
Berea (4,700 customers)	KENTUCKY	2005	Berea College Electric Utility
Moreno Valley Utilities (4,300 customers)	CALIFORNIA	2004	SCE*
Huron (2 customers)	OHIO	2004	Ohio Edison*
Elk City (8 customers)	OKLAHOMA	2004	AEP*
Electric City Power, Great Falls, Montana (large governmental and industrial customers)	MONTANA	2004	NorthWestern Energy
McAllister Ranch Irrigation District <sup>1</sup>	CALIFORNIA	2003	PG&E*
Rancho Cucamonga Municipal Utility <sup>1</sup> (400 customers/commercial and industrial)	CALIFORNIA	2004	SCE*
Industry, California <sup>1</sup> (23 customers)	CALIFORNIA	2003	SCE*
Port of Stockton Electric <sup>1</sup> (3,208 customers)	CALIFORNIA	2003	PG&E*
City of Victorville <sup>1</sup>	CALIFORNIA	2003	SCE*
Hercules Municipal Utility <sup>1</sup> (825 customers)	CALIFORNIA	2002	PG&E*
Corona Municipal Electric Utility <sup>1</sup> (1,700 customers)	CALIFORNIA	2001	SCE*
Hermiston (5,123 customers)	OREGON	2001	PacifiCorp*

<sup>1</sup> A “greenfield growth area” project, serving new industrial and/or residential development.

**APPENDIX B**

<b>New Utility Formed</b>	<b>State</b>	<b>Year Est.</b>	<b>Previous Supplier</b>
Long Island Power Authority (1,090,538 customers)	NEW YORK	1998	Long Island Lighting Company*
Town of Eagle Mountain (382 customers)	UTAH	1998	New Community
Ak-Chin Electric Utility Authority (378 customers)	ARIZONA	1997	Arizona Public Service*
Hohokam Irrigation & Drainage District (498 customers)	ARIZONA	1997	Arizona Public Service*
Village of Obetz (14 customers)	OHIO	1997	American Electric Power Co.*
Merced Irrigation District <sup>2</sup> (3,157 customers)	CALIFORNIA	1996	Pacific Gas & Electric*
Mohegan Tribal Utility Authority (54 customers)	CONNECTICUT	1996	New Entity
MassDevelopment Devens Utility (100 commercial customers)	MASSACHUSETTS	1996	Former Military Base
Tarentum Borough (2,651 customers)	PENNSYLVANIA	1996	West Penn Power*
Bozrah Light & Power (2,587 customers)	CONNECTICUT	1995	Bozrah Light & Power (private company)*
City of Broken Bow (5 customers)	OKLAHOMA	1995	Public Service Company of Oklahoma*
Asotin County Public Utility District No. 1 (3 customers)	WASHINGTON	1994	Clearwater Power Company*
Byng (53 customers)	OKLAHOMA	1990	Oklahoma Gas & Electric*
Clyde Light & Power (2,872 customers)	OHIO	1989	Toledo Edison*
City of Santa Clara (1,707 customers)	UTAH	1989	Utah Power & Light*
Hayfork Valley Public Utility District (724 customers) (Merged with Trinity County PUD in 1993)	CALIFORNIA	1988	Pacific Gas & Electric*
Lassen Municipal Utility District (12,059 customers)	CALIFORNIA	1988	CP National*
City of Scribner (589) customers	NEBRASKA	1988	Nebraska Public Power District

<sup>2</sup> Merced Irrigation District, Calif., began distribution utility in 1996.



**APPENDIX B**

New Utility Formed	State	Year Est.	Previous Supplier
City of Riverdale (206 customers)	NORTH DAKOTA	1988	Corps of Engineers
City of San Saba Electric Utility (2,196 customers)	TEXAS	1988	Lower Colorado River Authority
City of Washington (5,750 customers)	UTAH	1988	Utah Power & Light*
Electrical District #8 of Maricopa County (456 customers)	ARIZONA	1987	Arizona Public Service*
Town of Fredonia (731customers)	ARIZONA	1987	CP National*
Reedy Creek Improvement District (1,213 customers)	FLORIDA	1987	New Entity
Troy Power & Light (923 customers)	MONTANA	1987	Montana Light & Power*
Kerrville Public Utility Board (20,157 customers)	TEXAS	1987	Lower Colorado River Authority
Kanab City Corporation (1,378 customers) (Sold to Garkane Energy Cooperative in 2004)	UTAH	1987	Utah Power & Light*
Town of Pickstown (63 customers)	SOUTH DAKOTA	1986	Corps of Engineers
City of San Marcos Electric Utility District (20,320 customers)	TEXAS	1986	Lower Colorado River Authority
Strawberry Electric Service District (2,972 customers)	UTAH	1986	Strawberry Waters Users
City of Galena (335 customers)	ALASKA	1985	M & D Enterprises
Page Electric Utility (3,780 customers)	ARIZONA	1985	Arizona Public Service*
Ipnatchiaq Electric Co. (67 customers)	ALASKA	1984	Supplier Unknown
Larsen Bay Utility Co. (86 customers)	ALASKA	1984	Individual Generators
Aguila Irrigation District (39 customers)	ARIZONA	1984	Supplier Unknown
Columbia River People's Utility District (St. Helens, Oregon) (17,347 customers)	OREGON	1984	Pacific Power & Light*
Kwig Power Co. (111 customers)	ALASKA	1983	Supplier Unknown Exhibit No. KRK-4

**APPENDIX B**

<b>New Utility Formed</b>	<b>State</b>	<b>Year Est.</b>	<b>Previous Supplier</b>
St. Paul Municipal Electric Utility (231 customers)	ALASKA	1983	Federal Government
City of Thorne Bay Utilities (261 customers) (Sold to Alaska Power & Telephone* in 2001)	ALASKA	1983	Federal Government
Needles Department of Public Utilities (2,092 customers)	CALIFORNIA	1983	CP National*
Tuolumne County Public Power Agency (30 customers)	CALIFORNIA	1983	Pacific Gas & Electric*
Emerald People's Utility District (Eugene, Oregon) (18,104 customers)	OREGON	1983	Pacific Power & Light*
Akutan Electric Utility (65 customers)	ALASKA	1982	Supplier Unknown
City of Kotlik Utility (176 customers)	ALASKA	1982	Supplier Unknown
City of White Mountain (101 customers)	ALASKA	1982	Supplier Unknown
Trinity County Public Utility District (6,797 customers)	CALIFORNIA	1982	CP National*
City of Chignik (87 customers)	ALASKA	1981	Sea Alaska
Massena Electric Department (9,406 customers)	NEW YORK	1981	Niagara Mohawk*
Markham Hydro Distribution, Inc. (62,126 customers)	ONTARIO	1979	Supplier Unknown
Tatitlek Electric Authority (55 customers)	ALASKA	1978	Supplier Unknown
White, City of (254 customers)	SOUTH DAKOTA	1978	Supplier Unknown
Tlingit Haida Regional Electric Authority (1,268 customers)	ALASKA	1977	Supplier Unknown
Tonopah Irrigation District (31 customers)	ARIZONA	1977	Supplier Unknown
Sherrill, City of (1,884 customers)	NEW YORK	1977	Supplier Unknown
Manokotak, City of (136 customers)	ALASKA	1976	Supplier Unknown
Ellaville, City of (958 customers)	GEORGIA	1976	Supplier Unknown
Anthon, City of (374 customers)	IOWA	1976	Supplier Unknown

**APPENDIX B**

<b>New Utility Formed</b>	<b>State</b>	<b>Year Est.</b>	<b>Previous Supplier</b>
Kiowa, City of (753 customers)	KANSAS	1976	Supplier Unknown
Matinicus Plantation Electric Co. (120 customers)	MAINE	1976	Supplier Unknown
North Slope Borough Dept. of Municipal Services (1,180 customers)	ALASKA	1975	Supplier Unknown
De Witt, Village of (313 customers)	NEBRASKA	1975	Supplier Unknown
Hurricane Power Committee (5,229 customers)	UTAH	1975	Supplier Unknown
Tohono O’odam Utility Authority (3,746 customers)	ARIZONA	1974	Supplier Unknown
Lyons, Town of (1,095 customers)	COLORADO	1974	Supplier Unknown
Aurelia, City of (555 customers)	IOWA	1974	Supplier Unknown
Stanton, City of (228 customers)	NORTH DAKOTA	1974	Supplier Unknown
Kirbyville Light & Power Co. (1,318 customers)	TEXAS	1974	Supplier Unknown
Hobgood, Town of (324 customers)	NORTH CAROLINA	1973	Supplier Unknown

\* Represents an investor-owned utility

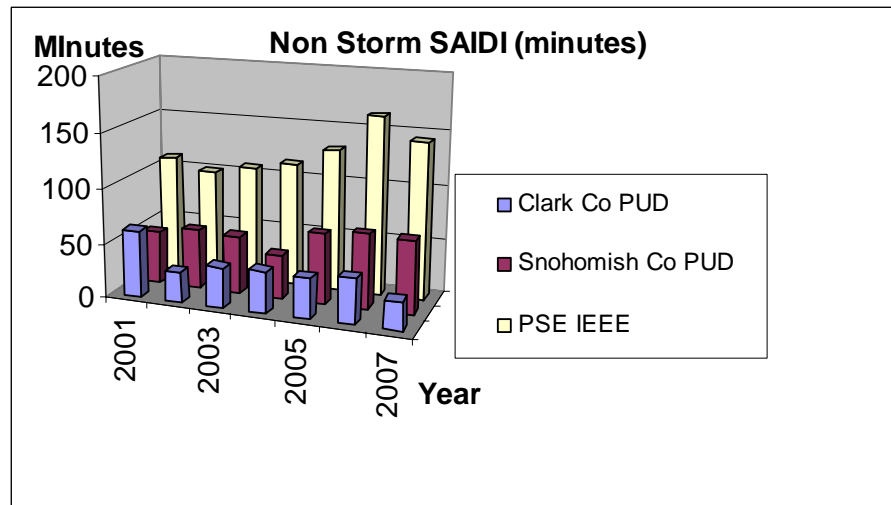
**Source: *American Public Power Association (2008)***

“Customers” refers to the number of customer-meters served. The population served would be some multiple of this number.

## APPENDIX C Comparative Electric System Reliability Statistics

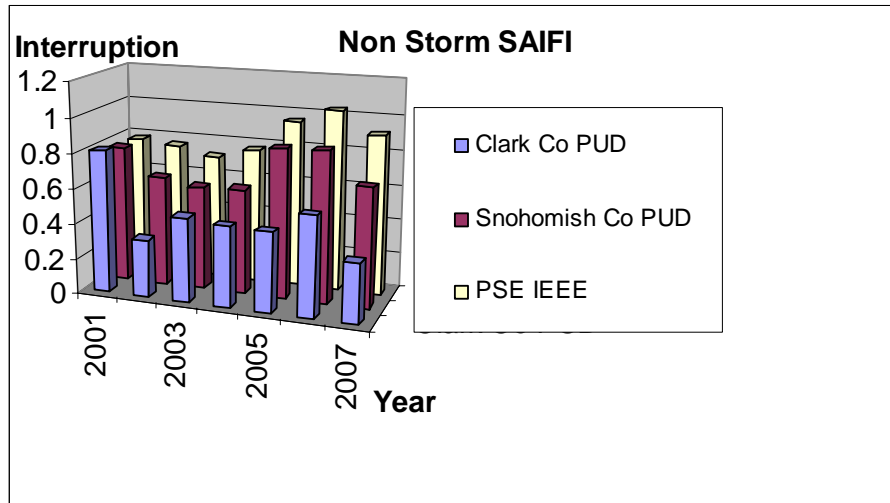
Two commonly used measures of electric system reliability are the System Average Interruption Duration Index (SAIDI) and the System Average Interruption Frequency Index (SAIFI)<sup>1</sup>. These two reliability measures attempt to identify the typical number of minutes of sustained outage an average customer of a utility experiences during a year (excluding outages associated with major storm events) and the average number of such sustained interruptions that a customer would see per year (again excluding storm events).

SAIDI and SAIFI statistics have been obtained for Puget Sound Energy, Snohomish County PUD (Everett, Washington) and Clark County PUD (Vancouver, Washington) for each of the past seven years. Although the exact calculation of these two statistics can vary somewhat from utility to utility, they are generally comparable. The following chart indicates that the average outage duration experienced by customers of PSE is noticeably higher than for Snohomish County PUD and Clark County PUD customers. In 2007 the average minutes of outage was about 50 minutes per customer compared to about 140 minutes per customer for PSE. The data is also suggestive that the reliability of service at PSE has declined somewhat over the past few years as indicated by the increase in the SAIDI between 2003 and 2007. PSE did not meet the benchmark SAIDI as established with the Washington Utilities and Transportation Commission in either 2006 or 2007.



<sup>1</sup> Puget Sound Energy (PSE) tracks two definitions of SAIDI and SAIFI. One is based on the way they have historically calculated these reliability statistics since the late 1980's and the other is based on Institute of Electrical and Electronic Engineers (IEEE) Standard 1366. The first of these was adopted by the Washington Utility and Transportation Commission (WUTC) as a Service Quality Index (SQI) by which the WUTC would monitor future PSE performance following the 1997 merger between Puget Sound Power & Light Company and the Washington Energy Company. IEEE Standard 1366 was first released for trial use in 1998 and was later refined in 2001 and 2003 updates. PSE started using this method in 2005 in addition to its historic SQI method of calculating non-storm reliability indexes. It has reviewed historic data back to 2001 to calculate IEEE SAIDI and SAIFI values. The SQI SAIDI index stops adding outage duration information when 5% of PSE's customers are out of power in any 24-hour period. The IEEE index stops adding outage duration information when outages in a single day exceed a rolling 5-year daily statistical threshold established using the IEEE "2.5 beta method." The PSE Service Quality Index (SQI) SAIDI and SAIFI values generally show greater minutes of outage and greater interruption amounts than the IEEE defined values. PSE did not meet the WUTC minimum SQI benchmark reliability values for SAIDI in 2006 and 2007.

The following chart shows the non-storm average number of interruptions per customer for PSE, Snohomish Co. PUD and Clark Co. PUD.



In addition to examining system information on reliability for PSE, we have examined reliability information on a more local basis. Outage reliability statistics are not reported for Jefferson County but are reported on a combined basis for Jefferson and Kitsap Counties. Reliability as measured by PSE’s non-storm SQI SAIDI statistic appears significantly worse in 2006 and 2007 than previous years. The 2007 SQI SAIDI reliability measurement shows worse reliability in Jefferson & Kitsap Counties than the average of other Counties reported by PSE.

PSE has not meet the System-wide (for all counties it serves) WUTC Service Quality Index (SQI) Non-storm System Average Interruption Duration Index (SAIDI) requirement of no more than 136 minutes of sustained non-storm outage in either 2006 or 2007.

PSE Subsystem Reliability statistics reported to the WUTC for combined Jefferson & Kitsap Counties (individual Jefferson County statistics are not reported by PSE)			
Year	SQI SAIDI (minutes of sustained outage not related to major storm events)	SQI SAIFI (number of average sustained non-storm outages)	SQI total outages (non-storm sustained outages)
2007	267.73	1.68	1,892
2006	326.45	1.66	2,281
2005	194.15	1.47	1,903
2004	192.72	1.08	1,749
2003	152.64	0.991	1,890
2002	87.53	0.644	1,501

## APPENDIX D

### Economic Impacts of a Jefferson County Electric PUD

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This report uses input-output analysis to project the economic impacts of creating a Public Utility District (PUD) to assume responsibility for electricity service in Jefferson County. The PUD would take over this responsibility from the current investor-owned utility, PSE. Input-output models estimate the multiplier impacts that result when a change in economic activity increases or decreases the amount of income flowing into a region from external sources. In the case of the proposed PUD, cost savings relative to continued provision of service by an investor-owned utility would increase the disposable income of Jefferson County residents after an initial startup period. In addition, the PUD would employ county residents to staff the PUD, whereas the investor-owned utility uses a number of personnel who work and/or live in other counties (central office staff in King County and maintenance crews based in Kitsap County). These two changes in the economic environment are called “direct impacts” in the language of input-output models. The input-output model estimates the multiplier impacts of these favorable direct impacts. This analysis uses the Washington State Input-Output Model for 2002, a recently released model published by the state’s Office of Financial Management.<sup>1</sup>

PUDs have different cost structures than investor-owned utilities for several reasons:

- They do not earn a guaranteed rate of return set by the state’s Utility and Transportation Commission;
- They do not pay dividends or interest to stockholders;
- They raise capital funds in tax-exempt municipal bond markets or from tax revenues rather than through stock issues, taxable bond issues, or other financial mechanisms subject to income taxes;
- They do not pay income taxes;
- They hire local workers and pay local labor rates, and
- They can access certain Bonneville Power Administration electricity supplies at favorable rates.

The net impact of these cost differences has been estimated by D. Hittle & Associates, Inc. as shown in the middle column of Table 1. The PUD take-over of PSE operations would initially cost more than continued PSE service, but cost savings are projected beginning in the 4<sup>th</sup> year of PUD operations and growing through the 10-year forecast period. By 2020, the projected savings reach \$15.8 million annually. The net present value of the cost savings, assuming a 5 percent discount rate and including the initial higher costs due to startup activities, is projected at \$24.8 million<sup>2</sup>.

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<sup>1</sup> <http://www.ofm.wa.gov/economy/io/2002/default.asp>

<sup>2</sup> Discounted to 2010. The net present value savings is shown as \$22.5 million in the D. Hittle & Associates report because it is discounted to 2008.

Table 1 also shows the projected total impact of the cost savings, including the multiplier impacts projected by the input output model. The cost savings realized by substituting a PUD for an investor-owned utility translate into lower electricity rates and increased disposable income for county residents as shown in the middle column of Table 1. Using spending patterns for U.S. consumers published in the Consumer Expenditure Survey,<sup>3</sup> these changes in disposable income are translated into projected increases in purchases from various local industries including retail trade, real estate and rental, transportation, health care, and entertainment. The total impacts of this increased disposable income are shown in the far right column of Table 1. The multiplier impacts of increased disposable income of county residents nearly double the initial cost savings resulting from PUD operation. Total impacts grow after the initial startup period and reach \$26.5 million by 2020. The net present value of these cost savings over the first 10 years of PUD operation is projected at \$41.7 million. In addition, local jobs are projected to increase by 235 jobs by 2020 due to greater local spending by Jefferson County residents.

Table 1: Cost Savings and Economic Impacts of PUD Operation

<i>Year</i>	<i>Cost Savings (\$ mill.)</i>	<i>Economic Impacts (\$ mill.)</i>
2011	-4.590	-7.700
2012	-4.120	-6.912
2013	-3.620	-6.073
2014	1.940	3.255
2015	2.730	4.580
2016	5.400	9.059
2017	6.450	10.821
2018	9.980	16.743
2019	11.280	18.924
2020	15.809	26.522

Source: D. Hittle & Associates, Inc. and author's calculations

In addition to operating costs, the PUD would need office and field staff to operate the PUD. D. Hittle & Associates has estimated that the PUD would need 67 employees for the electric system. PSE currently has a crew of 10 people stationed in Jefferson County. However, PSE accounting and management services staff are mainly located in Bellevue, WA. If the PUD hired local residents to perform these services, 57 projected new PUD staff members would be new jobs in Jefferson County.

Those 57 incremental PUD employees living in the county would have an additional economic impact as they spend their salaries. The state's wage records show that utility industry workers in Jefferson County earn an average of \$64,704.79 annually. No data are shown for electric distribution workers for Jefferson County. However, the statewide wage data show identical average annual earnings for all utility workers and those who work for electric distribution

<sup>3</sup> <http://www.bls.gov/news.release/cesan.nr0.htm>

utilities.<sup>4</sup> For 57 workers living in the county, the total annual payroll implied by the wage estimate of \$64,704.79 is \$3.688 million. This payroll is used to estimate total economic impacts by distributing the \$3.688 million among sectors of the economy in the same manner as the Jefferson residents' projected increases in disposable income due to lower utility rates. The total impact of these additional local jobs is a total increase in local employment of 112 and an increase in total economic output of \$6.187 million annually.

Table 2 shows the total economic impact of PUD operation, adding together the impacts of increased disposable income created through the operating cost savings of the PUD relative to the current investor-owned company service and the local employment effect of the PUD. Total impacts in 2008 dollars increase from a negative \$1.5 million in the first year of operation to a positive \$32.7 million in 2020, the 10<sup>th</sup> year of PUD provided electric service. The net present value of increased business revenues in the county, using a 5 percent discount rate, is estimated at \$89.5 million for the first 10 years of PUD operation. In addition, the total local employment impact of the PUD operation increases from 44 jobs in the first year of operation to 347 by the 10th year.

Table 2: Total Economic Impact of a Jefferson County Electric PUD

<i>Year</i>	<i>Cost Savings Impact</i> <i>(mill. 2008 \$)</i>	<i>Employee Payroll Impact</i> <i>(mill. 2008\$)</i>	<i>Total Impact</i> <i>(mill. 2008\$)</i>	<i>Local Employment</i>
2011	-7.700	6.187	-1.513	44
2012	-6.912	6.187	-0.724	51
2013	-6.073	6.187	0.114	58
2014	3.255	6.187	9.442	141
2015	4.580	6.187	10.767	152
2016	9.059	6.187	15.247	192
2017	10.821	6.187	17.008	208
2018	16.743	6.187	22.930	260
2019	18.924	6.187	25.111	279
2020	26.522	6.187	32.710	347

Source: author's calculations

## Conclusions

Due to different cost structures and local employment impacts, moving electricity services from an investor-owned utility to a locally operated Public Utility District would have favorable impacts on the economy of Jefferson County. Local employment is projected to increase by 347 jobs by the 10<sup>th</sup> year of operation of the PUD. Total impacts on business revenues in the county would increase by a net present value of \$89.5 million. These projections are based on multiplier relationships in the Washington Input Output Model for 2002, as well as employment and cost savings assumptions estimated by D. Hittle & Associates. The figures in the tables are best estimates based on the stated assumptions and typical inter-industry purchases and payroll spending patterns as contained in the Washington input-output model.

<sup>4</sup> 9071\_QCEW\_2007\_AA.xls, available at <http://www.workforceexplorer.com/cgi/dataanalysis/?PAGEID=94&SUBID=149>