

**FY 2010-11 AVERAGE SYSTEM COST  
DRAFT REPORT**

**FOR**

**Puget Sound Energy**

Docket Number: ASC-10-PS-01  
Effective Date: October 1, 2009

PREPARED BY  
BONNEVILLE POWER ADMINISTRATION  
U.S. DEPARTMENT OF ENERGY

April 13, 2009

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## 1. FILING DATA

Utility:       **Puget Sound Energy**  
10885 NE 4th Street  
P.O. Box 97034  
Bellevue WA 98009-9734  
<http://www.pse.com>

Parties to the Filing:

Investor Owned Utilities (IOUs):

Avista Utilities (Avista)  
Idaho Power Company (IPC)  
NorthWestern Energy (NorthWestern or NWE)  
PacifiCorp (PAC)  
Portland General Electric (PGE)  
Puget Sound Energy (PSE)

Consumer Owned Utilities (COUs):

Franklin County PUD (Franklin)  
Snohomish County PUD (Snohomish)

Other Participants to the Filing:

Idaho Public Utility Commission  
Public Power Council  
Public Utility Commission of Oregon (OPUC)  
Washington Utilities and Transportation Commission (WUTC)

ASC Base Period: CY 2007

Effective Exchange Period: FY 2010-2011 (October 1, 2009 – September 30, 2011)

Statement of Purpose:

Bonneville Power Administration (BPA) has conducted an Average System Cost (ASC) Review Process to determine Puget Sound Energy's ASC for FY 2010-2011 based on BPA's 2008 ASC Methodology (ASCM). This Draft Report describes the process, evaluation, and initial results of BPA's ASC review. After reviewing parties' comments on this Draft Report, BPA will publish a Final Report in July, 2009.

NOTE: If the filing utility or an intervenor wishes to preserve any issue regarding BPA's ASC Reports for subsequent administrative or judicial appeal, they must raise such issue in their comments on BPA's Draft ASC Reports. If a party fails to do so, the issue will be waived for subsequent appeal.

## 2. AVERAGE SYSTEM COST SUMMARY

### 2.1. Base Period ASC

The 2008 ASCM requires utilities participating in the ASC Review Process to submit to BPA “Base Period” financial and operational information. The Base Period is defined as the calendar year of the most recent FERC Form 1 data for IOUs, and Annual Reports, including Cost of Service Analysis (COSA) for COUs. The submitted information includes the Appendix 1, an Excel based workbook used in calculating the Base Period ASC. For purposes of this report, the Base Period is calendar year (CY) 2007.

The table below summarizes CY 2007 Base Period ASC based on (1) the ASC information filed by Puget Sound Energy on October 15, 2008 (including errata, if applicable), and (2) the same information from the ASC Draft Report as adjusted by BPA after the ASC Review Process. This table does not reflect Exchange Period ASC, which is noted in subsequent tables.

**Table 2.1: CY 2007 Base Period ASC**  
*(Results of Appendix 1 calculations)*

	<b>October 15, 2008</b>	<b>April 13, 2009</b>
	<b>As Filed</b>	<b>Draft Report</b>
Production Cost	\$1,256,004,114	\$1,241,342,190
Transmission Cost	\$107,712,563	\$106,415,114
(Less) NLSL Costs	\$ -	\$ -
Contract System Cost	<b>\$1,363,716,676</b>	<b>\$1,347,757,304</b>
Total Retail Load (MWh)	21,626,537	21,626,537
(Less) NLSL		
Total Retail Load (Net of NLSL)	21,626,537	21,626,537
Distribution Losses	1,092,140	1,092,140
Contract System Load	<b>22,718,677</b>	<b>22,718,677</b>
<b>CY 2007 Base Period ASC (\$/MWh)</b>	<b>60.03</b>	<b>59.32</b>

### 2.2. ASC New Resource Additions

In addition to the historical Base Period cost and load data, the exchanging utility may also provide its forecast of major new resource additions, and all associated costs, that are projected to come on-line through the end of the Exchange Period (FY 2010-2011). The forecast covers the period from the end of the Base Period (December, 2007) to the end of the Exchange Period (September, 2011). When a major new resource addition is projected to come on-line prior to the start of the Exchange Period, the associated costs are projected forward to the midpoint of the Exchange Period in order to calculate the Exchange Period ASC.

The 2008 ASCM also provides that changes to an established ASC are allowed to occur during the Exchange Period to account for major new resource additions and purchases that are projected to come on-line or be purchased and used to meet a utility's retail load during the Exchange Period (FY 2010-2011).

In either scenario, such changes in ASC must meet the same materiality threshold as a change in ASC resulting from major new resource additions, that is, a 2.5 percent or greater change in Base Period ASC. BPA allows utilities to submit stacks of individual resources that, when combined, meet the materiality threshold. However, each resource in the stack must result in an increase of Base Period ASC of 0.5 percent or more.

The tables below summarize the new major resource additions projected to come on-line during the forecast period, based on (1) the ASC information filed on October 15, 2008 (including errata, if applicable), and (2) the same information from the ASC Draft Report as adjusted by BPA after the ASC Review Process.

**Table 2.2.1:  
New Resource Additions Coming On-Line  
Prior to Exchange Period New Resource Additions (\$/MWh)**

<b>As-Filed FY 2010-2011 Exchange Period ASC</b>				
<b>Resource</b>	<b>Group 1</b>		<b>N/A</b>	<b>N/A</b>
Expected On-Line Date	12/01/08			
Delta*	<b>2.62</b>			

<b>Draft Report FY 2010-2011 Exchange Period ASC</b>				
<b>Resource</b>	<b>Group 1</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>
Expected On-Line Date	12/01/08			
Delta*	<b>2.16</b>			

\*The Delta is the incremental change in the ASC as the new resources come on line.

**Table 2.2.2:  
New Resource Additions Coming On-Line  
During the Exchange Period (\$/MWh)**

<b>As-Filed FY 2010-2011 Exchange Period ASC</b>				
<b>Resource</b>	<b>Group 2</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>
Expected On-Line Date	10/01/10			
Delta*	<b>2.41</b>			

<b>Draft Report FY 2010-2011 Exchange Period ASC</b>				
<b>Resource</b>	<b>Group 2</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>
Expected On-Line Date	10/01/10			
Delta*	<b>4.37</b>			

\*The Delta is the incremental change in the ASC as the new resources come on line.

### **2.3. FY 2010-2011 Exchange Period ASC for the Draft Report**

The following table identifies the Exchange Period ASC as filed on October 15, 2008, and as-adjusted by BPA for this Draft Report. The ASC includes major new resource additions projected to come on-line prior to the start of the Exchange Period only. The Exchange Period ASC will adjust as necessary as additional major new resources come on-line, and as identified above. The procedures used in making the determinations and any required changes are prescribed by the 2008 ASCM and described in the following sections.

**Table 2.2.1: Exchange Period FY 2010-2011 ASC (\$/MWh)  
Prior to New Resource Additions**

<b>Date</b>	<b>October 15, 2008 As-Filed</b>	<b>April 13, 2009 Draft Report</b>
FY 2010- 2011	63.20	61.44

The as-filed Appendix 1 Filing, including the ASC Forecast Model and supporting documentation submitted by Puget Sound Energy can be viewed at BPA’s Residential Exchange Program (REP) website: <http://www.bpa.gov/corporate/finance/ascm/filings.cfm>.

## **3. FILING REQUIREMENTS**

### **3.1. Introduction**

Section 5(c) of the Pacific Northwest Electric Power Planning and Conservation Act ( Northwest Power Act), 16 U.S.C. § 839c(c), established the REP. Any Pacific Northwest utility interested in participating in the REP may offer to sell power to BPA at the average system cost ASC of the utility’s resources. In exchange, BPA offers to sell an “equivalent amount of electric power to such utility for resale to that utility’s residential users within the region” at the BPA rate

established pursuant to section 7(b)(1) of the Act. *See generally* H.R. Rep. No. 976, Pt. I, 96th Cong., 2d Sess. 60 (1980). The cost benefits established by the REP are passed through directly to the exchanging utilities' residential and small farm consumers. 16 U.S.C. § 839c(c)(3).

The Northwest Power Act gives BPA's Administrator the discretionary authority to determine ASC on the basis of a methodology established in a public consultation proceeding. 16 U.S.C. § 839c(c)(7). The only express statutory limits on the Administrator's authority are found in sections 5(c)(7)(A), (B) and (C) of the Act. 16 U.S.C. §§ 839c(c)(7)(A), (B) and (C).

BPA's first ASC Methodology was developed in consultation with regional interests in 1981. *See* 48 Fed. Reg. 46,970 (Oct. 17, 1983). It was later revised in 1984. *See* 49 Fed. Reg. 39,293 (Oct. 5, 1984). In the late 1980s and mid-1990s, BPA and exchanging utilities executed a number of termination agreements that provided for payments to each utility through the remaining years of the Residential Purchase and Sale Agreements (RPSA) that implemented the REP. These termination agreements did not require the participating utilities to submit ASC filings. Subsequent REP Settlement Agreements with BPA's investor-owned utility customers were in effect from approximately 2001 through 2007, but were terminated following a judicial decision issued on May 3, 2007.

In 2007, BPA began administrative efforts to resume the full implementation of the REP, including the development of new RPSAs and a consultation proceeding to revise the 1984 ASC Methodology. As with the 1981 and 1984 ASC Methodologies, the 2008 ASCM was developed in a consultation proceeding with interested parties through, in part, a series of working group meetings conducted by BPA staff. The goal of the consultation process was to develop an administratively feasible ASC Methodology that would be technically sound and comport with the Northwest Power Act. The ASCM is subject to review and approval by the Federal Energy Regulatory Commission (FERC or Commission). On September 30, 2008, the Commission granted interim approval to BPA's 2008 ASCM.

BPA maintains a significant role in reviewing utilities' ASC filings to ensure compliance with the 2008 ASCM. For more information regarding the 2008 ASCM, please refer to the *Final Record of Decision, 2008 Average System Cost Methodology*, June 30, 2008.

### **3.2. ASC Review Process - FY 2010-2011**

Under the 2008 ASCM, utilities' ASCs are generally established prior to the calculation and payment of REP benefits, and the ASC Review Process occurs before the beginning of the Exchange Period.

On October 15, 2008, exchanging utilities submitted ASC filings for the FY 2010-2011 Exchange Period. All data were submitted using two Excel-based models: the Appendix 1 and the ASC Forecast Model. Supporting documentation was also submitted. A utility's submission of the models and supporting documentation is defined as the utility's "ASC filing."

To determine a utility's Exchange Period ASC for FY 2010-2011 (October 1, 2009, through September 30, 2011), the Base Period (CY 2007) ASC is first calculated using the Appendix 1.

BPA then uses the ASC Forecast Model to escalate the Base Period ASC forward to the effective Exchange Period. The Base Period and Forecast ASC results are reported herein.

The 2008 ASCM allows utilities to file multiple, contingent ASCs to reflect changes to service territories, and allows for changes to ASCs resulting from major resource additions and reductions.

The exchanging utilities' October 15, 2008, ASC filings began the formal review and comment processes, referred to as the Review Period, to establish the utilities' respective ASCs. For the Draft Reports, BPA completed a preliminary review of the utilities' ASC filings in conformance with the 2008 ASCM, which was approved by FERC on an interim basis on September 30, 2008. Parties had a full and complete opportunity to intervene in BPA's ASC Review Processes and to submit comments on the utilities' ASC filings. The Review Processes for FY 2010-2011 ASCs are still in progress at this publication date. Upon completion of the formal reviews and final ASC determinations, BPA will publish Final Reports in July, 2009 for each participating utility.

For details of the prospective Review Period and guidelines, see *Attachment A to the 2008 Final Record of Decision, 2008 Average System Cost Methodology, June 2008*, entitled *2008 Methodology for Determining the Average System Cost of Resources for Electric Utilities Participating in the Residential Exchange Program Established by Section 5(c) of the Pacific Northwest Electric Power and Conservation Act*.

### **3.3. Explanation of Schedules**

Utilities' Appendix 1 filings consist of a series of seven schedules and other supporting information that present the data necessary to calculate ASCs. The schedules and support data are as follows:

1. Schedule 1 - Plant Investment/Rate Base
2. Schedule 1A - Cash Working Capital Calculation
3. Schedule 2 - Capital Structure and Rate of Return
4. Schedule 3 - Expenses
5. Schedule 3A - Taxes
6. Schedule 3B - Other Included Items
7. Schedule 4 - Average System Cost
8. Distribution of Salaries and Wages
9. Purchased Power and Off-System Sales
10. New Large Single Loads
11. Labor Ratios

#### **3.3.1. Schedule 1 – Plant Investment/Rate Base**

This schedule establishes the rate base used by the utility. The calculation begins with a determination of the Gross Electric Plant In-Service, which includes the historical costs of the Intangible, General, Production, Transmission, and Distribution Plant. For exchanging utilities that provide electric and natural gas service, the portion of common plant allocated to electric

service is also included. These values (and all subsequent values) are entered into the Appendix 1 filing as line items based on the FERC Uniform System of Accounts. In general, each line item (Account) is functionalized to Production, Transmission, and/or Distribution/Other in accordance with the functionalizations prescribed in the 2008 ASCM, Attachment A, Table 1.

Next, in order to reflect the book value of the remaining plant, depreciation and amortization reserves are evaluated and entered into the Appendix 1 form and functionalized. These are then subtracted from the Gross Electric Plant In-Service to determine the Net Electric Plant.

The resulting Total Net Electric Plant is adjusted, where appropriate, to reflect additions in Cash Working Capital (calculated in Schedule 1A), Utility Plant, Property and Investments, Current and Accrued Assets, and Deferred Debits. It is adjusted again, where appropriate, to deduct the Current and Accrued Liabilities, and Deferred Credits. The outcome of these adjustments defines the Total Rate Base. When the Total Production and Total Transmission (calculated in the Total Rate Base) are multiplied by the Rate of Return as determined in Schedule 2, the result is the utility's return on investment.

### **3.3.2. Schedule 1A – Cash Working Capital**

Cash working capital is a ratemaking convention that is not included in the FERC Uniform System of Accounts, but is a part of all electric utility rate filings as a component of rate base. To determine the allowable amount of cash working capital in rate base for a utility, BPA allows one-eighth of the functionalized costs of total production expenses, transmission expenses and administrative and general expenses, less purchased power, fuel costs, and public purpose charges.

### **3.3.3. Schedule 2 – Capital Structure and Rate of Return**

This schedule lists the data used by the utility to develop the rate of return applied to the utility's rate base developed on Schedule 1 to determine the utility's return on investment.

Investor-owned utilities (IOU) use the weighted cost of capital (WCC) from their most recent State Commission Rate Order with a Federal income tax adjustment to determine the return calculation. The return on equity (ROE) used in the WCC calculation is grossed up for Federal income taxes at the marginal Federal income tax rate using the formula found in the ASCM, Attachment A, Section IX, Endnote b. For consumer-owned utilities (COU), the rate of return is equal to the COU's weighted cost of debt times total rate base as determined in Schedule 1.

### **3.3.4. Schedule 3 – Expenses**

This schedule represents operations and maintenance expense for the production, transmission and distribution of electricity. Each expense item is functionalized as outlined in the 2008 ASCM, Table 1. Additional expenses associated with customer accounts, sales, administrative and general expense, conservation program expense, and depreciation and amortization expense associated with Electric Plant in Service are also included. The sum of these costs is Total Operating Expenses.

### **3.3.5. Schedule 3A – Taxes**

This schedule presents allowable ASC costs for Federal employment tax and non-Federal taxes, including property and unemployment taxes. State income taxes, franchise fees, regulatory fees, and city/county taxes are included but are functionalized to Distribution/Other and therefore not incorporated in ASC. Taxes and fees for each state listed are grouped together and entered as “combined” line items for Appendix 1 filing purposes.

Federal income taxes included in ASC are calculated and described in Schedule 2 above, *Capital Structure and Rate of Return*.

### **3.3.6. Schedule 3B – Other Included Items**

This schedule includes revenues from the disposition of plant, sales for resale, and other revenues, including electric revenues and revenues from transmission of electricity to others (wheeling). Items in this schedule are deducted from the total costs of each utility.

### **3.3.7. Schedule 4 – Average System Cost (\$/MWh)**

This schedule summarizes the cost information calculated in Schedules 2 through 3B: Federal income tax adjusted return on rate base, total operating expenses, state and other taxes, and other included items. The schedule also identifies the Contract System Cost and Contract System Load, as defined below, and calculates the utility’s ASC (\$/MWh).

#### Contract System Cost:

Contract System Cost (CSC) includes the utility’s costs for production and transmission resources, including power purchases and conservation measures, which are includable in and subject to the provisions of the Appendix 1. Costs to serve NLSLs are excluded from ASC calculations. CSC becomes the numerator in calculating ASC.

#### Contract System Load (MWh):

The Contract System Load (CSL) is the total regional retail load, adjusted for distribution losses and NLSLs, pursuant the 2008 ASCM. The CSL is the denominator in calculating ASC.

### **3.3.8. Distribution of Salaries and Wages**

This supporting file is used to determine the Labor Ratio calculations and includes salaries and wages from relevant operations and maintenance of the electric plant.

### **3.3.9. Purchased Power and Sales for Resale**

Purchased Power is an Account of Schedule 3, *Expenses*, and includes all power purchases the utility made during the year, including power exchanges. Sales for Resale is an Account of Schedule 3B, *Other Included Items*, and includes power sales to purchasers other than ultimate consumers. Listed in the information for both Accounts is the statistical classification code for all transactions. Refer to the FERC Form 1, pages 310-311 for Sales for Resale, and pages 326-327 for Purchased Power, for identification of the classification codes.

### **3.3.10. New Large Single Loads**

An NLSL is any load associated with a new facility, an existing facility or an expansion of an existing facility, which was not contracted for or committed to (CF/CT) prior to September 1, 1979, and which will result in an increase in power requirements of the specific customer of ten average megawatts (10 aMW) or more in any consecutive twelve-month period.

BPA determines the cost of serving NLSLs by using the fully allocated cost of all post-September 1, 1979, resources and long-term power purchases greater than five years in duration.

NLSLs and the associated costs to serve them are not included in utilities' ASCs.

### **3.3.11. Labor Ratios**

These ratios assign costs on a pro rata basis using salary and wage data for Production, Transmission, and Distribution/Other functions included in the utility's most recently filed FERC Form 1. For COUs, comparable data is used based on the cost of service analysis (COSA) study used as the basis for retail rates in effect during the Base Period filing.

## **3.4. ASC Forecast**

Once BPA determines the Base Period ASC, it applies this data in an Excel-based forecasting model (ASC Forecast Model) to escalate the Base Period ASC data forward to the Exchange Period, which in this case is FY 2010-2011. BPA used Global Insight's forecast of cost increases for capital costs and fuel (except natural gas), O&M, and G&A expenses; BPA's forecast of market prices for IOU purchases to meet load growth and to estimate short-term and non-firm power purchase costs and sales revenues; BPA's forecast of natural gas prices; and BPA's estimates of the rates it will charge for its PF and other products. For the Draft Reports, the escalators were updated to be consistent with the escalators used in the WP-10 Power Rate Case. For additional background on the determination of Exchange Period ASCs, see the 2008 ASCM, Section IV, *Rules for Determining Exchange Period Average System Cost*, Subsection A.

### **3.4.1. Forecast Contract System Cost**

Forecast Contract System Cost (CSC) includes a utility's forecast costs for production and transmission resources, including power purchases and conservation measures, which costs are includable in and subject to the provisions of Appendix 1. As outlined in the 2008 ASCM, Section IV, *Rules for Determining Exchange Period Average System Cost*, Subsection A, "Forecast CSC," BPA escalates base period costs to the midpoint of the FY 2010-2011 Exchange Period (October 1, 2010) to calculate Exchange Period ASCs. BPA projects the costs of power products purchased from BPA using BPA's forecast of prices for its products.

### **3.4.2. Forecast of Sales for Resale and Power Purchases**

BPA does not normalize short-term purchases and sales for resale. The short-term purchases and sales for resale for the Base Period are used as the starting values for the forecast. Utilities are then allowed to include new plant additions and use a utility-specific forecast for the (1) price of purchased power and (2) sales for resale price, to value purchased power expenses and sales for resale revenue. For details, see the 2008 ASC Methodology, Section IV, *Rules for Determining Exchange Period Average System Cost*, Subsection B.

### **3.4.3. Forecast Contract System Load and Exchange Load**

All utilities are required to provide, with their Appendix 1 filings, a four-year forecast of their total retail load, as measured at the meter, and their qualifying residential and small farm retail load, as measured at the retail meter. Also required is a current distribution loss study as described in the 2008 ASCM, Attachment A, Endnote e. The total retail and residential and small farm load forecasts are adjusted for distribution losses and NLSLs when appropriate. The resulting load forecasts are the Contract System Load forecast and Exchange Load forecast, respectively.

### **3.4.4. Major Resource Additions**

BPA uses the method outlined in the 2008 ASCM, Section IV, *Rules for Determining Exchange Period Average System Cost*, Subsection C, to determine the change in ASC due to major new resource additions or reductions, subject to meeting the materiality threshold of 2.5 percent. These additions include new production or new generating resource investments, new transmission investments, long-term generating contracts, pollution control and environmental compliance investments relating to generating resources, transmission resources or contracts, hydro relicensing costs and fees, and plant rehabilitation investments.

The exchanging utility provides its forecast of major resource additions and all associated costs. The forecast covers the period from the end of the Base Period to the end of the Exchange Period.

The forecast of the major resource costs to be included in the utility's Exchange Period ASC is reviewed and determined during the Review Period. All resources included prior to the start of the Exchange Period are projected forward to the midpoint of the Exchange Period.

### **3.4.5. Load Growth Not Met by New Resource Additions**

All load growth not met by new resource additions is met by purchased power at the forecasted utility-specific short-term purchased power price. BPA uses the method outlined in the 2008 ASCM, Section IV, *Rules for Determining Exchange*, Subsection D.

## 4. REVIEW OF THE ASC FILING

Pursuant to the 2008 ASCM and section 5(c) of the Northwest Power Act, BPA is responsible for reviewing all costs and loads used to establish ASCs. During this review and evaluation, numerous issues may be identified for comment by BPA or other parties. BPA's ASC determination is limited to specific findings on those issues identified for comment, with the exception of ministerial or mathematical errors. There may have been additional issues that BPA did not identify for comment in this filing. Acceptance of a utility's treatment of an item without comment is not intended to signify a decision of the proper interpretation to be applied either in subsequent filings or universally under the 2008 ASCM. Similarly, given that the current report is one of the first published under the 2008 ASCM, further experience under the 2008 ASCM may result in amendment or refinement of determinations made herein when addressed in future ASC reviews.

### 4.1. Identification and Analysis of Issues from BPA Issue List

BPA raised the following issues during the ASC Review Process, and Puget Sound Energy submitted its responses. No other party raised or commented on Puget Sound Energy's responses. Each issue pertains to the October 15, 2008, filing unless otherwise noted.

Although a utility's State regulatory bodies or FERC may allow a particular functionalization to a specific account, this does not require that BPA will follow the same functionalization for the same account in calculating a utility's ASC. BPA retains the discretion to make an independent determination of the appropriateness of inclusion or exclusion of particular costs, as well as the functionalization method used in the calculation of that cost, in conformance with the 2008 ASCM.

### 4.2. SCHEDULE 1: Plant Investment/Rate Base:

#### 4.2.1. **Account 303, Intangible Plant Miscellaneous: "Customer Information System (CLX, MDW, etc)"**

##### Statement of Issue:

*What is the correct functionalization of Account 303 – "Customer Information System (CLX, MDW, etc.)"?*

##### Statement of Facts:

In response to ASC-09-PSE Data Request 06, PSE stated "Customer Information System (CLX, MDW, etc)" infrastructure supports all areas of the Company and so this group of assets has been functionalized using the PTD ratio. In addition, a similar functionalization methodology is used to functionalize all assets in Account 303 across the production, transmission and distribution

functions for ratemaking purposes. Also, in previous ASC filings, assets in this account were also functionalized using the PTD ratio.

In response to ASC-09-PSE Data Request 06, PSE stated “The software and technology assets identified as "Customer Information System (CLX, MDW, etc)" represent upgrades and enhancements to specific components of PSE's energy information infrastructure. Included in this enterprise wide energy information infrastructure are:

1. ConsumerLinx ("CLX) assets - the Company's customer information system,
2. Meter Data Warehouse ("MDW") assets - the primary repository for energy data,
3. Customer Data Analysis and Research System ("CDARS") database assets - the primary source for normalized energy data that is used corporate wide for analytical and reporting purposes, and
4. Metering and meter reading assets including automated meter reading ("AMR) related assets - the primary source of energy related data.

### **Summary of Parties' Positions:**

In response to ASC-10-PSE Data Request 06, PSE stated "Customer Information System (CLX, MDW, etc)" infrastructure supports all areas of the Company and so this group of assets has been functionalized using the PTD ratio.

### **Analysis of Positions:**

Section VIII.B, Table 1 of the 2008 ASCM, provides that functionalization of Account 303 is direct analysis with an option to Distribution.

The 2008 ASCM states “Functionalization of each Account included in a Utility’s Average System Cost (ASC) shall be according to the functionalization prescribed in Table 1, *Functionalization and Escalation Codes*, beginning on page 18. Direct Analysis on an Account may be performed only if Table 1 states specifically that a Utility may perform a Direct Analysis on the Account with the exception of conservation costs. Utilities will be able to functionalize all conservation-related costs to Production, regardless of the Account in which they are recorded.” *Id* at 16.

When utilities perform a direct analysis on an Account, they must submit sufficient documentation so that BPA can determine if the functionalization is reasonable. In addition, the 2008 ASCM states that “BPA will not allow Utilities to use a combination of Direct Analysis and a prescribed functionalization method for the same Account. The Utilities can develop and use a functionalization ratio or use a prescribed functionalization method if the Utility through Direct Analysis can justify how the ratio adequately reflects the functional nature of the costs included in any Account or cost item being functionalized by the ratio.” *Id.* at 17.

*Customer Information Systems (CIS)* manage retail customer information, bill calculation and presentation, and payment processes.

In the description of the software provided in the response to BPA Data Request No. 006, the software appears to be primarily used in the retail part of the business. PSE's justification provided in the data response for using the PTD ratio for this account was that CIS "supports all functions of the company." Such catchall phrases, if taken to the extreme, could be used to rationalize using the PTD ratio to functionalize the entire ASC filing using the PTD ratio. Such simple statements do not constitute a valid direct analysis.

The functionalization of a software system should follow the functionalization of the operation it supports and how the operation is functionalized under the 2008 ASCM.

The description of the software indicates the software is primarily used for the retail side of the business and used in the billing process. Even though the software is used to bill the expenses incurred by the Generation, Transmission and Distribution services, the expense and sophistication of the software is driven by the size and diversification of the retail (distribution) side of the business. In addition, the software replaces tasks that were previously performed manually and were charged to the Customer Accounts Expenses, Accounts 901-905. The 2008 ASCM functionalizes Accounts 901-905 to Distribution. BPA believes that the functionalization of software that performs or replaces work or manual processes should generally follow the functionalization as the account where the work was performed. For example, automated generation control software that automatically adjusts load and other controllable variables of a generation plant that were previously performed by plant operators would be functionalized to Production. BPA will functionalize software in Account 303 based on the functionalization of the Account where the expenses for the work process performed by the software are charged, which for CIS software is Accounts 901-910.

**Draft Decision:**

*Account 303 – "Customer Information System (CLX, MDW, etc.)" will be functionalized to Distribution.*

**Table 4.2.1: Account 303, Intangible Plant Miscellaneous:  
"Customer Information System (CLX, MDW, etc)"**

	Function Method	Total Cumulative Acquisition Value	Production Cumulative Acquisition Value	Transmission Cumulative Acquisition Value	Distribution/ Other Cumulative Acquisition Value
<b>AS - FILLED</b>					
CLX Software Release Management CLX Project Cost Thru September 30, 2003 Only	C303 PTD	\$817,146	\$309,625	\$50,247	\$457,274
CLX Software Phase 1 Only CLX Project Cost Thru April 2000 Only	C303 PTD	\$101,723	\$38,544	\$6,255	\$56,924
CLX - Ibm Mainframe Software Upgrade	C303 PTD	\$132,825	\$50,329	\$8,167	\$74,329
CLX Software Phase 2 Only CLX Project Cost Thru August 2000 Only	C303 PTD	\$8,148,652	\$3,087,608	\$501,064	\$4,559,979
CLX Software Phase 4 Only CLX Project Cost Thru March 2001 Only	C303 PTD	\$4,288,514	\$1,624,962	\$263,703	\$2,399,849
CLX Phase 3 S/W Customization	C303 PTD	\$7,531,672	\$2,853,828	\$463,126	\$4,214,718
CLX Phase 1 S/W Customization	C303 PTD	\$79,817,061	\$30,243,510	\$4,907,989	\$44,665,562

	Function Method	Total Cumulative Acquisition Value	Production Cumulative Acquisition Value	Transmission Cumulative Acquisition Value	Distribution/ Other Cumulative Acquisition Value
CLX Software Phase 5 Only - Pem CLX Project Cost Thru December 31, 2001 Only	C303 PTD	\$974,908	\$369,403	\$59,948	\$545,558
Cdars Software Order 131000406	C303 PTD	\$2,142,654	\$811,874	\$131,753	\$1,199,027
CLX Software Phase 1 & 3 Improvements CLX Project Cost Thru December 31, 2002 Only	C303 PTD	\$2,153,772	\$816,087	\$132,436	\$1,205,249
Cdars Software CLX Software Accounts Receivable Balancing CLX Project Cost Thru September 30, 2003 Only	C303 PTD	\$108,201	\$40,999	\$6,653	\$60,549
New CLX Functions - Purge And Archive CLX Project Cost Thru December 15, 2003 Only	C303 PTD	\$365,253	\$138,398	\$22,460	\$204,395
CLX - Product Enhancements Order 131000505 - CLX Project Cost Thru December 31	C303 PTD	\$296,516	\$112,353	\$18,233	\$165,930
CLX - Product Enhancements Order 131000505	C303 PTD	\$11,556	\$4,379	\$711	\$6,467
CLX - Meter Data Warehouse Service Order Tracking Order 131001617	C303 PTD	\$130,771	\$49,550	\$8,041	\$73,179
CLX - Electronic Billing Software Order 131001674	C303 PTD	\$408,539	\$154,799	\$25,121	\$228,618
CLX - NCC Optimization Software Order 131001037	C303 PTD	\$344,864	\$130,672	\$21,206	\$192,985
CLX - Finance Work Pkg S/W Order 131002016	C303 PTD	\$248,825	\$94,282	\$15,300	\$139,242
CLX - Rates Report Work Package SW Order 131002014	C303 PTD	\$254,293	\$96,354	\$15,637	\$142,302
CLX - NCC Optimization Software Order 131001037	C303 PTD	\$1,436	\$544	\$88	\$804
CLX - Electronic Billing Software Order 131001674	C303 PTD	\$28,639	\$10,852	\$1,761	\$16,027
CLX - Rates Report Work Pacakge SW Order 131002014	C303 PTD	\$14,314	\$5,424	\$880	\$8,010
CLX - Finance Work Pkg S/W Order 131002016	C303 PTD	\$16,771	\$6,355	\$1,031	\$9,385
CLX Metering Software Order 131002015	C303 PTD	\$71,806	\$27,208	\$4,415	\$40,183
CLX - Meter Data Warehouse Service Order Trackin	C303 PTD	\$1,436	\$544	\$88	\$804
CLX - Customer Service Enhancements S/W Order 131002017	C303 PTD	\$774	\$293	\$48	\$433
CLX -Enhance Outage Management Order 131002174	C303 PTD	\$137,260	\$52,009	\$8,440	\$76,811
CLX -Purge And Archive Ii S/W Order 131001615	C303 PTD	\$1,144,569	\$433,689	\$70,380	\$640,500
CLX Operations Enhancements 2005 Common Order 131200743	C303 PTD	\$498,526	\$188,897	\$30,655	\$278,975
CLX Credit & Collection Enhancements Order 131200003	C303 PTD	\$902,599	\$342,004	\$55,501	\$505,094
CLX Credit & Collection Enhancements Order 131200003	C303 PTD	\$116	\$44	\$7	\$65
CLX Web Enable Self Service S/W Order 131002114	C303 PTD	\$807,091	\$305,815	\$49,628	\$451,648
CLX - Customer Service Enhancements S/W Order 131201320	C303 PTD	\$271,186	\$102,755	\$16,675	\$151,755
CLX Software Phase 3 Only CLX Project Cost Thru November 13, 2000 Only	C303 PTD	\$105,820	\$40,096	\$6,507	\$59,217
CLX - Customer Service Enhancements S/W Order 131002017	C303 PTD	\$1,098,248	\$416,138	\$67,532	\$614,579
CLX Web Enable Self Service S/W Order	C303 PTD	\$2,956,539	\$1,120,263	\$181,799	\$1,654,477

131002114

	Function Method	Total Cumulative Acquisition Value	Production Cumulative Acquisition Value	Transmission Cumulative Acquisition Value	Distribution/ Other Cumulative Acquisition Value
<b>Total</b>		\$120,570,563	\$45,685,433	\$7,413,941	\$67,471,188
<b>ADJUSTED</b>					
CLX Software Release Management CLX Project Cost Thru September 30, 2003 Only	C303 DIST	\$817,146	\$0	\$0	\$817,146
CLX Software Phase 1 Only CLX Project Cost Thru April 2000 Only	C303 DIST	\$101,723	\$0	\$0	\$101,723
CLX - Ibm Mainframe Software Upgrade	C303 DIST	\$132,825	\$0	\$0	\$132,825
CLX Software Phase 2 Only CLX Project Cost Thru August 2000 Only	C303 DIST	\$8,148,652	\$0	\$0	\$8,148,652
CLX Software Phase 4 Only CLX Project Cost Thru March 2001 Only	C303 DIST	\$4,288,514	\$0	\$0	\$4,288,514
CLX Phase 3 S/W Customization	C303 DIST	\$7,531,672	\$0	\$0	\$7,531,672
CLX Phase 1 S/W Customization	C303 DIST	\$79,817,061	\$0	\$0	\$79,817,061
CLX Software Phase 5 Only - Pem CLX Project Cost Thru December 31, 2001 Only	C303 DIST	\$974,908	\$0	\$0	\$974,908
Cdars Software Order 131000406	C303 DIST	\$2,142,654	\$0	\$0	\$2,142,654
CLX Software Phase 1 & 3 Improvements CLX Project Cost Thru December 31, 2002 Only	C303 DIST	\$2,153,772	\$0	\$0	\$2,153,772
Cdars Software	C303 DIST	\$108,201	\$0	\$0	\$108,201
CLX Software Accounts Receivable Balancing CLX Project Cost Thru September 30, 2003 Only	C303 DIST	\$365,253	\$0	\$0	\$365,253
New CLX Functions - Purge And Archive CLX Project Cost Thru December 15, 2003 Only	C303 DIST	\$296,516	\$0	\$0	\$296,516
CLX - Product Enhancements Order 131000505 - CLX Project Cost Thru December 31	C303 DIST	\$4,235,686	\$0	\$0	\$4,235,686
CLX - Product Enhancements Order 131000505	C303 DIST	\$11,556	\$0	\$0	\$11,556
CLX - Meter Data Warehouse Service Order Tracking Order 131001617	C303 DIST	\$130,771	\$0	\$0	\$130,771
CLX - Electronic Billing Software Order 131001674	C303 DIST	\$408,539	\$0	\$0	\$408,539
CLX - NCC Optimization Software Order 131001037	C303 DIST	\$344,864	\$0	\$0	\$344,864
CLX - Finance Work Pkg S/W Order 131002016	C303 DIST	\$248,825	\$0	\$0	\$248,825
CLX - Rates Report Work Package SW Order 131002014	C303 DIST	\$254,293	\$0	\$0	\$254,293
CLX - NCC Optimization Software Order 131001037	C303 DIST	\$1,436	\$0	\$0	\$1,436
CLX - Electronic Billing Software Order 131001674	C303 DIST	\$28,639	\$0	\$0	\$28,639
CLX - Rates Report Work Pacakge SW Order 131002014	C303 DIST	\$14,314	\$0	\$0	\$14,314
CLX - Finance Work Pkg S/W Order 131002016	C303 DIST	\$16,771	\$0	\$0	\$16,771
CLX Metering Software Order 131002015	C303 DIST	\$71,806	\$0	\$0	\$71,806
CLX - Meter Data Warehouse Service Order Trackin	C303 DIST	\$1,436	\$0	\$0	\$1,436
CLX - Customer Service Enhancements S/W Order 131002017	C303 DIST	\$774	\$0	\$0	\$774
CLX -Enhance Outage Management Order 131002174	C303 DIST	\$137,260	\$0	\$0	\$137,260
CLX -Purge And Archive Ii S/W Order 131001615	C303 DIST	\$1,144,569	\$0	\$0	\$1,144,569

	Function Method	Total Cumulative Acquisition Value	Production Cumulative Acquisition Value	Transmission Cumulative Acquisition Value	Distribution/ Other Cumulative Acquisition Value
CLX Operations Enhancements 2005 Common Order 131200743	C303 DIST	\$498,526	\$0	\$0	\$498,526
CLX Credit & Collection Enhancements Order 131200003	C303 DIST	\$902,599	\$0	\$0	\$902,599
CLX Credit & Collection Enhancements Order 131200003	C303 DIST	\$116	\$0	\$0	\$116
CLX Web Enable Self Service S/W Order 131002114	C303 DIST	\$807,091	\$0	\$0	\$807,091
CLX - Customer Service Enhancements S/W Order 131201320	C303 DIST	\$271,186	\$0	\$0	\$271,186
CLX Software Phase 3 Only CLX Project Cost Thru November 13, 2000 Only	C303 DIST	\$105,820	\$0	\$0	\$105,820
CLX - Customer Service Enhancements S/W Order 131002017	C303 DIST	\$1,098,248	\$0	\$0	\$1,098,248
CLX Web Enable Self Service S/W Order 131002114	C303 DIST	\$2,956,539	\$0	\$0	\$2,956,539
<b>Total</b>		<b>\$120,570,563</b>	<b>\$-</b>	<b>\$-</b>	<b>\$120,570,563</b>

#### 4.2.2. Account 303, Intangible Plant Miscellaneous: Computer Telephony Interface Software / Development

##### **Statement of Issue:**

*Whether PSE's direct analysis justifies the functionalization of the Computer Telephony Interface Software / Development to PTD?*

##### **Statement of Facts:**

The explanation of the items was not sufficiently clear to allow an understanding of the software's purposes and therefore the applicability and justification of the functionalization to PTD.

The Computer Telephony Integration (CTI), also known as telephone software, is a product that enables computers to know about and control phone functions such as making and receiving voice, fax, and data calls with telephone directory services and caller identification. The integration of telephone software and computer systems is a major development in the evolution of the automated office.

##### **Summary of Parties' Positions:**

PSE functionalized Account 303, Intangible Plant Miscellaneous: Computer Telephony Interface Software / Development to PTD.

##### **Analysis of Positions:**

Section VIII.B, Table 1 of the 2008 ASCM, provides that functionalization of Account 303 is direct analysis with an option to Distribution.

The 2008 ASCM states “Functionalization of each Account included in a Utility’s Average System Cost (ASC) shall be according to the functionalization prescribed in Table 1, *Functionalization and Escalation Codes*, beginning on page 18. Direct Analysis on an Account may be performed only if Table 1 states specifically that a Utility may perform a Direct Analysis on the Account with the exception of conservation costs. Utilities will be able to functionalize all conservation-related costs to Production, regardless of the Account in which they are recorded.” *Id* at 16.

When utilities perform a direct analysis on an Account, they must submit sufficient documentation so that BPA can determine if the functionalization is reasonable. In addition, the 2008 ASCM states that “BPA will not allow Utilities to use a combination of Direct Analysis and a prescribed functionalization method for the same Account. The Utilities can develop and use a functionalization ratio or use a prescribed functionalization method if the Utility through Direct Analysis can justify how the ratio adequately reflects the functional nature of the costs included in any Account or cost item being functionalized by the ratio.” *Id.* at 17.

Computer Telephony Interface Software / Development is a software that enables computers to know about and control phone functions such as making and receiving voice, fax, and data calls with telephone directory services and caller identification.

PSE did not provide a detailed description of the Computer Telephony Interface Software/ Development Software. The functionalization of a software system should follow the functionalization of the operation it supports and how the operation is functionalized under the 2008 ASCM.

PSE’s justification provided in the support spread sheet documentation for using the PTD ratio for this account was that Computer Telephony Interface Software / Development “supports all functions of the company.” Such catchall phrases, if taken to the extreme, could be used to rationalize using the PTD ratio to functionalize the entire ASC filing using the PTD ratio. Such simple statements do not constitute a valid direct analysis.

BPA believes that the functionalization of a software system should generally follow the functionalization of the operation it supports and how the operation is functionalized under the 2008 ASCM, which for Computer Telephony Interface Software / Development is Accounts 901-910.

**Draft Decision:**

*Without additional documentation, BPA is unable to justify PSE’s functionalization of Account 303, Intangible Plant Miscellaneous: COMPUTER TELEPHONY INTERFACE SOFTWARE/ DEVELOPMENT SOFTWARE to PTD. The Account will therefore be functionalized to the default of Distribution.*

**Table 4.2.2: Account 303, Intangible Plant Miscellaneous:  
Computer Telephony Interface Software / Development**

				<b>Total Cumulative Acquisition Value</b>	<b>Production Cumulative Acquisition Value</b>	<b>Transmission Cumulative Acquisition Value</b>	<b>Distribution/ Other Cumulative Acquisition Value</b>
		<b>Function Method</b>					
<b>AS - FILLED</b>							
Computer Telephony Interface Software/Development Order No. 131000217	C303	PTD		\$219,160	\$83,042	\$13,476	\$122,642
Computer Telephony Interface Software/Development	C303	PTD		\$22,390	\$8,484	\$1,377	\$12,530
Computer Telephony Interface SW/Development-Custom	C303	PTD		\$6,596	\$2,499	\$406	\$3,691
<b>Total</b>				<u>\$248,146</u>	<u>\$94,025</u>	<u>\$15,259</u>	<u>\$138,863</u>
<b>ADJUSTED</b>							
Computer Telephony Interface Software/Development Order No. 131000217	C303	DIST		\$219,160	\$0	\$0	\$219,160
Computer Telephony Interface Software/Development	C303	DIST		\$22,390	\$0	\$0	\$22,390
Computer Telephony Interface SW/Development-Custom	C303	DIST		\$6,596	\$0	\$0	\$6,596
<b>Total</b>				<u>\$248,146</u>	<u>\$-</u>	<u>\$-</u>	<u>\$248,146</u>

**4.2.3. Account 303, Intangible Plant Miscellaneous: Enterprise Resource Planning**

**Statement of Issue:**

*Whether PSE’s direct analysis justifies the functionalization of the Account to PTD.*

**Statement of Facts:**

Enterprise Resource Planning (ERP) Systems provide a common foundation for business accounting including common functions such as accounts payable, general ledger, and accounts receivable. Representative vendor solutions include: Lawson Enterprise Financial Management, Oracle B-Business Suite, PeopleSoft Enterprise Financial Management Solutions, and SAP ERP Financials.

**Summary of Parties’ Positions:**

PSE contends the Enterprise Resource Planning (ERP) System should be functionalized to PTD.

**Analysis of Positions:**

Table 1 of the 2008 ASCM provides that the functionalization method for this account is direct analysis with a default to Distribution.

The 2008 ASCM states “Functionalization of each Account included in a Utility’s Average System Cost (ASC) shall be according to the functionalization prescribed in Table 1, *Functionalization and Escalation Codes*, beginning on page 18. Direct Analysis on an Account may be performed only if Table 1 states specifically that a Utility may perform a Direct Analysis on the Account with the exception of conservation costs. Utilities will be able to functionalize all conservation-related costs to Production, regardless of the Account in which they are recorded.” *Id at 16.*

When utilities perform a direct analysis on an Account, they must submit sufficient documentation so that BPA can determine if the functionalization is reasonable. In addition, the 2008 ASCM states that “BPA will not allow Utilities to use a combination of Direct Analysis and a prescribed functionalization method for the same Account. The Utilities can develop and use a functionalization ratio or use a prescribed functionalization method if the Utility through Direct Analysis can justify how the ratio adequately reflects the functional nature of the costs included in any Account or cost item being functionalized by the ratio.” *Id. at 17.*

BPA’s review of the initial ASC filings revealed that most utilities either used the PTD or Labor ratio to functionalize a majority of Account 303 software. However, the functionalization methodology and rationale for the direct analysis was not consistent among utilities. Some of the statements included by utilities to support functionalization of a specific piece of software using the PTD ratio used terms like “supports all functions of the company”<sup>1</sup> or “supports all areas of the company.”<sup>2</sup> These catchall phrases, if taken to the extreme, could be used to rationalize using the PTD ratio to functionalize the entire ASC filing using the PTD ratio. Such simple statements do not constitute a valid direct analysis.

BPA and the parties generally support the concept that the functionalization of a software system should follow the functionalization of the operation it supports and how the operation is functionalized under the 2008 ASCM. While the concept is easy enough to understand, it is difficult to implement within the context of a utility’s ASC filing because of how the software is recorded or listed in internal databases of software in the utility information systems and because of the sheer volume of the individual items of software.

For example, a utility may record its customer information system (CIS) as ‘Customer Information System’ or record it by the name of the vendor such as Oracle, Harris, SAP or Ventyx, or by the application name such as Xcellant, Peace, or ConsumerLinX. Repeating this disparate method of recording software in a utility database for a 1,000 or more unique software products that a typical utility may have and the task of functionalizing the software for an ASC filing is difficult and time consuming for a utility analyst that may not have familiarity with the software and how and where it is used within the utility. Given this difficulty, it is not surprising that most utilities and their regulatory commissions use a simple ratio, such as PTD or labor, to functionalize most or all of the software in Account 303. This approach works well for

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1 See, for example, Data Responses ASC-09 PA-BPA-12 and ASC-09-PS-BPA-6

2 See, for example, data response ASC-09-PS-BPA-12, and Excel file E302, 303, E399, Common 2006 filed.xls, DATA for ASC tab, column W.

development of retail rates which incorporate most, if not all, production, transmission and distribution costs of the utility.

However, a utility’s ASC may include only allowable production and transmission costs determined in accordance with the 2008 ASCM. Using the PTD or Labor ratio for all software costs could result in an incorrect functionalization of costs. For example, the costs of certain software packages are very large relative to others in Account 303, which would cause simple ratios to functionalize a portion of distribution-related software into ASC. For example, in PacifiCorp’s Response to BPA Data Request ASC-09-PA-12, PacifiCorp stated that:

The remaining \$462 million consists of various computer hardware and software assets. Two assets dwarf the remaining assets – the Company’s accounting software – SAP (\$159 million) and Customer Service System (\$102 million) which support all areas of the Company and have been allocated on the PTD factor.

BPA decided to develop a general framework for use in software functionalization for Account 303 software. It did so to ensure that software costs will be functionalized in accordance with the 2008 ASCM and that similar types of software will receive the same functionalization for all exchanging utilities to the greatest extent possible. In addition, it should allow utilities that decided not to undertake the task of functionalization of Account 303 – Software an “easy to use” framework for functionalization.

BPA’s software cost functionalization framework functionalizes cost related to Enterprise Resource Planning ERP systems using the Labor ratio because the primary benefit of ERP systems is increased productivity of the utility’s work force. ERP systems are not installed to reduce line losses or increase heat rates of power generation equipment. While utilities may experience an increase in the productivity of assets, the cause is a result of the more accurate, timely and higher quality information provided to labor, thus resulting in a more efficient use of utility assets.

**Draft Decision:**

*PSE’s Account 303, Intangible Plant Miscellaneous: Enterprise Resource Planning Software will be functionalized to Labor.*

**Table 4.2.3: Account 303, Intangible Plant Miscellaneous: Enterprise Resource Planning**

			Function Method	Total Cumulative Acquisition Value	Production Cumulative Acquisition Value	Transmission Cumulative Acquisition Value
<b>AS - FILLED</b>						
Pathfinder Projects SAP Software	C303	PTD	\$3,490,654	\$1,322,645	\$214,642	\$1,953,367
Pathfinder Projects SAP S/W Customization	C303	PTD	\$22,366,040	\$8,474,724	\$1,375,298	\$12,516,018
Pathfinder Projects SAP S/W Customization	C303	PTD	\$1,367,765	\$518,260	\$84,105	\$765,400
Pathfinder Projects SAP S/W Customization	C303	PTD	\$4,823	\$1,828	\$297	\$2,699

SAP Version 4.6 Upgrade - SW - (Zb81) Order 131000463	C303	PTD	\$1,188,922	\$450,495	\$73,107	\$665,320
SAP Customization Software/Guixt Order 131001154	C303	PTD	\$18,126	\$6,868	\$1,115	\$10,143
Hr Enhancements-Applicant Tracking Order 131001136 - 65%	C303	DIST	\$76,763	\$0	\$0	\$76,763
Oracle Processor Licences S/W Order 131001978	C303	PTD	\$113,364	\$42,955	\$6,971	\$63,439
Sales & Distrib Enhance SAP SW Order 131001784	C303	PTD	\$117,899	\$44,673	\$7,250	\$65,976
Oracle Growth Software Order 131200480	C303	PTD	\$61,080	\$23,144	\$3,756	\$34,180
Work Mgmt Customization (SAP) Software Order 131001954	C303	PTD	\$161,621	\$61,240	\$9,938	\$90,443
Customer Service Enhancements (SAP) SW Order #131200840	C303	PTD	\$88,738	\$33,624	\$5,457	\$49,657
SAP Enhancements For Asset Data Integrity Order 131200581	C303	PTD	\$178,951	\$67,806	\$11,004	\$100,141
SAP Ecc/Bi Upgrade Software Order 131201661	C303	PTD	\$3,429,730	\$1,299,560	\$210,896	\$1,919,274
SAP Change Control Tool SW Order 131200742	C303	PTD	\$173,529	\$65,752	\$10,670	\$97,107
<b>Total</b>			<b>\$32,838,004</b>	<b>\$12,413,573</b>	<b>\$2,014,504</b>	<b>\$18,409,927</b>
<b>ADJUSTED</b>						
Pathfinder Projects SAP Software	C303	LABOR	\$3,490,654	\$1,121,040	\$100,238	\$2,269,377
Pathfinder Projects SAP S/W Customization	C303	LABOR	\$22,366,040	\$7,182,959	\$642,263	\$14,540,818
Pathfinder Projects SAP S/W Customization	C303	LABOR	\$1,367,765	\$439,264	\$39,277	\$889,224
Pathfinder Projects SAP S/W Customization	C303	LABOR	\$4,823	\$1,549	\$139	\$3,136
SAP Version 4.6 Upgrade - SW - (Zb81) Order 131000463	C303	LABOR	\$1,188,922	\$381,828	\$34,141	\$772,953
SAP Customization Software/Guixt Order 131001154	C303	LABOR	\$18,126	\$5,821	\$520	\$11,784
Hr Enhancements-Applicant Tracking Order 131001136 - 65%	C303	LABOR	\$76,763	\$24,653	\$2,204	\$49,906
Oracle Processor Licenses S/W Order 131001978	C303	LABOR	\$113,364	\$36,408	\$3,255	\$73,702
Sales & Distrib Enhance SAP SW Order 131001784	C303	LABOR	\$117,899	\$37,864	\$3,386	\$76,650
Oracle Growth Software Order 131200480	C303	LABOR	\$61,080	\$19,616	\$1,754	\$39,710
Work Mgmt Customization (SAP) Software Order 131001954	C303	LABOR	\$161,621	\$51,905	\$4,641	\$105,074
Customer Service Enhancements (SAP) SW Order #131200840	C303	LABOR	\$88,738	\$28,498	\$2,548	\$57,691
SAP Enhancements For Asset Data Integrity Order 131200581	C303	LABOR	\$178,951	\$57,471	\$5,139	\$116,341
SAP Ecc/Bi Upgrade Software Order 131201661	C303	LABOR	\$3,429,730	\$1,101,474	\$98,488	\$2,229,768
SAP Change Control Tool SW Order 131200742	C303	LABOR	\$173,529	\$55,730	\$4,983	\$112,816
<b>Total</b>			<b>\$32,838,004</b>	<b>\$10,546,079</b>	<b>\$942,975</b>	<b>\$21,348,949</b>

#### 4.2.4. Account 303, Intangible Plant Miscellaneous: *Miscellaneous Software*

##### **Statement of Issue:**

*What is the correct functionalization of Account 303 – Miscellaneous Software?*

##### **Statement of Facts:**

Miscellaneous software is defined as software that does not easily fit into other categories; such as Customer Information System (CIS), Billing, Metering, Employee Information, Facilities Management, etc. These are software systems that generally make employees more efficient at

their jobs. For example, Microsoft Office XP Licenses is a license for Microsoft office suites that are used by employees' computers.

PSE's explanation of the items was not sufficiently clear to allow an understanding of the software's purposes and therefore the applicability and justification of the functionalization to PTD or Distribution.

**Summary of Parties' Positions:**

PSE supports functionalization of most of the software that BPA has classified as Miscellaneous using the PTD ratio. PSE supports functionalization of Veritas Backup Server Software, Eyretel Recording SW - For VoIP Phone System and Hummingbird DM Client License SW to Distribution.

**Analysis of Positions:**

When direct analysis is used, utilities must provide a clear description and justification for the functionalization of all accounts and sub-accounts.

The software PSEBPA has classified as miscellaneous appears to be either used by a large number of PSE employees or supports the general IT infrastructure and is more accurately functionalized to the operation it supports or replaces, which are PSE's employees. Therefore, the Labor ratio more accurately reflects the appropriate functionalization.

**Draft Decision:**

*Account 303 – Miscellaneous Software will be functionalized to Labor.*

**Table 4.2.4: Account 303, Intangible Plant Miscellaneous  
Miscellaneous Software**

	Function Method		Total Cumulative Acquisition Value	Production Cumulative Acquisition Value	Transmission Cumulative Acquisition Value	Distribution/ Other Cumulative Acquisition Value
<b>AS - FILLED</b>						
Common Access To Legacy Systems Data Order 131000203	C303	PTD	\$142,127	\$53,853	\$8,739	\$79,534
Common Access To Legacy Systems Data	C303	PTD	\$3,192	\$1,210	\$196	\$1,786
Hummingbird Dm Client License SW Order 131200000	C303	DIST	\$7,783	\$0	\$0	\$7,783
Microsoft Direct Enterprise SW License Order 131200005	C303	PTD	\$752,534	\$285,143	\$46,274	\$421,118
Hr Enhancements-Compensation S/W Order 131001916	C303	PTD	\$90,740	\$34,382	\$5,580	\$50,778
Microsoft Direct Enterprise SW License Order 131200005	C303	PTD	\$761,068	\$288,377	\$46,798	\$425,893
Microsoft Direct Enterprise SW License Order 131200005	C303	DIST	\$193,390	\$0	\$0	\$193,390

<b>Total</b>			\$1,950,834	\$662,965	\$107,588	\$1,180,282
<b>ADJUSTED</b>						
Common Access To Legacy Systems Data Order 131000203	C303	LABOR	\$142,127	\$45,645	\$4,081	\$92,401
Common Access To Legacy Systems Data	C303	LABOR	\$3,192	\$1,025	\$92	\$2,075
Hummingbird Dm Client License SW Order 131200000	C303	LABOR	\$7,783	\$2,499	\$223	\$5,060
Microsoft Direct Enterprise SW License Order 131200005	C303	LABOR	\$752,534	\$241,680	\$21,610	\$489,245
Hr Enhancements-Compensation S/W Order 131001916	C303	LABOR	\$90,740	\$29,141	\$2,606	\$58,993
Microsoft Direct Enterprise SW License Order 131200005	C303	LABOR	\$761,068	\$244,421	\$21,855	\$494,793
Microsoft Direct Enterprise SW License Order 131200005	C303	LABOR	\$193,390	\$62,108	\$5,553	\$125,729
<b>Total</b>			\$1,950,834	\$626,520	\$56,020	\$1,268,294

#### **4.2.5. Account 303, Intangible Plant Miscellaneous: Meter Data Interface Software**

##### **Statement of Issue:**

*What is the correct functionalization of Account 303 – Meter Data Interface Software?*

##### **Statement of Facts:**

Meter Data Interface Software supports the following:

*Meter Reading System* – this system manages the meter reading for residential and commercial customers. It includes meter route management and performs limited meter read validation.

*Advanced Meter Infrastructure (AIM) System* – this system(s) measures, collects and analyses energy usage from advanced devices through various communication media on request or on a pre-defined schedule. It also includes the infrastructure (e.g., hardware, software, communications, customer associated systems, etc.) and the meter data management system components.

##### **Summary of Parties' Positions:**

PSE supports functionalization of the Account using the PTD ratio.

##### **Analysis of Positions:**

Section VIII.B, Table 1 of the 2008 ASCM, provides that functionalization of Account 303 is direct analysis with an option to Distribution.

The 2008 ASCM states “Functionalization of each Account included in a Utility’s Average System Cost (ASC) shall be according to the functionalization prescribed in Table 1, *Functionalization and Escalation Codes*, beginning on page 18. Direct Analysis on an Account may be performed only if Table 1 states specifically that a Utility may perform a Direct Analysis on the Account with the exception of conservation costs. Utilities will be able to functionalize all

conservation-related costs to Production, regardless of the Account in which they are recorded.” *Id* at 16.

When utilities perform a direct analysis on an Account, they must submit sufficient documentation so that BPA can determine if the functionalization is reasonable. In addition, the 2008 ASCM states that “BPA will not allow Utilities to use a combination of Direct Analysis and a prescribed functionalization method for the same Account. The Utilities can develop and use a functionalization ratio or use a prescribed functionalization method if the Utility through Direct Analysis can justify how the ratio adequately reflects the functional nature of the costs included in any Account or cost item being functionalized by the ratio.” *Id.* at 17.

Meter Data Interface Software supports the system that manages the meter reading for retail customers. It includes meter route management and performs limited meter read validation and or measures, collects and analyses energy usage from advanced devices through various communication media on request or on a pre-defined schedule.

PSE’s justification provided in its support worksheet for using the PTD ratio for this account was that Meter Data Interface Software “supports all functions of the company.” Such catchall phrases, if taken to the extreme, could be used to rationalize using the PTD ratio to functionalize the entire ASC filing using the PTD ratio. Such simple statements do not constitute a valid direct analysis.

BPA believes that the functionalization of a software system should generally follow the functionalization of the operation it supports and how the operation is functionalized under the 2008 ASCM, which for Meter Data Interface Software is Accounts 902.

**Draft Decision:**

*Account 303, Intangible Plant Miscellaneous: Meter Data Interface Software will be functionalized to Distribution.*

**Table 4.2.5: Account 303, Intangible Plant Miscellaneous:  
COMPUTER METER DATA INTERFACE SOFTWARE**

	Function Method	Total Cumulative Acquisition Value	Production Cumulative Acquisition Value	Transmission Cumulative Acquisition Value	Distribution/ Other Cumulative Acquisition Value
<b>AS - FILLED</b>					
Meter Data Interface Software Order 131000543	C303 PTD	\$471,659	\$178,716	\$29,003	\$263,940
Routestar Meter Reading Software Order 130000500	C303 PTD	\$114,641	\$43,439	\$7,049	\$64,153
Meter Data Warehouse Enhancements Order 131001914	C303 PTD	\$572,713	\$217,007	\$35,216	\$320,490
Meter Data Warehouse Enhancements Order 131001914	C303 PTD	\$203,329	\$77,043	\$12,503	\$113,783
Meter Data Warehouse Enhancements Order 131001914	C303 PTD	\$62,496	\$23,680	\$3,843	\$34,973

<b>Total</b>				<u>\$1,424,837</u>	<u>\$539,886</u>	<u>\$87,614</u>	<u>\$797,338</u>
<b>ADJUSTED</b>							
Meter Data Interface Software Order 131000543	C303	DIST	\$471,659	\$0	\$0	\$471,659	
Routestar Meter Reading Software Order 130000500	C303	DIST	\$114,641	\$0	\$0	\$114,641	
Meter Data Warehouse Enhancements Order 131001914	C303	DIST	\$572,713	\$0	\$0	\$572,713	
Meter Data Warehouse Enhancements Order 131001914	C303	DIST	\$203,329	\$0	\$0	\$203,329	
Meter Data Warehouse Enhancements Order 131001914	C303	DIST	\$62,496	\$0	\$0	\$62,496	
<b>Total</b>				<u>\$1,424,837</u>	<u>\$-</u>	<u>\$-</u>	<u>\$1,424,837</u>

**4.2.6. Account 303, Intangible Plant Miscellaneous: Tax Fixed Asset S/W Customization**

**Statement of Issue:**

*What is the correct functionalization of the Account 303 – Tax Fixed Asset S/W Customization?*

**Statement of Facts:**

The functionalization of a software system should follow the functionalization of the operation it supports and how the operation is functionalized under the 2008 ASCM.

The explanation of the items was not sufficiently clear to allow an understanding of the software’s purposes and therefore the applicability and justification of the functionalization to PTD.

When direct analysis is used, there is a requirement for a clear description and justification for the functionalization of all accounts and sub-accounts.

It is BPA understanding that the Tax Fixed Asset S/W Customization software us used in the tracking of the taxes related to fixed assets such as property taxes.

The 2008 ASCM requires property taxes to be functionalized to PTDG

**Summary of Parties’ Positions:**

PSE supports functionalization using the PTD ratio.

**Analysis of Positions:**

The 2008 ASCM requires property taxes to be functionalized to PTDG

**Draft Decision:**

*Account 303 – Tax Fixed Asset S/W Customization will be functionalized to PTDG.*

**Table 4.2.6: Account 303, Intangible Plant Miscellaneous:  
Tax Fixed Asset S/W Customization**

	Function Method	Total Cumulative Acquisition Value	Production Cumulative Acquisition Value	Transmission Cumulative Acquisition Value	Distribution/ Other Cumulative Acquisition Value
<b>AS FILED</b>					
Tax Fixed Asset S/W Customization	C303 PTD	\$68,423	\$25,926	\$4,207	\$38,290
<b>ADJUSTED</b>					
Tax Fixed Asset S/W Customization	C303 PTDG	\$68,423	\$26,013	\$4,186	\$38,224

#### **4.3. SCHEDULE 1A: Cash Working Capital**

No direct adjustment.

#### **4.4. SCHEDULE 2: Capital Structure and Rate of Return**

No direct adjustment.

#### **4.5. SCHEDULE 3: Expenses**

No direct adjustment.

#### **4.6. SCHEDULE 3A: Taxes**

##### **4.6.1. SCHEDULE 3A –Taxes: - State and Other Taxes Property or In-Lieu:**

##### **Statement of Issue:**

*Should State and Other Taxes Property or In-Lieu Taxes be functionalized to PTDG or does the 2008 ASCM allow direct analysis?*

##### **Statement of Facts:**

PSE used the PTDG ratio to functionalize the state of Washington’s Property Taxes and directly assign Montana Property Taxes - Colstrip Generating Station and Oregon Property Taxes - BPA Transmission Line to Production.

PSE functionalized property taxes related to out-of-state production plant to Production. PSE argues this functionalization is consistent with the 2008 ASCM ROD, which states: “The ASCM will exclude state and local income- and revenue-related taxes, excise taxes and miscellaneous fees from ASC, although BPA will include in-state and out-of-state property taxes associated with an exchangeable resource or for resource-related costs such as pipelines.”

##### **Summary of Parties’ Positions:**

PSE believes the 2008 ASCM provides that out-of-state property taxes associated with an exchangeable resource or for resource-related costs are exchangeable and utilities can use direct analysis to functionalize such costs.

##### **Analysis of Positions:**

The 2008 ASCM requires property or in-lieu taxes to be functionalized using the PTDG ratio.

The ASCM does not allow for direct assignment of costs of property or in-lieu taxes.

**Draft Decision:**

*State and Other Taxes Property or In-Lieu Taxes will be functionalized with the PTDG ratio.*

**Table 4.6.1: SCHEDULE 3A - Taxes:  
State and Other Taxes Property or In-Lieu**

	<b>Functionalization Method</b>	<b>Total</b>	<b>Production</b>	<b>Transmission</b>	<b>Distribution</b>
<b>AS FILED</b>					
Property or In-Lieu (c)	Combination	36,122,054	19,924,433	2,236,370	13,961,251
<b>ADJUSTED</b>					
Property or In-Lieu (c)	PTDG	36,122,054	13,732,821	2,210,045	20,179,188

**4.7. SCHEDULE 3B: Other Included Items**

No direct adjustment.

**5. SUPPORTING DOCUMENTATION:**

**5.1. Purchased Power and Sales for Resale**

**5.2. Salaries and Wages**

No direct adjustment

**5.3. Labor Ratios**

No direct adjustment

**5.4. Distribution Loss Factor**

No direct adjustment.

**5.5. ASC FORECAST MODEL:**

**5.5.1. ASC Forecast Model: Load Forecast - Calendar year versus fiscal year**

**Statement of Issue:**

*Whether load forecasts should be based on calendar years or fiscal years.*

**Statement of Facts:**

PSE supplied calendar year load forecasts in its Initial ASC Filing.

ASCs are based on a fiscal year and therefore require fiscal year load forecasts. During the Review Process, PSE supplied an updated load forecast based on fiscal years. The supporting data for the fiscal year forecast for purposes of ASC calculation are shown in tab DetldElecDelLoads at Column T in Attachment A - CONFIDENTIAL PSE Resp BPA DR 030 F2007Tables to PSE Response to BPA Data Request No. 030 in BPA ASC Docket ASC-09-PS-01 dated Wed 11/26/2008.

**Summary of Parties' Positions:**

PSE agrees with the need for fiscal year data and provided revised load forecasts to reflect fiscal years.

**Analysis of Positions:**

ASCs are based on a fiscal year and therefore require fiscal year load forecasts. PSE provided revised forecasts to reflect fiscal year data.

**Draft Decision:**

*BPA will adjust the initially-filed load forecasts to reflect fiscal year data based on PSE's revised forecasts.*

**Table 5.5.1: ASC Forecast Model: Load Forecast:  
Calendar year versus fiscal year  
(GWh)**

Total Retail Load @ Meter	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
CY	21,627	21,816	22,344	22,793	23,220	23,631	24,025	24,454	24,901	25,419	25,941
FY	21,332	21,591	21,852	22,066	22,264	22,380	22,524	22,685	22,872	23,122	23,385

## 5.5.2. ASC Forecast Model: Resource Additions

### Statement of Issue:

*Should the Group 2 resources be adjusted to reflect PSE errata resource additions?*

### Statement of Facts:

On November 10, 2008 PSE submitted revisions to its Group 2 resource. PSE provided both confidential detail and non-confidential grouped detail.

### Summary of Parties' Positions:

On November 10, 2008 Puget Sound Energy submitted errata to its initial ASC Appendix 1 for the Exchange Period FY 2010-11.

### Analysis of Positions:

The revised data is both in the reasonable range for the specified resources and meets the materiality thresholds.

### Draft Decision:

*BPA adjusted the new resources to reflect the adjusted resource additions.*

**Table 5.5.2: ASC Forecast Model: Resource Additions  
Group 2 Resources**

		AS FILED	ADJUSTED
<b>Other Production Plant</b>			
Other Production	340-346	156,665,174	655,785,174
Fuel Stock	151	0	0
Plant Materials and Operating Supplies	154	0	0
EPA Allowances	158.1- 158.2	0	0
<b>Other Expense</b>		0	0
Other Power - Fuel	547	0	0
Other Power - Operations (Excluding 547 - Fuel)	546-550	0	0
Other Power - Maintenance	551-554	3,916,014	10,941,311
Property Insurance	924	80,801	398,108
Depreciation	403	9,408,555	26,152,555
Firm Sales for Resale (\$)	447	0	0
Firm Sales for Resale (MWh)		0	0
Expected Annual Generation (MWh)		207,886	562,915
<b>Property Taxes Production</b>		0	0
Total Production Property	262	467,448	3,988,784
		0	0
<b>Purchased Power Contracts (Market)</b>		0	0
Contract Termination (\$)		0	0

		<b>AS FILED</b>	<b>ADJUSTED</b>
		0	0
Purchased Power (Excluding REP Reversal)	555	41,992,987	0
Purchased Power (MWh)		518,592	0
System Control and Load Dispatching	556	0	0
Other Expenses	557	0	0
<b>Transmission Plant</b>		0	0
Transmission Plant	350-359	0	0
Plant Materials and Operating Supplies		0	0
<b>Transmission Expenses</b>		0	0
Transmission of Electricity to Others (Wheeling)	565	13,942,822	17,414,538

### **5.5.3. ASC Forecast Model: Capacity Factors: New Plant Additions**

#### **Statement of Issue:**

*Whether BPA should adjust the capacity factor in the ASC Forecast model for estimating the operating costs and expected energy output for new plant additions.*

#### **Statement of Facts:**

In PSE's Supplemental Response to Data Request 039 dated Feb 10, 2009, it stated that "Year to year, the projected capacity factor varies depending on projected market conditions. Similarly, the actual capacity factor will vary based upon actual market conditions. Mint Farm Generating Station is designed and permitted to run 24/7. Economics and market conditions will determine the actual run time for the plant. As/if the actual run time changes over time, so will the actual capacity factor, all other things being equal. Changes to the capacity factor and run time assumptions for Mint Farm necessitate corresponding changes to the total O&M costs associated with the new resources. "

PSE restated its capacity factor, average cost of fuel burned and heat rate. This restatement resulted in changes in Mint Farm's O&M expenses.

#### **Summary of Parties' Positions:**

PSE restated its capacity factor, average cost of fuel burned and heat rate, with a resulting increase in Mint Farm's O&M expenses.

#### **Analysis of Positions:**

The restated capacity factor is in the range of normal operating characteristics for a combined cycle combustion turbine.

**Draft Decision:**

*BPA adjusted Mint Farm’s capacity factor, average cost of fuel burned and heat rate, which increased Mint Farm’s O&M expenses.*

**Table 5.5.3 ASC Forecast Model: Capacity Factors: New Plant Additions:  
Capacity Factors**

	<b>Mint Farm</b>	<b>Mint Farm</b>
	<b>AS FILED</b>	<b>ADJUSTED</b>
Capacity Factor (Expected)	26.1%	54%
Average Cost of fuel burned (\$/MMBtu)	\$9.11	\$6.67
Total O&M (including Fuel and Transmission)	\$72,493,939	97,063,118

**6. OTHER ISSUES**

**6.1. Generic Issue List**

In addition to the above-noted issues specific to IPC, BPA raised seven issues that may be “generic” to all utilities. Following are the issues, which were discussed with the parties during the Review Process. In general, the IOUs responded in unison. Puget Sound submitted additional comments. Franklin PUD and Snohomish PUD did not respond in writing; however, Snohomish voiced support for the IOUs’ proposal during the generic issue list discussion at the workshop held on March 4, 2009.

**6.1.1. SCHEDULE 1: Plant Investment/Rate Base: Account 303, Intangible Plant -  
Miscellaneous**

**Statement of Issue:**

*Whether BPA should adopt a common functionalization for similar types of software assets?*

### **Statement of Facts:**

During review of the ASC filings, BPA noticed that a direct analysis performed by the utilities resulted in different functionalizations for similar types of software. For example, metering and customer information system (CIS) software was functionalized to Distribution by PGE while Avista, IPC, PacifiCorp, Puget and NorthWestern functionalized such software using the PTD ratio. The direct analysis provides by utilities to support use of the PTD ratio to functionalize Account 303 – Software was minimal or non-existent.

The 2008 ASCM specifies that the default functionalization for Account 303 – Intangible Plant - Miscellaneous is Direct, with an option to Distribution.

### **Summary of Parties' Positions:**

The parties generally support the idea of a consistent functionalization of similar types of software. In their February 25, 2009, response to BPA's Issue List the IOUs stated that:

BPA should maintain consistency in the functionalization of these common types of programs, with costs greater than an identified threshold value, amongst utilities when calculating ASC. In our initial Appendix 1 filings the IOUs have not functionalized certain software the same, we are all in agreement that given a determination by BPA on the proper functionalization of these items the IOUs will support a consistent treatment.

However, parties filed separate responses concerning functionalization of software included in Account 303. For example, Puget filed separate comments on functionalization of Account 303 software arguing that:

Functionalization of software assets should reflect the regulatory treatment of such software assets in jurisdictional ratemaking.

In calculating ASCS, it may sometimes be appropriate for BPA to maintain consistency in the functionalization of similar types of software assets. In some cases, however, jurisdictional or cost differences may render a consistent or generic treatment insufficient. If BPA were to adopt common functionalization for similar types of software assets, such common functionalization should be a default from which a utility could opt out.

PacifiCorp's February 11, 2009, response to BPA's Issues List stated many times in response to a BPA issue concerning functionalization of a specific piece of software that the "functionalization of a software system should follow the functionalization of the operation it supports." PacifiCorp also offered a conflicting rationale in response to a BPA Issue with a specific piece of software. For example, PacifiCorp's response to functionalization of a Customer Information System argued that "[i]n determining the proper functionalization, the focus should be on what costs the Company is recovering using this computer software."

PGE's February 11, 2009, response to BPA's Issues List stated that:

Account 303 contains many different types of software, some of which should be functionalized using allocation factors rather than directly assigned. The account consists of the following categories and cost assignments:

- Function Specific – Direct assigned
- Customer Service – Direct assigned to distribution then allocated
- Environmental Compliance – PTD allocation of \$55,350
- General Ledger/Payroll – Labor allocation
- Common T & D Software – O&M Allocation, 15% T, 85% D

This allocation method is a hybrid that combines the use of direct assignment and allocation factors. It was developed with oversight from the Oregon Public Utility Commission and is used in PGE rate cases. In the ASC Sch. 3 Expense allocations, A&G expenses, Office Supplies and Office Expenses are assigned using a Labor allocation. To be consistent, General Ledger and Payroll software should also be assigned using a Labor allocation. For PGE, a combination of direct and allocated methods is the most efficient and accurate way to functionalize account 303.

BPA should consider expanding their functionalization methodology to include the hybrid method described above. This method could prescribe a common functionalization based on the type of software. It would not apply a uniform allocation factor to the total of account 303.

NorthWestern Energy's February 11, 2009, response to BPA's Issues List argued that:

NWE believes it appropriate to adopt a common functionalization for similar types of software assets and still allow an IOU the option to functionalize based on its unique accounting applications supported with adequate documentation.

### **Analysis of Positions:**

Section VIII.B, Table 1 of the 2008 ASCM, provides that functionalization of Account 303 is direct analysis with an option to Distribution.

The 2008 ASCM states "Functionalization of each Account included in a Utility's Average System Cost (ASC) shall be according to the functionalization prescribed in Table 1, *Functionalization and Escalation Codes*, beginning on page 18. Direct Analysis on an Account may be performed only if Table 1 states specifically that a Utility may perform a Direct Analysis on the Account with the exception of conservation costs. Utilities will be able to functionalize all conservation-related costs to Production, regardless of the Account in which they are recorded." *Id* at 16.

When utilities perform a direct analysis on an Account, they must submit sufficient documentation so that BPA can determine if the functionalization is reasonable. In addition, the 2008 ASCM states that "BPA will not allow Utilities to use a combination of Direct Analysis and a prescribed functionalization method for the same Account. The Utilities can develop and

use a functionalization ratio or use a prescribed functionalization method if the Utility through Direct Analysis can justify how the ratio adequately reflects the functional nature of the costs included in any Account or cost item being functionalized by the ratio.” *Id.* at 17.

BPA’s review of the initial ASC filings revealed that most utilities either used the PTD or Labor ratio to functionalize a majority of Account 303 software. However, the functionalization methodology and rationale for the direct analysis was non-existent, or weak and not consistent among utilities. Some of the statements included by utilities to support functionalization of a specific piece of software using the PTD ratio used terms like “supports all functions of the company”<sup>3</sup> or “supports all areas of the company.”<sup>4</sup> These catchall phrases, if taken to the extreme, could be used to rationalize using the PTD ratio to functionalize the entire ASC filing using the PTD ratio. Such simple statements do not constitute a valid direct analysis.

BPA and the parties generally support the concept that the functionalization of a software system should follow the functionalization of the operation it supports and how the operation is functionalized under the 2008 ASCM. While the concept is easy enough to understand, it is difficult to implement within the context of a utility’s ASC filing because of how the software is recorded or listed in internal databases of software in the utility information systems and because of the sheer volume of the individual items of software.

For example, a utility may record its customer information system (CIS) as ‘Customer Information System’ or record it by the name of the vendor such as Oracle, Harris, SAP or Ventyx, or by the application name such as Xcellant, Peace, or ConsumerLinX. Repeating this disparate method of recording software in a utility database for a 1,000 or more unique software products that a typical utility may have and the task of functionalizing the software for an ASC filing is difficult and time-consuming for a utility analyst that may not have familiarity with the software and how and where it is used within the utility. Given this difficulty, it is not surprising that most utilities and their regulatory commissions use a simple ratio, such as PTD or labor, to functionalize most or all of the software in Account 303. This approach works well for development of retail rates which incorporate most, if not all, production, transmission and distribution costs of the utility.

However, a utility’s ASC may include only allowable production and transmission costs determined in accordance with the 2008 ASCM. Using the PTD or LABOR ratio for all software costs could result in an incorrect functionalization of costs. For example, the costs of certain software packages are very large relative to others in Account 303, which would cause simple ratios to functionalize a portion of distribution-related software into ASC. For example, in PacifiCorp’s Response to BPA Data Request ASC-09-PA-12, PacifiCorp stated that:

The remaining \$462 million consists of various computer hardware and software assets. Two assets dwarf the remaining assets – the Company’s accounting software – SAP (\$159 million) and Customer Service System (\$102 million)

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<sup>3</sup> See, for example, Data Responses ASC-09 PA-BPA-12 and ASC-09-PS-BPA-6

<sup>4</sup> See, for example, Data Response ASC-09-PS-BPA-12, and Excel file E302, 303, E399, Common 2006 filed.xls, DATA for ASC tab, column W.

which support all areas of the Company and have been allocated on the PTD factor.

BPA decided to develop a general framework for use in software functionalization for Account 303 software. It did so to ensure that software costs will be functionalized in accordance with the 2008 ASCM and that similar types of software would receive the same functionalization for all exchanging utilities to the greatest extent possible. In addition, it should allow utilities that decided not to undertake the task of functionalization of Account 303 – Software an “easy to use” framework for functionalization.

### **Draft Decision:**

*BPA will functionalize software systems to follow the operation they support or the labor expense that the software replaced. If a utility fails to provide adequate documentation, BPA will functionalize software systems to Distribution.*

Below is a list that describes and categorizes the bulk of utility software, includes the accounts associated with utility software and the functionalization BPA will use for each type of software.

### **System Categories**

- ***Customer/Marketing*** – this category includes such applications as customer information systems for residential, commercial, and industrial customer billing, energy and demand management systems, meter reading, call center operations, and customer relationship management systems.
  - *Customer Information System (CIS)* – systems that manage the residential and small commercial customer information, bill calculation and presentation, and payment processes. Distribution - Accounts 901-910.
  - *Industrial Billing* – systems that manage the large industrial customers, bill calculation and presentation processes. Distribution - Accounts 901-910.
  - *Energy and Demand Management Systems* – systems and software that design, administer, manage, track, and report on the utility’s portfolio of Demand-Side Management (DSM) and Energy Efficiency (EE) programs. Production.
  - *Call Center Operations* - these systems manage the operations of customer call centers including telephony and data management and employee scheduling and performance management. Distribution - Accounts 901-910.
  - *Customer Relationship Management (CRM) System* – systems that manage information about the utility’s customers. Distribution - Accounts 901-910.
  - *Advanced Meter Infrastructure (AIM) System* – systems that measure, collect and analyze energy usage from advanced devices through various communication media on request or on a pre-defined schedule. It also includes the infrastructure (e.g., hardware, software,

communications, customer associated systems, etc.) and the meter data management system components. Distribution – Account 902.

- *Meter Reading System* – systems that manage the meter reading for residential and commercial customers. It includes meter route management and performs limited meter read validation. Distribution - Accounts 902.
- ***Employee Information*** – this category includes such applications as employee benefits, human resources, training, time entry, payroll, and compensation management systems.
  - *Payroll System* – systems that calculate pay for employees and produces payments (checks or direct deposits). LABOR – Account 920.
  - *Human Resources* – systems that maintain employee information required to pay employees and maintain individual employee personal and work-related information. LABOR – Account 920.
  - *Training System* – systems that maintain information about all employee training requirements, schedules, certifications, courses, and update/recertification requirements. LABOR – Account 920.
  - *Time Entry System* – systems that capture actual time and attendance information for employees. LABOR – Account 920.
  - *Compensation Management System* – systems that optimize and automate the salary planning process and maintain information on salary history, company guidelines, employee performance and job aspirations. LABOR – Account 920.
- ***Facilities Management*** – this category includes such applications as generation operations and management, transmission operations and management, substation operations and management, geographic information systems, asset/facilities management, and computer-aid design systems.
  - *Geographic Information System (GIS)* – systems that integrate hardware, software, and data for capturing, managing, analyzing, and displaying all forms of geographically referenced information. Distribution - Accounts 580-599.
  - *Computer Aided Design (CAD)* – systems that use computers to aid in the design and particularly the drafting (technical drawing and engineering drawing) of a part or product, including entire buildings. It is both a visual (or drawing) and symbol-based method of communication whose conventions are particular to a specific technical field. Distribution - Accounts 580-599.
- ***Financial Information*** – this category includes such applications as accounts receivable, accounts payable, general ledger, treasury and cash management, debt management, operations and capital budget preparation and management, asset accounting, work order accounting, and cost accounting systems.

- *Enterprise Resource Planning (ERP) System* – systems that provide a common foundation for business accounting including common functions such as accounts payable, general ledger, and accounts receivable. Representative vendor solutions include: Lawson Enterprise Financial Management, Oracle B-Business Suite, PeopleSoft Enterprise Financial Management Solutions, and SAP ERP Financials. LABOR – Account 920.
  - *Treasury and Cash Management* – systems that maintain information on the cash accounts, investments cash pooling, and banking operations. Representative vendor solutions include: Oracle Cash and Treasury Management Solution, SymPro LABOR – Account 920.
  - *Debt Management* – systems that manage the debt owned by the utility including debt instruments, notes, bonds, commercial paper, and stocks. PTDG.
  - *Budget Preparation* – systems that provide for the preparation of both the capital and operational budget. These systems are often incorporated in the ERP system (see above). LABOR – Account 920.
  - *Asset Accounting* – systems that automate the continuing property records of the utility. PTDG.
  - *Work Order Accounting* – systems that maintain an automated sub-ledger to the general ledger to account for work-in-progress accounting for both capital and operation and maintenance projects. PTDG.
  - *Cost Accounting* – systems that provide a standard cost accounting capability for both capital projects and operations and maintenance activities. LABOR – Account 920.
- ***Management Information*** – this category includes such applications as executive information, key performance indicators, and data warehouse systems.
- *Executive Information* – systems that facilitate and support the information and decision-making needs of senior executives by providing easy access to both internal and external information relevant to meeting the strategic goals of the utility. LABOR – Account 920.
  - Key Performance Indicators – systems that capture both internal and external information related to key business indicators for senior management. LABOR – Account 920.
  - Business Intelligence – systems that provide historical, current, and predictive information about the operations of the utility. LABOR – Account 920.
- ***Market Operations and Trading*** – this category includes such applications as risk management, market simulation, market interface, transmission rights and access, transmission pricing and billing, wholesale billing and settlement, energy trading and tagging, and market dispatch systems.

- *Risk Management* – systems used to integrate loss data from a variety of sources to develop a comprehensive view of operational risk exposure to the utility. LABOR – Account 920.
  - *Market Simulation* – systems used to provide a model of transmission and security-constrained optimization of the system resources against spatially distributed loads. These systems are used to produce realistic projections of market clearing prices and asset utilization levels across the transmission grid. Transmission.
  - *Transmission Rights and Access* – systems that maintain data on the utility’s transmission line rights and access policies. Transmission.
  - *Transmission Pricing and Billing* – systems that, similar to the *Customer Information System* above, maintain information on transmission system customers, bill calculation and presentation, and payment processes. Transmission.
  - *Wholesale Billing and Settlement* – systems that, similar to the *Customer Information System* above, maintain information on wholesale customers, bill calculation and presentation, and payment processes. LABOR – Account 920.
  - *Market Dispatch* - LABOR – Account 920.
  - *Energy Trading and Tagging* – systems that provide trade processing, risk control and invoicing, credit risk to manage credit exposure, collateral management, and counterparty evaluation. Representative vendor solutions include: Triple Point Technology’s Commodity XL, Allegro, and ADICA’s EMCAS system. Production.
- ***Planning Models*** – this category includes such applications as resource management, capacity plan, fuel plan, load forecast, purchased power, and financial/rate forecast systems. LABOR – Account 920.
- ***Resource Management*** – this category includes such applications as materials management, purchasing, warehouse management, inventory, fleet management, fuel management, and alternative energy supply systems.
- *Materials Management* – systems that maintain information on products, price lists, inventory receipts, shipments, movements, and counts within the utility, as well as to and from suppliers. These systems are often incorporated in the ERP system (see above). PTD.
  - *Purchasing* – systems that automate the acquisition of goods and services. These systems are often incorporated in the ERP system (see above). LABOR – Account 920.
  - *Warehouse and Inventory Management* – systems that include the physical inventory, shipping, receiving, and picking of items, barcode labeling, and space management. These systems are often incorporated in the ERP system (see above). PTD – Account 163.

- *Fleet Management* – systems that provide for the management and maintenance of all vehicles and equipment used by the utility including scheduling maintenance and preventive maintenance. Distribution - Account 933.
  - *Fuel Management* – systems that maintain information on fuel management for the utility's fleet operations. Distribution - Account 933.
  - *Alternative Energy Supply* – systems that manage the availability of energy supply from alternative sources which may be outside the control of the utility. Production.
- **System Operations** – this category includes such applications as outage scheduling, system optimization, load control, generation control, SCADA, energy management, system dispatch, fault restoration, stability analysis, and state estimator systems.
- *Generation Control* – systems that regulate the power output of electric generators within a prescribed area in response to changes in system frequency, tie-line loading, and the relation of these to each other. Production.
  - *Generation Operations and Management* – systems used to maximize plant operating income by optimizing output and heat rates and by reducing maintenance expenses. Production.
  - *Substation Operations and Management* – systems used to monitor the operation of substations to maximize performance and ensure safe equipment operations. TD.
  - *Supervisory Control And Data Acquisition (SCADA)* – systems that maintain the real-time, as-operated state of the electrical network, tracking remote control and local control operations, temporary network changes, and fault conditions. TD.
  - *Energy Management (EMS)*– systems used to reduce energy losses, improve the utilization of the system, increase reliability, and predict electrical system performance as well as optimize energy usage to reduce cost. TD.
  - *System Dispatch* – systems used to evaluate and optimize on an hour-ahead and day-ahead basis the dispatch of the utility's power plants to changing plant conditions, power markets, and contractual obligations. Production.
- **Work Management** – this category includes such applications as plant maintenance, work order, service order, outage management, trouble order, contractor management, and project management systems.
- *Plant Maintenance* – systems used to plan, manage, and evaluate the required major maintenance activities typically in generation facilities or other major facilities and substations. Production.
  - *Work Order* – systems that manage longer-duration work, either capital or operations and maintenance frequently performed by multi-person crews. Distribution.

- *Service Order* – systems that manage the short-interval work of the utility typically performed by service crews. The system would include work scheduling, tracking, and order completion. Distribution.
  - *Outage Management* – systems that prioritize restoration efforts based upon criteria such as locations of emergency facilities, size of outages, and duration of outages, extent of outages and number of customers impacted; calculate estimates of restoration times; provides information on crews needed and assisting in restoration; and predict the location of fuse or breaker that opened upon failure. Representative vendor solutions include: ABB, GE Energy, Intergraph, Oracle Utilities, and Trimble. Distribution.
- **Miscellaneous Software** – For software that is in general and widespread use throughout the utility such as Microsoft Office, Microsoft Exchange Server, Anti-Virus applications Adobe products, or for software where the functional nature cannot be determined and the cost of the software is less than 1% of the total cost in Account 303 – Software. LABOR

### **6.1.2. SCHEDULE 1: Account 182.3, Other Regulatory Assets; Account 254, Other Regulatory Liabilities**

#### **Statement of Issue:**

*Whether BPA should adopt a common functionalization for similar types of regulatory assets and liabilities?*

#### **Statement of Facts:**

There is an inconsistency in the way the IOUs functionalize Deferred Pension, Pay and other labor-related Assets and Liabilities. PGE, Avista and NW use the Labor Ratio. IPC uses PTD. PSE and PacifiCorp functionalize these assets to Distribution. The issue is whether BPA should maintain consistency in the functionalization of deferred pension, pay and other labor-related assets and liabilities among utilities when calculating ASC.

#### **Summary of Parties' Positions:**

In PSE's February 25, 2009, response to BPA's Issue list, it stated that:

Functionalization of regulatory assets and liabilities should reflect the regulatory treatment of such regulatory assets and liabilities in jurisdictional ratemaking.

In calculating ASCs, it may sometimes be appropriate for BPA to maintain consistency in the functionalization of deferred pension, pay and other labor related assets and liabilities to the extent that regulatory treatment of the account is the same across utilities and jurisdictions. In some cases, however, jurisdictional or cost differences may render a consistent or generic treatment insufficient. If BPA were to adopt common functionalization for similar types of software assets, such common functionalization should be a default from which a utility could opt out.

Avista, Idaho Power, NorthWestern, PacifiCorp and PGE's February 25, 2009, joint response to BPA's Issue Lists stated that "BPA should maintain consistency in the functionalization of deferred pension, pay and other labor related assets and liabilities amongst utilities when calculating ASC. All of the IOUs agree that it is appropriate for purposes of determining a utility's ASC to functionalize these accounts by the LABOR ratio."

### **Analysis of Positions:**

The 2008 ASCM ROD states that "The Utility must describe the functional nature of the regulatory asset or liability, whether or not the asset or liability is included in rate base by its state commission(s), and the return or carrying costs allowed by the state commission(s). *Under no conditions would regulatory assets be included in ASC at a level greater than regulatory commissions allow them to be recovered in retail rates.*" 2008 ASCM ROD at 149 (emphasis added).

Regulatory assets and liabilities exist in the balance sheets of electric utilities only because of the effects of regulation. FERC defines them as "assets and liabilities that result from rate actions [of] regulatory agencies."<sup>5</sup> The WUTC states that "regulatory assets are a creature of regulatory decisions made by state regulators or FERC. These assets represent costs a Utility is allowed to book and recover in rates over a period of time, rather than expense in a particular period." *Id.*

Regulatory Assets and Liabilities, Accounts 182.3 and 254 in the FERC Uniform System of Accounts, were established in March of 1993 in FERC Order No. 552, which established uniform accounting treatment for allowances associated with the 1990 Clean Air Act. Order No. 552 also dealt more broadly with accounting for regulatory assets and liabilities for electric and gas utilities.<sup>6</sup>

Regulatory assets and liabilities are a subset of the larger issue of the difference between accounting for utilities that are subject to price regulation and Generally Accepted Accounting Principles (GAAP). The issue can be traced back to the Internal Revenue Act of 1954 which permitted use of accelerated depreciation for income tax purposes. In 1962, the Accounting Principles Board (precursor to FASB) issued Opinion No. 2, which dealt comprehensively with the issue of accounting for industries subject to price regulation, was prepared in response to questions surrounding the creation of investment tax credits by Congress. Opinion No. 2 stated that all companies are subject to GAAP, but those differences may arise, generally surrounding recognition of cost, for companies subject to price or rate regulation.<sup>7</sup>

Simply because a utility recovers the expense associated with a regulatory asset in rates does not mean that the regulatory asset is also included in a utility's rate base and earning a return.

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<sup>5</sup> 6 See §11.03[2], G. Hahne and G. Aliff, *Public Utility Accounting*, pages 11-5 (Mathew Binder 2005).

<sup>6</sup> Ibid. 11-5

<sup>7</sup> Ibid.

After review of the parties' comments and the 2008 ASCM ROD, BPA believes that functionalization of Regulatory Assets and Liabilities is a two-step process. First, the regulatory asset or liability must be a component of the utility's jurisdictional rate base. If the regulatory asset or liability is **not** in its jurisdictional rate base, then it is functionalized to distribution.

If the regulatory asset or liability **is included** in the utility's jurisdictional rate base, then and only then will the utilities be permitted to functionalize the regulatory asset or liability based on the functional nature of the item?

**Draft Decision:**

*Following the Review Processes and publication of the Final ASC Reports for FY 2010-2011, BPA will work with the parties to develop a standard functionalization protocol for common types of regulatory assets and liabilities that are not included in the utility's jurisdictional rate base.*

*For the FY 2010-2011 ASC Filings, BPA will use consistent decision criteria for common types of Regulatory Assets and Liabilities.*

**6.1.3. Account 182.3, Other Regulatory Assets; Account 186, Miscellaneous Deferred Debits; Account 253, Other Deferred Credits; Account 254, Other Regulatory Liabilities**

**Statement of Issue:**

*Whether BPA should require a common functionalization for asset accounts that have a corresponding liability account? For example, whether pension costs in Accounts 182.3 and 254 should have the same functionalization?*

**Statement of Facts:**

A direct analysis is required in the functionalization of Other Regulatory Assets (Account 182.3), Miscellaneous Deferred Debits (Account 186), Other Deferred Credits (Account 253), and Other Regulatory Liabilities (Account 254). A direct analysis should include maintaining a consistency in functionalization where there is an asset in either Account 182.3 or 186 and offsetting liabilities in either Account 253 or 254.

**Summary of Parties' Positions:**

Avista, IPC, NorthWestern, PacifiCorp and PGE's February 25, 2009, joint response to BPA's Issue Lists stated that "The IOUs agree that BPA should require that accounts that have a corresponding asset and liability account have the same functionalization."

PSE's February 25, 2009, Issue List stated that:

Functionalization of Account 182.3 and Account 254 should reflect the regulatory treatment of such accounts in jurisdictional ratemaking.

In calculating ASCs, it may sometimes be appropriate for BPA to maintain consistency in the functionalization of pension costs in Accounts 182.3 and 254 to the extent that there is a direct relationship between an Account 182.3 asset and an Account 254 liability and each such asset and liability receives the same regulatory ratemaking treatment.

However, the appropriate functionalization of both the Account 182 asset and the Account 254 liability should fall out of the Direct Analysis rather than be constrained by predetermined expectations. Direct Analysis should go beyond just the name or title of the account and reflect the purpose and reason why each account was established. Other than deferred taxes, PSE is unaware of off sets on a particular regulatory asset or liability being booked in opposing accounts. For example, PSE normally nets debits and credits (other than taxes) and books the net in the appropriate asset or liability account.

### **Analysis of Positions:**

BPA and the parties agree that asset accounts that have a corresponding liability account should be functionalized consistently.

### **Draft Decision:**

*BPA will require a common functionalization for asset accounts that have a corresponding liability account. This includes Other Regulatory Assets (Account 182.3), Miscellaneous Deferred Debits (Account 186), Other Deferred Credits (Account 253), and Other Regulatory Liabilities (Account 254).*

## **6.1.4. Various Other Regulatory Assets and Liabilities**

### **Statement of Issue:**

*What should be the functionalization of Other Regulatory Assets and Liabilities that are not included in rate base by the regulatory authority? What should be the functionalization of the corresponding income statement accounts for the Regulatory Assets and Liabilities that are not included in rate base by the regulatory authority?*

### **Statement of Facts:**

There is an inconsistency between utilities in the functionalization of Regulatory Assets and Liabilities that are not included in the utility's jurisdictional rate base. Some items in these accounts are included in working capital for ratemaking purposes. There is a concern that the treatment of the income statement accounts for the Regulatory Assets and Liabilities are not consistent with the asset and liability treatment for ASC purposes.

For example, PacifiCorp and PSE functionalized all Other Regulatory Assets and Liabilities that are not in their jurisdictional rate base to distribution. IPC, PGE, and Avista functionalized

several items in these same accounts, not included in their jurisdictional rate base based on the functional nature of the item.

### **Summary of Parties' Positions:**

Avista, IPC, NorthWestern, PacifiCorp and PGE's February 25, 2009, Response to BPA's Issue List stated that "There should be consistency between utilities in the functionalization of Regulatory Assets and Liabilities when not included in rate base. Regulatory Assets and Liabilities not included in Rate Base have no effect on the Company's income statement. All entries affect only the balance sheet."

PSE's February 25, 2009, response to BPA's Issue List stated that:

Functionalization of Other Regulatory Assets and Liabilities not included in rate base should reflect the regulatory treatment of such assets and liabilities in jurisdictional ratemaking.

This issue illustrates an inconsistency that can exist in the Appendix 1 if an account on the balance sheet defaults to Direct Analysis, but the corresponding accounts on the income statement do not. To resolve this inconsistency, BPA should adjust the income statement to directly assign the component related to the balance sheet account. Forcing the balance sheet accounts to conform to the functional method used for the related income statement account is problematic because of the Direct Analysis default of the balance sheet account.

With respect to the functionalization of balance sheet accounts for which the default functionalization is Direct Analysis, the utility should first determine the regulatory treatment of the balance sheet account. If the balance sheet account was directly included in rate base (i.e., the balance sheet account was included in rate base but not through the regulated working capital component of rate base calculation) for ratemaking purposes, the utility should further review the specific functional nature of the balance sheet account. If, however, the balance sheet account was either not included directly in rate base for ratemaking purposes or was included only via the regulated working capital calculation, the utility should functionalize the balance sheet account to DIST/Other.

### **Analysis of Positions:**

The 2008 ASCM ROD states that "The Utility must describe the functional nature of the regulatory asset or liability, whether or not the asset or liability is included in rate base by its state commission(s), and the return or carrying costs allowed by the state commission(s). *Under no conditions would regulatory assets be included in ASC at a level greater than regulatory commissions allow them to be recovered in retail rates.*" 2008 ASCM ROD at 149 (emphasis added).

Regulatory assets and liabilities exist in the balance sheets of electric utilities only because of the effects of regulation. FERC defines them as “assets and liabilities that result from rate actions regulatory agencies.”<sup>8</sup> The WUTC states that “regulatory assets are a creature of regulatory decisions made by state regulators or FERC. These assets represent costs a Utility is allowed to book and recover in rates over a period of time, rather than expense in a particular period.” *Id.*

Regulatory Assets and Liabilities, Accounts 182.3 and 254 in the FERC Uniform System of Accounts, were established in March of 1993 in FERC Order No. 552, which established uniform accounting treatment for allowances associated with the 1990 Clean Air Act. Order No. 552 also dealt more broadly with accounting for regulatory assets and liabilities for electric and gas utilities.<sup>9</sup>

Regulatory assets and liabilities are a subset of the larger issue of the difference between accounting for utilities that are subject to price regulation and Generally Accepted Accounting Principles (GAAP). The issue can be traced back to the Internal Revenue Act of 1954, which permitted use of accelerated depreciation for income taxes purposes. In 1962, the Accounting Principles Board (precursor to FASB) issued Opinion No. 2, which dealt comprehensively with the issue of accounting for industries subject to price regulation, was prepared in response to questions surrounding the creation of investment tax credits by Congress. Opinion No. 2 stated that all companies are subject to GAAP, but those differences may arise, generally surrounding recognition of cost, for companies subject to price or rate regulation.<sup>10</sup>

Simply because a utility recovers the expense associated with a regulatory asset in rates does not mean that the regulatory asset is also included in the utility’s rate base and earning a return.

Regulatory assets and liabilities will eventually be moved from the balance sheet to the income statement through recognition of the revenue or expense. They are only recorded on the utility balance sheets because of regulation. BPA and its customers reviewed revenue and expense accounts in detail during the 2008 ASCM consultation process and the 2008 ASCM has functionalization rules for those accounts. BPA will not change the functionalization of an income statement account as a result of a direct analysis on regulatory assets and liabilities.

**Draft Decision:**

*Regulatory assets and liabilities must be included in a utility’s jurisdictional rate base in order to be included in rate base for ASC purposes. BPA will not change the functionalization rules of an income statement account as the result of a direct analysis of a regulatory asset or liability.*

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<sup>8</sup> 6 See §11.03[2], G. Hahne and G. Aliff, *Public Utility Accounting*, pages 11-5 (Mathew Binder 2005).

<sup>9</sup> Ibid. 11-5

<sup>10</sup> Ibid.

### **6.1.5. Account 555, Purchased Power Expenses; Account 447, Sales for Resale; Price Spread**

#### **Statement of Issue:**

*How should book-outs and trading adjustments be treated for calculations of purchased power expense and sales for resale revenue and the price spread calculation? Should the treatment be consistent across utilities?*

#### **Statement of Facts:**

PacifiCorp reduced the amount of its purchased power expense and sales for resale revenue by book-outs and trading adjustments.

The inclusion of book-outs and trading adjustments in purchased power and sales for resale accounts affects the price spread calculation.

#### **Summary of Parties' Positions:**

Avista, IPC, NorthWestern, PacifiCorp and PGE's February 25, 2009, response to BPA's Issue List stated that "The IOUs support a consistent reporting of purchase power expenses and sales for resale among the exchanging utilities for the determination of price spread. If Bonneville determines the amounts used to calculate each company's price spread and reported in the FERC Form 1 should be without book-outs the IOUs agree to report and calculate accordingly."

PSE's February 25, 2009, response to BPA's Issue List stated that "PSE supports the use of the price spread, and the calculation of the price spread should be the same across all utilities. PSE understands that the objective of the price spread is to reflect the individual utility's experience in the wholesale market. Introducing differences in the calculation from utility to utility introduces more than just market differences and may distort the result when compared across utilities. Such inconsistencies in the data input to the calculation of the price spread should be avoided."

#### **Analysis of Positions:**

Both BPA and the IOUs support a consistent reporting of purchase power expenses and sales for resale among the exchanging utilities for the determination of price spread.

#### **Draft Decision:**

*Utilities shall not adjust their purchase power and sales for resale for the effects of book-outs and trading adjustments.*

## **6.1.6. ASC Forecast Model: New Plant Additions – Natural Gas Prices**

### **Statement of Issue:**

*Should BPA adopt a common natural gas price forecast in the ASC Forecast Model for all new natural gas-fired plant additions?*

### **Statement of Facts:**

Forecasted natural gas prices vary significantly between utilities that have new natural gas-fired generating resources coming on-line after the Base Period. None of the utilities submitted documentation or copies of firm natural gas supply contracts to support their projected natural gas prices.

The primary informational basis of the ASCM is the use of utility-specific FERC Form 1 historical data. Use of utility-specific forecast data is consistent with this approach.

### **Summary of Parties' Positions:**

Avista, IPC, PGE, PacifiCorp and NWEs February 25, 2009, response to BPA's Issue List stated that:

The IOUs propose that it is reasonable to use a third party gas price forecast in the determination of an exchanging utility's ASC. The IOUs believe that the third party gas price forecast that BPA uses would be appropriate or another publicly available gas price forecast. In addition, if a given exchanging utility desires to use a different gas price for their new resource it is understood that they will have to supply all necessary data in support of their alternative gas price forecast.

PSE's February 25, 2009, response to BPA's Issue List stated that:

Natural gas price forecasts should reflect the regulatory treatment of natural gas price forecasts in jurisdictional ratemaking.

In calculating ASCs, it may sometimes be appropriate for BPA to use a third party gas price forecast for the gas commodity component of fuel cost. If BPA were to use such a third party gas price forecast, BPA should then reflect basis or hub differences as adjustments to this commodity price. BPA should also make adjustments for firm gas transportation costs on a utility-by-utility, resource-specific basis. These transportation cost adjustments would reflect the extent to which firm gas transportation contracts are in place for the specific new resource. In some cases, however, jurisdictional or cost differences may render a third party gas price forecast insufficient. If BPA were to use a third party gas price forecast, such third party gas price forecast should be a default from which a utility could opt out.

The OPUCs March 3, 2009, response to BPA's Issue List recommended that BPA use:

The natural gas forward market prices existing at the time of utility filings for nearest available Hub, such as Sumas, to account for the average commodity cost of fuel for new natural gas generating resources unless a utility demonstrates other commodity contractual prices for its new resource(s). This would have the affect of removing BPA and utility guesses when accounting for the commodity cost of fuel for new natural generating resources. Natural gas market price forecasts are by their very nature tenuous.

The OPUC also recommended:

. . . [t]hat BPA adds charges for pipeline transportation and any other known fuel related charges to this commodity cost of fuel. In this regard, utilities include both fixed (Reservation) and variable pipeline charges in their Account 547, Other Power – Fuel. It should be recognized pipeline charges calculated on a unit basis, for instance dollars per MMBtu, vary with capacity factor. For example, Northwest Pipeline’s tariff currently shows a maximum reservation charge of about 38 cents per MMBTU/day firm receipt/delivery capacity. If a utility plant having firm pipeline transportation for all of its maximum daily operation normally operates at 25 percent, then this pipeline charge equates to an average cost of \$1.52 per delivered MMBTU (38 cents at full operation divided by 25 percent actual operation). So, when accounting for new resource other power fuel costs, BPA should also utilize pipeline tariffs in deriving the pipeline cost of transporting natural gas fuel from hub to plant gate along with plant capacity information unless a utility demonstrates other contractual pipeline charges.

OPUCs March 10, 2009, response to issues reiterated the above statements and stressed the need that whatever forecast was chosen should be available to parties through discovery in order to allow the parties to consider the reasonableness of the forecast.

Snohomish supports a common natural price forecast that is used in the ASC Forecast Model. Snohomish would support the use (by BPA) of third-party forecasting for natural gas prices, rather than BPA internal staff.

### **Analysis of Positions:**

All of the responding parties supported the option of adopting a common natural gas price forecast in the ASC Forecast Model for all new natural gas-fired plant additions. The parties suggested that an independent third party should supply the natural gas forecast.

The parties also supported the principle that the natural gas price forecast should include adjustments for basis or hub differences, and adjustments for firm gas transportation costs on a utility-by-utility, resource-specific basis.

The parties proposed that the use of a third party gas price forecast should not preclude a utility from using its own forecast.

BPA agrees with the parties that a common natural gas price forecast would be reasonable. To that end, BPA considered using several commercially-available natural gas price forecasts. Unfortunately, the commercially-available forecasts are proprietary. Generally, the companies

that provide these forecasts do not allow BPA to provide these forecasts to companies that do not subscribe to their services.

BPA believes it is equally important to that the costs included in the calculation of utility ASCs be consistent with the costs included in the calculation of the PF Exchange rate. Using the natural gas price forecast used to develop BPA's rates achieves this consistency. In addition, it allows all parties to BPA's rate case to examine and critique the forecast.

**Draft Decision:**

*BPA will use the natural gas forecast used in the BPA rate case for new gas-fired resources in the ASC Forecast Model.*

**6.1.7. ASC Forecast Model – Capacity Factors**

**Statement of Issue:**

*Whether BPA should use common representative capacity factors in the ASC Forecast Model for estimating the operating costs and expected energy output for new plant additions.*

**Statement of Facts:**

Projected capacity factors vary significantly between utilities for similar types of new resources, and the ranges are too wide to provide consistency among the utilities.

**Summary of Parties' Positions:**

PSE's February 25, 2009, response to BPA's Issue List stated that:

Capacity factors for specific new resources should reflect the regulatory treatment of capacity factors in jurisdictional ratemaking.

In calculating ASCs, it may sometimes be appropriate for BPA to use common, representative capacity factors in the ASC Forecast model. In some cases, however, jurisdictional or cost differences may render common, representative capacity factors insufficient. If BPA were to use common, representative capacity factors, such common, representative capacity factors should be a default from which a utility could opt out.

Avista, IPC, NorthWestern, PacifiCorp and PGE's February 25, 2009, response to BPA's Issue List stated that:

The IOUs propose that they will use a capacity factor within the range of capacity factors listed below for new resources coming online during the rate period.

<u>Resource Type</u>	<u>Capacity Factor</u>
Combined Cycle CT	45% to 75%
Simple Cycle CT	1% to 30%
Wind	25% to 45%
Geothermal	greater than 90%

Again, if a utility chooses to use capacity factor outside the above range for a new resource, the utility will have to supply complete justification and documentation for use of such a capacity factor.

After a discussion with the parties, BPA will defer a decision on this issue until after the FY 2010- 2011 ASC Review Process is completed so that it can devote more time to this complex issue. Developing representative projected capacity factors for new resources is not a trivial exercise. For new natural gas-fired resources, projected stream flows, electric market prices, natural gas prices and heat rates must be analyzed before representative capacity factors can be developed. For projected wind resources the Pacific Northwest region is just beginning a major expansion of a resource with little historical data to use as a benchmark for developing representative capacity factors. Based on the exceedingly small amount of data on wind capacity factors BPA and parties reviewed, differences by location were observed, but more time and research needs to be devoted to this effort. BPA and some of parties believe that this issue should be deferred to future ASC filings to develop more robust estimates of projected capacity factors for new resources.

Some of the filing utilities submitted revised capacity factors which reduced somewhat the variance in capacity factors for new generating resources. Partly for this reason, it is reasonable to accept utilities' respective as-filed capacity factors in establishing FY 2010-2011 ASCs.

**Draft Decision:**

*The capacity factors submitted by each utility will be accepted for this FY 2010-2011 Review Process. BPA, however, makes no precedential decision at this time. The issue will be revisited in future ASC filings.*

**6.2. ASC FORECAST MODEL: New Resource Additions during FY 2010-2011**

In addition to the historical Base Period cost and load data, the exchanging utility may also provide its forecast of major new resource additions, and all associated costs, that are projected to come on-line through the end of the Exchange Period (FY 2010-2011). The forecast covers the period from the end of the Base Period (December, 2007) to the end of the Exchange Period (September, 2011). When a major new resource addition is projected to come on-line prior to the start of the Exchange Period, the associated costs are projected forward to the midpoint of the Exchange Period in order to calculate the Exchange Period ASC.

The 2008 ASCM also provides that changes to an established ASC are allowed to occur during the Exchange Period to account for major new resource additions and purchases that are

projected to come on-line or be purchased and used to meet a utility's retail load during the Exchange Period (FY 2010-2011).

In either scenario, such changes in ASC must meet the same materiality threshold as a change in ASC resulting from major new resource additions, that is, a 2.5 percent or greater change in Base Period ASC. BPA allows utilities to submit stacks of individual resources that, when combined, meet the materiality threshold. However, each resource in the stack must result in an increase of Base Period ASC of 0.5 percent or more.

The tables below summarize the new major resource additions projected to come on-line during the forecast period, based on (1) the ASC information filed on October 15, 2008 (including errata, if applicable), and (2) the same information from the ASC Draft Report as adjusted by BPA after the ASC Review Process.

### **6.3. ASC Forecast Model Calculates the Contract System Cost: Depreciation and Purchased Power**

Under the 2008 ASCM, the BPA-approved Base Period costs are escalated to the midpoint of the rate period/Exchange Period to calculate Exchange Period ASCs. For a two year rate period the costs are escalated to the midpoint for a 2-year rate period/Exchange Period

To accomplish this, the ASC Forecast Model calculates the Contract System Cost at the start of the rate period, October 2009, and the end of the rate period, September 2011. The midpoint ASC is then calculated as the average of the start of rate period and end of rate period Contract System Costs, divided by the average of the start of rate period and end of rate period Contract System Loads.

The ASC Forecast Model uses a similar method to calculate the short-term (ST) purchased power expense included in Contract System Cost. Purchased power expense for the first year of the Exchange Period, FY 2010, is calculated by multiplying the amount of ST MWh purchases for FY 2010 by the utility's FY 2010 purchase price. Purchased power expense for the second year of the Exchange Period, FY 2011, is calculated by multiplying the amount of ST MWh purchases for FY 2011 by the utility's FY 2011 purchase price. The purchased power expense included in the calculation of the midpoint ASC is the average of the FY 2010 and FY 2011 purchased power expense. At the same time, the ASC Forecast Model calculates a weighted average purchased power price for the rate period.

When the exchanging Utilities submitted their Appendix 1 filings in October 2008, they provided their forecasts of major new resource additions, including all associated costs. For new resources forecast to come on-line during the Exchange Period, all new resource costs except depreciation expense were included at the midpoint of the Exchange Period, October 1, 2010. To calculate the change in ST purchased power expense resulting from new generating resources or new purchased power contracts, the amount of ST power purchases for FY 2011 was decreased by the amount of MWh forecast to be provided by the new generating resource or purchased power contract. A new average 2-year average of ST purchased power MWhs was then calculated. The new 2-year average MWh value was multiplied by the 2-year weighted average purchased

power price calculated above to get the new ST purchased power included in Contract System Cost.

During the ASC Review process, BPA examined how the costs of new resources added during the rate period were being included in a Utility's Contract System Cost. Further analysis revealed that, by using a new 2-year average of ST MWh purchases, only half of the reduction in purchased power expense was being removed from Contract System Cost. However, with the exception of the new resource's depreciation expense, the ASC Forecasting Model was including a full year's cost for the new generating resource or purchased power contract. To address this inconsistency, BPA determined that it would be more appropriate to include a full year's change in Contract System Cost resulting from new generating resources or purchased power contracts.

In order to capture the total reduction in purchased power expense, BPA revised the method to calculate ST purchased power expense when a new generating resource is added. Under the revised method, the forecast MWhs provided by the new resource are multiplied by the FY 2011 purchased power price to get the reduction in ST purchased power expense resulting from adding the new resource. This method assures that the entire reduction in purchased power expense is captured in Contract System Cost. BPA also included the new resource's full year depreciation expense in Contract System Cost in order to capture all the changes in cost resulting from adding new resources during the rate period/Exchange Period.

## **7. FY 2010-2011 ASC**

Overall BPA adjustments, including all changes made to Puget Sound Energy's Appendix 1 filing decreased Puget Sound Energy's CY 2007 ASC by \$0.71/MWh. These changes decreased PSE's FY 2010-2011 ASC by \$1.76/MWh. Puget Sound Energy's ASC for FY 2010-2011, prior to the addition of any new resources, is \$61.44/MWh.

## **8. REVIEW SUMMARY**

This draft ASC determination is BPA's best estimate of Puget Sound Energy's FY 2010-2011 ASC based on the information and data provided by Puget Sound Energy to date, and based on the professional review, evaluation, and judgment of BPA's REP staff. BPA will solicit and review comments on this Draft Report and the Draft Reports of all other exchanging utilities' for FY 2010-2011. After review of such comments, BPA will make final ASC determinations used to calculate REP benefits for each exchanging utility for FY 2010-2011. Final ASC determinations will be published in July, 2009.

The as-filed Appendix 1 Filing, ASC Forecast Model and NLSL assessment, and supporting documentation submitted by Puget Sound Energy, used to calculate Puget Sound Energy's ASC can be viewed at BPA's REP website: <http://www.bpa.gov/corporate/finance/ascm/filings.cfm>.

## **9. ADMINISTRATOR'S APPROVAL**

I have examined Puget Sound Energy's ASC filing, as amended, and the administrative record of the ASC Review Process. Based on this review and the foregoing analysis of the issues, I certify that this ASC determination conforms to the 2008 ASC Methodology and generally accepted accounting principles, and fairly represents Puget Sound Energy's ASC.