

BP-16 Rate Proceeding

Transmission Segmentation Study and Documentation

BP-16-FS-BPA-06

July 2015



TRANSMISSION SEGMENTATION STUDY AND DOCUMENTATION

TABLE OF CONTENTS

COMMONLY USED ACRONYMS AND SHORT FORMS	iii
1. OVERVIEW	1
2. DEFINING THE SEGMENTS.....	3
2.1 Generation Integration Segment	3
2.2 Network Segment.....	4
2.3 Southern Intertie Segment.....	5
2.4 Eastern Intertie Segment	6
2.5 Utility Delivery Segment	6
2.6 Direct Service Industry (DSI) Delivery Segment	7
2.7 Ancillary Services Segment.....	7
3. ASSIGNING FACILITIES TO THE SEGMENTS	9
3.1 Multi-Segmented Facilities	10
3.2 Facilities Not Assigned to a Segment	12
4. DETERMINING AND ALLOCATING INVESTMENT AND HISTORICAL O&M EXPENSES TO THE SEGMENTS	13
4.1 Gross Investment in Existing Facilities	13
4.1.1 Transmission Plant Investment	13
4.1.2 Intangible Investment.....	14
4.1.3 Land Investment.....	14
4.1.4 Ancillary Service Investment.....	15
4.1.5 General Plant Investment.....	15
4.2 Retirement of Existing Facilities and Installation of New Facilities	16
4.3 Operations and Maintenance (O&M) Expense.....	16
4.3.1 Historical Line and Station O&M Assignment to Segments	17
4.4 U.S. Army Corps of Engineers and U.S. Bureau of Reclamation Facilities.....	19

Tables

Table 1:	BPA Investment Summary	23
Table 2:	BPA Segmented Investment	25
Table 3.1:	Future Plant in Service Summary	27
Table 3.2:	Future Plant in Service Details	28
Table 4.1:	BPA Historical O&M FY 2008-2014	30
Table 4.2:	Historical O&M Expenses FY 2008-2014 (Total O&M by Category)	31
Table 4.3:	Historical O&M Expenses FY 2008-2014 (Allocation of Average Historical O&M to Lines, Substations, and Metering Locations)	32
Table 5:	U.S. Army Corps of Engineers and U.S. Bureau of Reclamation Project Segmentation.....	33

Chart

Chart 1: BPA Plant Investment.....24

Appendices

Appendix A: BP-16 Rate Case Final Proposal Segmentation Detail
Appendix B: BP-16 Rate Case Final Proposal Multi-Segmented Facilities Summary

COMMONLY USED ACRONYMS AND SHORT FORMS

ACNR	Accumulated Calibrated Net Revenue
ACS	Ancillary and Control Area Services
AF	Advance Funding
aMW	average megawatt(s)
ANR	Accumulated Net Revenues
ASC	Average System Cost
BAA	Balancing Authority Area
BiOp	Biological Opinion
BPA	Bonneville Power Administration
Btu	British thermal unit
CDQ	Contract Demand Quantity
CGS	Columbia Generating Station
CHWM	Contract High Water Mark
CIR	Capital Investment Review
COE	U.S. Army Corps of Engineers
COI	California-Oregon Intertie
Commission	Federal Energy Regulatory Commission
Corps	U.S. Army Corps of Engineers
COSA	Cost of Service Analysis
COU	consumer-owned utility
Council	Northwest Power and Conservation Council
CP	Coincidental Peak
CRAC	Cost Recovery Adjustment Clause
CSP	Customer System Peak
CT	combustion turbine
CY	calendar year (January through December)
DDC	Dividend Distribution Clause
<i>dec</i>	decrease, decrement, or decremental
DERBS	Dispatchable Energy Resource Balancing Service
DFS	Diurnal Flattening Service
DNR	Designated Network Resource
DOE	Department of Energy
DOI	Department of Interior
DSI	direct-service industrial customer or direct-service industry
DSO	Dispatcher Standing Order
EE	Energy Efficiency
EIS	Environmental Impact Statement
EN	Energy Northwest, Inc.
ESA	Endangered Species Act
ESS	Energy Shaping Service
e-Tag	electronic interchange transaction information
FBS	Federal base system
FCRPS	Federal Columbia River Power System
FCRTS	Federal Columbia River Transmission System

FELCC	firm energy load carrying capability
FORS	Forced Outage Reserve Service
FPS	Firm Power and Surplus Products and Services
FPT	Formula Power Transmission
FY	fiscal year (October through September)
G&A	general and administrative (costs)
GARD	Generation and Reserves Dispatch (computer model)
GMS	Grandfathered Generation Management Service
GSR	Generation Supplied Reactive
GRSPs	General Rate Schedule Provisions
GTA	General Transfer Agreement
GWh	gigawatthour
HLH	Heavy Load Hour(s)
HOSS	Hourly Operating and Scheduling Simulator (computer model)
HYDSIM	Hydrosystem Simulator (computer model)
IE	Eastern Intertie
IM	Montana Intertie
<i>inc</i>	increase, increment, or incremental
IOU	investor-owned utility
IP	Industrial Firm Power
IPR	Integrated Program Review
IR	Integration of Resources
IRD	Irrigation Rate Discount
IRM	Irrigation Rate Mitigation
IRMP	Irrigation Rate Mitigation Product
IS	Southern Intertie
kcf/s	thousand cubic feet per second
kW	kilowatt
kWh	kilowatthour
LDD	Low Density Discount
LLH	Light Load Hour(s)
LPP	Large Project Program
LPTAC	Large Project Targeted Adjustment Charge
Maf	million acre-feet
Mid-C	Mid-Columbia
MMBtu	million British thermal units
MRNR	Minimum Required Net Revenue
MW	megawatt
MWh	megawatthour
NCP	Non-Coincidental Peak
NEPA	National Environmental Policy Act
NERC	North American Electric Reliability Corporation
NFB	National Marine Fisheries Service (NMFS) Federal Columbia River Power System (FCRPS) Biological Opinion (BiOp)

NIFC	Northwest Infrastructure Financing Corporation
NLSL	New Large Single Load
NMFS	National Marine Fisheries Service
NOAA Fisheries	National Oceanographic and Atmospheric Administration Fisheries
NORM	Non-Operating Risk Model (computer model)
Northwest Power Act	Pacific Northwest Electric Power Planning and Conservation Act
NP-15	North of Path 15
NPCC	Pacific Northwest Electric Power and Conservation Planning Council
NPV	net present value
NR	New Resource Firm Power
NRFS	NR Resource Flattening Service
NT	Network Integration
NTSA	Non-Treaty Storage Agreement
NUG	non-utility generation
NWPP	Northwest Power Pool
OATT	Open Access Transmission Tariff
O&M	operation and maintenance
OATI	Open Access Technology International, Inc.
OMP	Oversupply Management Protocol
OS	Oversupply
OY	operating year (August through July)
PDCI	Pacific DC Intertie
Peak	Peak Reliability
PF	Priority Firm Power
PFIA	Projects Funded in Advance
PFp	Priority Firm Public
PFx	Priority Firm Exchange
PNCA	Pacific Northwest Coordination Agreement
PNRR	Planned Net Revenues for Risk
PNW	Pacific Northwest
POD	Point of Delivery
POI	Point of Integration or Point of Interconnection
POR	Point of Receipt
Project Act	Bonneville Project Act
PRS	Power Rates Study
PS	Power Services
PSC	power sales contract
PSW	Pacific Southwest
PTP	Point to Point
PUD	public or people's utility district
PW	WECC and Peak Service
RAM	Rate Analysis Model (computer model)
RD	Regional Dialogue

REC	Renewable Energy Certificate
Reclamation	U.S. Bureau of Reclamation
REP	Residential Exchange Program
REPSIA	REP Settlement Implementation Agreement
RevSim	Revenue Simulation Model
RFA	Revenue Forecast Application (database)
RHWM	Rate Period High Water Mark
ROD	Record of Decision
RPSA	Residential Purchase and Sale Agreement
RR	Resource Replacement
RRS	Resource Remarketing Service
RSC	Resource Shaping Charge
RSS	Resource Support Services
RT1SC	RHWM Tier 1 System Capability
SCD	Scheduling, System Control, and Dispatch rate
SCS	Secondary Crediting Service
SDD	Short Distance Discount
SILS	Southeast Idaho Load Service
Slice	Slice of the System (product)
T1SFCS	Tier 1 System Firm Critical Output
TCMS	Transmission Curtailment Management Service
TGT	Townsend-Garrison Transmission
TOCA	Tier 1 Cost Allocator
TPP	Treasury Payment Probability
TRAM	Transmission Risk Analysis Model
Transmission System Act	Federal Columbia River Transmission System Act
Treaty	Columbia River Treaty
TRL	Total Retail Load
TRM	Tiered Rate Methodology
TS	Transmission Services
TSS	Transmission Scheduling Service
UAI	Unauthorized Increase
UFT	Use of Facilities Transmission
UIC	Unauthorized Increase Charge
ULS	Unanticipated Load Service
USACE	U.S. Army Corps of Engineers
USBR	U.S. Bureau of Reclamation
USFWS	U.S. Fish & Wildlife Service
VERBS	Variable Energy Resources Balancing Service
VOR	Value of Reserves
VR1-2014	First Vintage Rate of the BP-14 rate period (PF Tier 2 rate)
VR1-2016	First Vintage Rate of the BP-16 rate period (PF Tier 2 rate)
WECC	Western Electricity Coordinating Council
WSPP	Western Systems Power Pool

1 **1. OVERVIEW**

2 The Bonneville Power Administration (BPA) segments, or groups, its transmission
3 facilities based on the services those facilities provide. Segments are groups of
4 transmission facilities that serve a particular function or provide a specific service and
5 therefore are appropriate to group together for ratesetting purposes. BPA began
6 segmenting its transmission system in the 1979 rate case to demonstrate the equitable
7 allocation of costs between Federal and non-Federal uses of the transmission system, as
8 required by section 10 of the Federal Columbia River Transmission System Act,
9 16 U.S.C. § 838h.

10
11 Segmentation involves three primary steps: defining the segments; assigning facilities to
12 the segments; and determining the gross investment and historical operation and
13 maintenance (O&M) expenses for the facilities in each segment. BPA uses this
14 information to develop the segmented transmission revenue requirement. *See*
15 Transmission Revenue Requirement Study Documentation, BP-16-FS-BPA-08A,
16 Tables 2.1 to 2.8. The segmented revenue requirement is then used to set transmission
17 rates. *See* Transmission Rates Study and Documentation, BP-16-FS-BPA-07.

18
19 Prior to segmenting its system for this rate period, BPA engaged the region in a
20 comprehensive public process regarding its segmentation methodology. This process
21 included a discussion about why BPA segments its system, the principles BPA considers
22 in establishing its segmentation methodology, an industry scan of how other transmission
23 providers functionalize and allocate transmission costs, and collaboration with customers
24 to identify and evaluate different segmentation methodologies. The process culminated
25 in a white paper that BPA used as an input to develop the segmentation methodology
26 used in this study. *See* Tenney *et al.*, BP-16-E-BPA-16, § 3.

This page intentionally left blank.

1 **2. DEFINING THE SEGMENTS**

2 Defining the segments is the first step in the segmentation process. BPA defines the
3 segments based on applicable legal, policy, and technical principles and requirements.

4 The definitions set forth below incorporate those principles and requirements.
5

6 For the FY 2016–2017 rate period, BPA has divided its transmission system into the
7 following segments: (1) Generation Integration, (2) Network, (3) Southern Intertie,
8 (4) Eastern Intertie, (5) Utility Delivery, (6) Direct Service Industry (DSI) Delivery, and
9 (7) Ancillary Services. This study also identifies facility investment in general plant that
10 supports the transmission system, such as communications equipment, buildings, and
11 vehicles. *See* § 4.1.5.
12

13 **2.1 Generation Integration Segment**

14 The Generation Integration segment consists of facilities that connect the Federal
15 generating plants to BPA’s transmission facilities. Generation Integration facilities are
16 the same type of facilities that BPA requires other entities to provide to interconnect
17 non-Federal generators. Because the purpose of these facilities is to interconnect Federal
18 generation with BPA’s transmission system, the costs associated with these facilities are
19 assigned to and recovered through BPA’s power rates.

20 This segment includes:

- 21 • generator step-up transformers, which transform voltage from the generation level
22 to the transmission level;
- 23 • transmission lines between the generating facility and the first substation at which
24 the power enters the Network segment; and
- 25 • substation terminal equipment, such as disconnect switches and circuit breakers,
26 associated with integrating Federal generation installed and assigned to the
27 Generation Integration segment prior to the development of the Direct

1 Assignment Guidelines in the late 1990s; (the guidelines have been revised and
2 are now known as the Facility Ownership and Cost Assignment Guidelines.)
3 Except for replacements, none of this equipment has been installed since the
4 guidelines were developed. Under the guidelines, BPA would likely allocate the
5 costs of substation terminal equipment to the Network segment if it were
6 constructed today for new generation. *See Tenney et al.*, BP-16-E-BPA-16,
7 §§ 8-10.
8

9 **2.2 Network Segment**

10 The Network segment is the core of BPA's transmission system. The facilities in this
11 segment support the transmission of power from Federal and non-Federal generation
12 sources or interties to the load centers of BPA's transmission customers in the Pacific
13 Northwest or to other segments (*e.g.*, an intertie or delivery segment). The Network
14 segment provides several benefits to BPA and its customers, including displacement
15 (local generation flowing to the nearest load instead of the remote generation that is
16 scheduled to serve that load), bulk power transfers, voltage regulation, and increased
17 overall reliability resulting from alternative resource and transmission pathways. The
18 costs of the Network segment are recovered through the Formula Power Transmission
19 rate, the Integration of Resources rate, the Network Integration rate, the Advanced
20 Funding rate, the Use-of-Facilities Transmission (UFT) rate, and the Point-to-Point rate.

21
22 This segment includes:

- 23 • transmission lines, substation equipment and associated station general that allow
24 the transfer of energy between the interconnection points with generators and the
25 interconnection points with customers' transmission facilities and other BPA
26 segments;

- transmission lines, substation equipment, and associated station general that interconnect BPA's facilities with customers' facilities that have been determined to be BPA's responsibility to build and own based on the Direct Assignment Guidelines, and that are not included in any of the other segments; and
 - facilities included in the Network segment in the BP-14 Segmentation Study, even if they would be directly assigned under the Direct Assignment Guidelines.
- Id.* § 9.

2.3 Southern Intertie Segment

The Southern Intertie segment is a system of transmission lines and substations used primarily to transmit power between the Pacific Northwest and California. Segmenting the Southern Intertie separately from the Network recognizes BPA's contractual obligations regarding assignments of cost for the construction and ongoing use of Southern Intertie facilities. BPA recovers the costs of the Southern Intertie segment through the Southern Intertie rates.

This segment includes:

- the 1,000-kV direct-current (DC) line from the Celilo converter station near The Dalles, Oregon, to the Nevada-Oregon border, including the Celilo converter station equipment and the terminal equipment in the Big Eddy substation supporting the DC line, along with associated station general;
- the multiple 500-kV alternating-current (AC) lines from north-central Oregon to the California-Oregon border and all associated terminals and supporting station general, including BPA's share of the Alvey-Dixonville-Meridian line (jointly owned with PacifiCorp), except for (1) one of the 500-kV AC lines from Grizzly substation to Malin substation in central Oregon and associated terminals (owned

1 by Portland General Electric Company), and (2) the Meridian-Captain Jack-Malin
2 line, Summer Lake-Malin line, and Meridian-Captain Jack line, and associated
3 terminals (owned by PacifiCorp); and
4 • certain other facilities determined to support the facilities specified above,
5 including one of the 500-kV AC lines between John Day and Big Eddy
6 substations, a 500-kV AC line between Coyote Springs and Slatt substations, a
7 500-kV AC line between Slatt and John Day substations, and the dynamic braking
8 resistor at Chief Joseph substation.

9

10 **2.4 Eastern Intertie Segment**

11 The Eastern Intertie segment facilities provide a transmission path from Montana
12 (primarily for the Colstrip generating project) to the Network segment. These facilities
13 were built pursuant to the Montana Intertie Agreement, which provides that the costs
14 associated with building and maintaining the facilities will be recovered from the parties
15 to the agreement through the Townsend-Garrison transmission rate. This segment
16 includes the double-circuit 500-kV line between Townsend and Garrison, Montana, and
17 associated terminal equipment and supporting station general at Garrison substation. The
18 costs associated with the Eastern Intertie are recovered through the Townsend-Garrison
19 Transmission, Montana Intertie, and the Eastern Intertie rates.

20

21 **2.5 Utility Delivery Segment**

22 The Utility Delivery segment consists of low-voltage transmission lines and substation
23 equipment associated with supplying power directly to utility distribution systems.
24 Utility Delivery equipment is distinguished from Network equipment in that Utility
25 Delivery transforms power down to the customer's distribution voltage, whereas Network
26 equipment transmits power at voltages that the customer must step down (reduce) before

1 the power enters the customer's distribution system. Utility Delivery equipment provides
2 service to only a small subset of BPA's transmission customers. This equipment does not
3 provide reliability benefits to the Network segment. BPA recovers the costs of this
4 equipment through the Utility Delivery rate.

5
6 This segment includes:

- 7 • step-down transformers and associated low-side switching and protection
8 equipment;
- 9 • two short low-voltage lines, one from BPA's Albany substation to DOE's
10 National Energy Technology Laboratory, and one from BPA's Hood River
11 substation to Hood River Electric Cooperative.

12 13 **2.6 Direct Service Industry (DSI) Delivery Segment**

14 This segment consists of transformers and low-side switching and protection equipment
15 at the Intalco, Conkelley, and Trentwood substations necessary to step down transmission
16 voltages to industrial voltages (*i.e.*, 6.9 or 13.8 kV) to supply power to direct-service
17 industry (DSI) customers. Because this equipment serves the distinct purpose of
18 supplying power to DSI customers, BPA segments the equipment separately and allocates
19 the cost to the DSI Delivery segment. Customers that utilize this equipment pay Use-of-
20 Facilities-Transmission (UFT) rates.

21 22 **2.7 Ancillary Services Segment**

23 This segment consists of control equipment and associated communications equipment
24 necessary for BPA to provide Scheduling, System Control, and Dispatch (SCD) service.
25 Because this equipment serves the distinct purpose of supporting BPA's provision of

1 SCD services, BPA assigns it to the Ancillary Services segment and recovers its costs
2 through the SCD rate.

3

4 This segment includes:

- 5 • monitoring and supervisory control equipment;
- 6 • associated communications equipment; and
- 7 • control center hardware and software.

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

26

3. ASSIGNING FACILITIES TO THE SEGMENTS

After the segments are defined, equipment and facilities are assigned to the various segments based on the definitions set forth in section 2. Appendix A to this study, which lists the facilities included in each segment, identifies:

- facilities (lines and stations) whose transmission plant investment is assigned solely to one segment;
- multi-segmented facilities whose transmission plant investment is assigned to several segments;
- facilities with depreciable land investment assigned by segment;
- facilities with ancillary service investment assigned to the Ancillary Services segment; and
- facilities with general plant investment.

The following resources are used to segment the facilities:

- One-line diagrams identify the location, interconnectivity, ownership, and characteristics of transmission lines, substations, circuit breakers, and transformers.
- Installation and maintenance records identify major equipment (*e.g.*, transformers, circuit breakers, and reactive equipment) installed or maintained by BPA. BPA uses these records to identify and associate specific equipment in the plant accounting records with the equipment identified on the one-line diagrams. This association is particularly useful in allocating investment at facilities that support more than one function and whose costs are allocated to more than one segment. Multi-segmented facilities that support more than one function are described in more detail in section 3.1.

- Agreements, such as those relating to the construction and operation of the Southern and Eastern Interties, specify how the costs for certain facilities will be allocated.

3.1 Multi-Segmented Facilities

Some facilities, referred to as multi-segmented facilities, support more than one segment.

For multi-segmented lines, investment is generally allocated to multiple segments according to percentages established by contract. If the allocation of multi-segmented lines is not established by contract, BPA uses line mileage to develop percentages that reflect which segments the line supports. For example, if two miles of a 20-mile line are used to integrate Federal generation, and after two miles a tap off the line integrates a non-Federal generator into the Network, 10 percent of the line investment is segmented to Generation Integration and 90 percent is segmented to the Network.

For multi-segmented substations, the process is more involved. First, the segment definitions described in section 2 are used to determine the segments a substation supports. If a substation supports the Utility Delivery segment, only the transformer and low-side equipment are assigned to the Utility Delivery segment. The remaining investment in the substation is allocated to all other applicable segments according to the following process:

1. The investment in major equipment in the substation (*e.g.*, circuit breakers, transformers, and reactive devices, all of which are tracked separately in the investment records) is grouped by type and voltage level. For example, a substation may have 230-kV equipment that supports the Network and Generation Integration segments and reactive devices that support only the Network. The investment in this substation is separated into two groups, a 230-kV shared group

- 1 that is segmented to both Generation Integration and the Network (as described
2 below) and a reactive group that is segmented entirely to the Network.
- 3 2. The investment in common equipment for the substation, and station general such
4 as buildings and fences, is allocated to each group based on the investment in
5 major equipment. In the example above, if the 230-kV shared group is assigned
6 80 percent of the investment in major equipment, the 230-kV group is also
7 assigned 80 percent of the investment in common equipment and station general.
- 8 3. The total investment in each shared group is then allocated to the segments that
9 the group supports based on the number of terminals in each segment. A terminal
10 connects a transmission line, power transformer, or reactive device to substation
11 bus work so that power can flow. A terminal typically consists of a power circuit
12 breaker (or, alternatively, a circuit switcher in some stations), disconnect
13 switches, and protective relaying. All terminals rely on the equipment in the
14 shared group to transmit power between the lines, transformers, and reactive
15 devices to which they are connected at the substation. Therefore, the cost of the
16 shared group is assumed to be shared equally among the terminals. In the above
17 example, if the 230-kV shared group supports four Network terminals and two
18 Generation Integration terminals, two-thirds (four of six terminals) of the 230-kV
19 shared group investment is allocated to the Network segment, and one-third (two
20 of six) is allocated to the Generation Integration segment.

21

22 As described further in section 4, the percentage of the total investment in each segment
23 is used to allocate the historical O&M for each facility to the different segments.

24 Appendix A identifies the percentage of each facility allocated to each segment and the
25 associated investment and historical O&M expenses assigned to the segment.

26

1 **3.2 Facilities Not Assigned to a Segment**

2 Some transmission equipment and facilities are not assigned to a particular segment
3 because they cannot be identified with a particular type of service. For example,
4 emergency equipment spares support most or all the segments and therefore are not
5 assigned to a particular segment.

6
7 The transmission plant investment associated with these facilities is allocated to all the
8 segments on a pro rata basis. For example, if 80 percent of the directly assigned
9 investment in station equipment is segmented to the Network segment, then 80 percent of
10 the investment in station equipment that is not directly assigned is also segmented to the
11 Network. Table 2, lines 4 and 18, shows the allocation of the investment in these
12 facilities.

1 **4. DETERMINING AND ALLOCATING INVESTMENT AND**
2 **HISTORICAL O&M EXPENSES TO THE SEGMENTS**

3
4 Once the segmentation of facilities is determined, the investment and historical O&M
5 expenses by segment are calculated. As described below, the investment associated with
6 each segment is developed by aggregating the investment of the facilities allocated to
7 each segment. The historical O&M expenses are similarly aggregated by segment. The
8 segmented investment and the historical O&M expenses are used in the Revenue
9 Requirement Study to assign costs to each segment.

10
11 The transmission segmented investment through September 30, 2014, is shown in
12 Table 2. Table 3.1 shows the segmented expected future plant investment. The historical
13 O&M by segment for FY 2008 to FY 2014 is shown in Table 4.1.

14
15 **4.1 Gross Investment in Existing Facilities**

16 BPA’s gross investment is shown in Table 1, and broken down in the associated chart.
17 The investment related to (1) transmission plant, including leased assets, emergency
18 stock, and intangibles, (2) depreciable land, and (3) general plant is identified and
19 segmented in the segmentation process. These investments are described in more detail
20 below. The gross investment is identified from BPA’s investment records as of the most
21 recently completed fiscal year (FY 2014).

22
23 **4.1.1 Transmission Plant Investment**

24 Transmission plant investment refers to investment in lines and substations, which is
25 defined in FERC accounts 352 through 359, 390, and 391, and investment in some leased
26 facilities (which are not classified by FERC account). *See* Table 2. The total
27 transmission plant investment, including leased facilities but excluding Projects Funded

1 in Advance (PFIA), is \$6.5 billion as of the end of FY 2014 (Table 1, line 23). PFIA are
2 projects funded by the customers taking service over the new facilities. The costs of the
3 new facilities are assigned to and are funded by customers consistent with the Facility
4 Ownership and Cost Assignment Guidelines (formerly the Direct Assignment
5 Guidelines). Other than PFIA, transmission plant investment associated with specific
6 facilities is allocated to segments based on the assignment of facilities to the segments as
7 described in section 3.

9 **4.1.2 Intangible Investment**

10 Intangible investment is BPA's share of financial participation in facilities owned by
11 others (BPA's capacity rights). In each case the investment supports either the Network
12 or the Southern Intertie segment. For the FY 2016–2017 rate period, the investment is
13 segmented to one of these segments based on the segment each facility supports. As
14 shown in Table 2, line 29, BPA has \$9.6 million of intangible investment.

16 **4.1.3 Land Investment**

17 Land owned by BPA is not depreciated, and therefore no amortized costs for land need to
18 be segmented. However, BPA does have leased land that is depreciable (\$48.2 million,
19 *see* Table 2, line 37) and which therefore must be segmented. Most of this land
20 (\$47.5 million, *see* Table 2, line 34, columns H and I) is rights-of-way for transmission
21 lines and is segmented according to the type of service provided by the associated
22 transmission lines. For example, leased land that supports a transmission line segmented
23 to the Network segment is allocated to that segment.

24
25 BPA also has depreciable leased land (\$0.67 million, *see* Table 2, line 35) associated with
26 radio stations that is not assigned to a specific segment because communication facilities

1 like radio stations generally support all the segments. Therefore, the investment
2 associated with this leased land is prorated to the segments based on the total of the line
3 and station investment allocated to each segment.

4.1.4 Ancillary Service Investment

4
5 BPA has \$147.4 million in ancillary service investment. *See* Table 2, line 41. This
6 investment includes equipment designated as control equipment (\$77.9 million, line 43),
7 hardware and software at the control centers supporting scheduling and dispatch
8 (\$18.2 million, line 46), and communications equipment supporting Supervisory Control
9 and Data Acquisition (SCADA) (\$51.3 million, line 52). This investment is all allocated
10 to the Ancillary Services segment.
11

4.1.5 General Plant Investment

12
13 General plant investment is associated with equipment of a general nature (FERC
14 accounts 390 through 398, with some amounts identified in FERC accounts 352, 353,
15 and 356). *See* Table 2. BPA's telecommunications system facilities (such as radio
16 stations), maintenance buildings, and vehicles are examples of general plant investment.
17 Through FY 2014, BPA's general plant investment (less PFIA) was \$855.4 million.
18 *See* Table 2, line 41. General plant investment is not allocated to the segments in this
19 study. In the Transmission Revenue Requirement Study, the depreciation cost associated
20 with this investment is treated as an overhead expense and allocated pro rata to the
21 segments based on the segmented O&M expenses. *See* Transmission Revenue
22 Requirement Study Documentation, BP-16-FS-BPA-08A, ch. 4.
23
24
25
26

1 **4.2 Retirement of Existing Facilities and Installation of New Facilities**

2 As this study is being prepared, BPA has the actual investment figure for facilities in
3 place as of the end of FY 2014. To estimate the investment that will be in place during
4 the FY 2016–2017 rate period, this figure is adjusted to remove investment in facilities
5 expected to be retired or sold, and to include the forecast of facilities expected to be
6 installed after the end of FY 2014 and before the end of FY 2017. Table 3.1 summarizes
7 the expected station and line investment by segment for fiscal years 2015 through 2017.

8
9 New facility investment is identified from BPA’s Integrated Program Review (IPR)
10 process. No specific facilities are identified for retirement in this study. However, as
11 discussed in the Transmission Revenue Requirement Study, the expected investment in
12 new station facilities has been reduced based on historical ratios of retired equipment to
13 new replacement equipment. Transmission Revenue Requirement Study Documentation,
14 BP-16-FS-BPA-08A, ch. 2.

15
16 **4.3 Operations and Maintenance (O&M) Expense**

17 This study includes historical O&M expenses from plant record data for the last seven
18 fiscal years (2008 through 2014). O&M expenses are categorized into three groups
19 (*see* Table 4.2):

- 20 • O&M on lines and substations,
- 21 • scheduling and system operations allocated to the Ancillary Services segment,
- 22 and
- 23 • marketing and business support (overhead).

24
25 The O&M expenses on lines and substations include substation operations, various
26 transmission maintenance programs, technical training, vegetation management, and

1 environmental expenses such as pollution controls. These expenses are segmented
2 according to the facilities supported (section 4.3.1). The seven-year historical line and
3 substation O&M expenses average \$154.3 million annually (*see* Table 4.1, line 16). The
4 segmented historical costs are used to allocate the projected future O&M costs. *See*
5 Transmission Revenue Requirement Study Documentation, BP-16-FS-BPA-08A, ch. 2.
6 Scheduling costs and system operations costs are for staff and technology associated with
7 reserving, scheduling, monitoring, controlling, and dispatching the transmission system.
8 The seven-year average historical scheduling and dispatch cost is \$45.9 million. *See*
9 Table 4.1, line 18. Rate period forecast scheduling and system operations costs are
10 directly assigned to the Ancillary Services segment and recovered through the SCD
11 service rate. *See* Transmission Revenue Requirement Study Documentation, BP-16-FS-
12 BPA-08A, ch. 2.

13
14 Marketing and business support costs are associated with general business functions,
15 including sales and contract management, billing, business strategy, legal support, aircraft
16 services, and general administration and executive services. The seven-year historical
17 marketing and support costs average \$44.4 million. *See* Table 4.1, line 18. Rate period
18 forecast costs are allocated pro rata on a net plant basis based on the directly assigned
19 investment. *See* Transmission Revenue Requirement Study Documentation, BP-16-FS-
20 BPA-08A, ch. 2.

21 22 **4.3.1 Historical Line and Station O&M Assignment to Segments**

23 The following process is used to segment historical O&M expenses:

- 24 1. Historical O&M expenses are identified by fiscal year and category, as
25 shown in Table 4.2. Categories are expense programs within BPA's

1 transmission business line, such as substation operations and transmission
2 line maintenance.

- 3 2. Approximately one-third of the historical O&M expenses are associated
4 with a specific line, substation, or metering location (*i.e.*, facility type).

5 These expenses, identified as direct O&M expenses, are allocated to
6 segments in the same proportion as was the investment in the specific
7 facility. Thus, if certain O&M expenses are associated with a given
8 substation, and 60 percent of the substation investment was allocated to
9 the Network, 60 percent of those O&M expenses are allocated to the
10 Network. If the investment in a substation is allocated entirely to one
11 segment, then the O&M is also allocated entirely to that segment. The
12 allocation of O&M for each facility is identified in Appendix A. The
13 direct O&M expenses are then aggregated by category and facility type.
14 *See* Table 4.3.

- 15 3. Non-direct O&M expenses (that is, expenses not identified with a specific
16 facility) are aggregated by category and allocated to the facility types
17 (transmission lines, substations, or metering locations) in the same
18 proportions as the direct O&M expenses. For example, if 80 percent of
19 direct O&M expenses for substation maintenance are assigned to
20 substations, then 80 percent of non-direct O&M expenses for substation
21 maintenance are assigned to substations. Technical training and
22 environmental analysis have no direct O&M expense, and are allocated to
23 facility type in the same proportions as the total direct O&M expenses for
24 each facility type. Thus, for example, since about 15 percent of direct
25 expenses are allocated to transmission lines, 15 percent of technical
26 training expenses are allocated to transmission lines. Transmission line

1 maintenance, vegetation management and right-of-way maintenance
2 non-direct O&M expenses are allocated entirely to transmission lines.

- 3 4. The sum of the non-direct O&M expense for each facility type is shown in
4 Table 4.3, line 15. These amounts are allocated to the segments in the
5 same proportion as the direct expenses for each facility type. For
6 example, 90 percent of direct O&M expenses for transmission lines were
7 allocated to the Network. Therefore, 90 percent of non-direct O&M
8 expenses for transmission lines are allocated to the Network.
9 *See* Table 4.1, lines 7 and 13.

10 11 **4.4 U.S. Army Corps of Engineers and U.S. Bureau of Reclamation Facilities**

12 The investment and annual O&M expenses for the U.S. Army Corps of Engineers
13 (Corps) and U.S. Bureau of Reclamation (Bureau) facilities that function as part of
14 BPA's transmission system are included in the transmission revenue requirement, even
15 though BPA does not own these facilities. The total Corps and Bureau expenses
16 allocated to transmission were identified in the BP-16 generation inputs settlement,
17 Attachment 3. The segmentation of these expenses is based on an analysis of the Corps
18 and Bureau facilities summarized in Table 5. As shown, 97.3 percent of the expenses are
19 segmented to the Network and 2.7 percent of the expenses are segmented to Utility
20 Delivery.

This page intentionally left blank.

TABLES

This page intentionally left blank.

Table 1
BPA Investment Summary, through Sept. 30, 2014
(\$000)

A	B	C	D	E
<u>Category</u>	<u>Total</u>	<u>Funded in Advance</u>	<u>PFIA Stations</u>	<u>PFIA Lines</u>
1 TRANSMISSION PLANT IN SERVICE	5,975,261	141,767	89,727	52,040
2 MASTER LEASE	526,061			
3 LEASED ASSETS	125,086			
4 CAPITAL LEASES	20,353			
5 EMERGENCY MINIMUM STOCK	11,560			
6 INTANGIBLES	9,559			
7 FEE LAND IN SERVICE	142,351	238	31,289	110,825
8 DEPRECIABLE FEE LAND	48,343	107	716	47,521
9 GENERAL PLANT IN SERVICE	948,377	45,279		
10 Corporate Plant in Service	136,681			
11 PS Plant in Service	50,131			
12 Accounting Adjustments	0			
13 Grand Total	7,993,764	187,390		
		Segmented	Unsegmented	Ancillary Service
Transmission Plant				
14 Substations	3,300,665			
15 Metering Locations	14,177			
16 Total Stations	3,314,842	3,304,245	10,596	
17 Total Lines	2,975,484	2,956,034	19,450	
18 Other Transmission Plant	115,026		115,026	
19 Emergency minimum stock	11,560		11,560	
20 Intangibles	9,559	9,559		
21 Communication Equipment (397)	21,739		13,665	8,074
22 Control Equipment (353.1)	77,904			77,904
23 TPLNT (inc Leases) less PFIA	6,526,113	6,269,838	170,296	85,978
General Plant				
24 Communication Equipment (397)	477,862		434,664	43,198
25 Control Equipment (353.1, 391.2, 391.3)	18,177			18,177
26 Other General Plant	407,059		407,059	
27 GPLNT less PFIA	903,098		841,724	61,374
Subtotals				
28 Communication Equipment (397)	499,601		448,329	51,272
29 Control Equipment (353.1, 391.2, 391.3)	96,081			96,081
30 Total (incl. Dep Land GPlant)			855,388	147,353

Chart 1
BPA Plant Investment
 as of September 30, 2014 \$7,993,764
 (\$000)

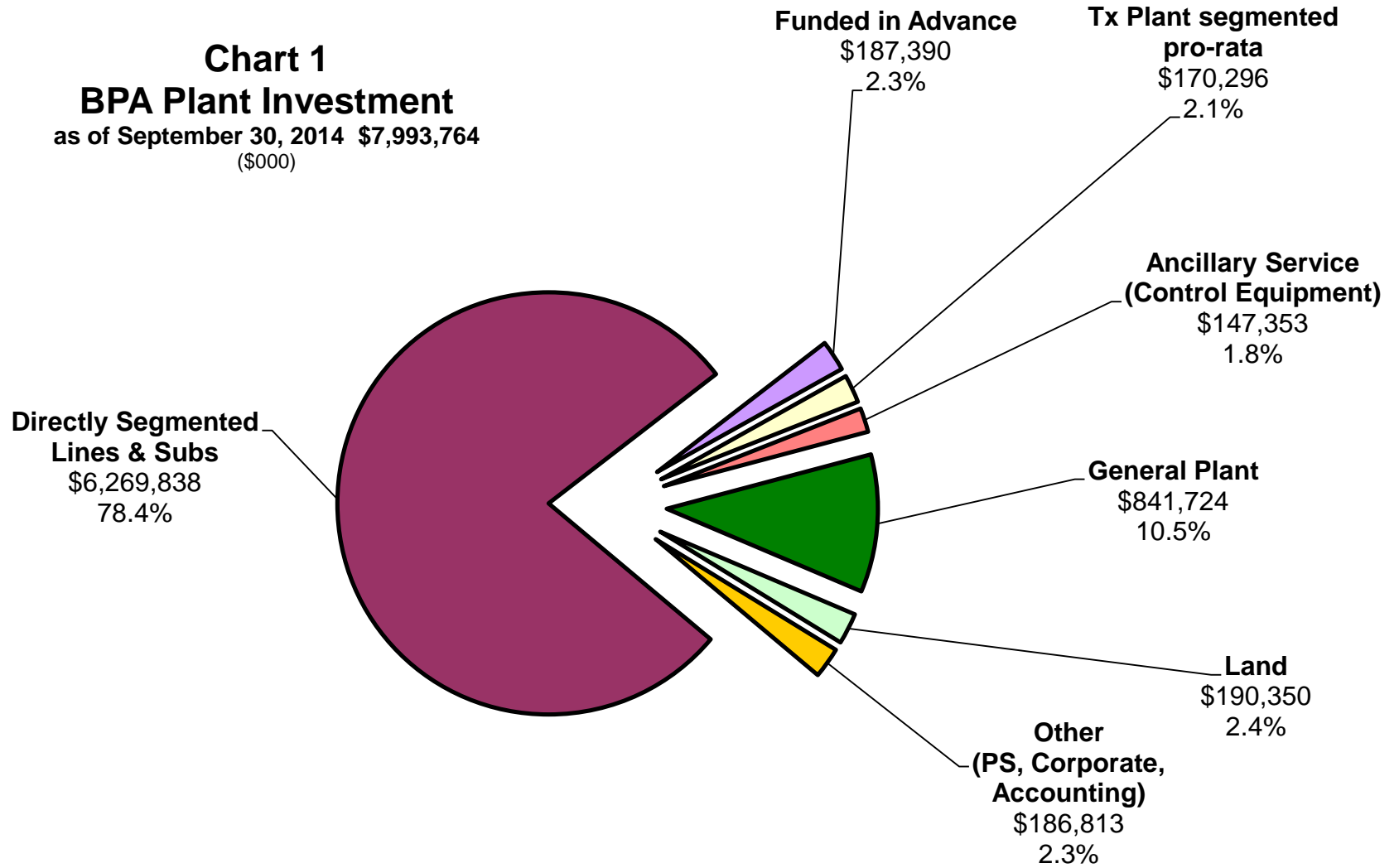


Table 2
BPA Segmented Investment, through Sept. 30, 2014
(\$000)

A	B	C	D	E	F	G	H	I
	<u>Generation</u> <u>Integration</u>	<u>Network</u>	<u>Southern</u> <u>Intertie</u>	<u>Eastern</u> <u>Intertie</u>	<u>Utility</u> <u>Delivery</u>	<u>DSI Delivery</u>	<u>Segmented</u> <u>Total</u>	<u>Un-segmented</u>
1 Substations	78,501	2,571,782	610,829	22,361	10,853	9,919	3,304,245	10,596
2 Other Facilities								115,026
3 Emergency Stock								11,560
4 Unseg.Allocation	3,259	106,773	25,360	928	451	412	137,182	(137,182)
5 Subtotal	81,760	2,678,554	636,189	23,289	11,304	10,331	3,441,428	-
FERC Account Summary								
6 Account 352							356,152	
7 Account 353							3,066,960	
8 Account 354							9,245	
9 Account 355							1,040	
10 Account 356							3,956	
11 Account 358							59	
12 Account 359							3,299	
13 Account 390							166	
14 Account 391							484	
15 Leased (no account)							67	
16 Substation total							3,441,428	
17 Lines	17,874	2,645,758	197,962	94,271	169	-	2,956,034	19,450
18 Unseg.Allocation	118	17,408	1,303	620	1	-	19,450	(19,450)
19 Subtotal	17,992	2,663,166	199,264	94,891	170	-	2,975,484	-
FERC Account Summary								
20 Account 352							1,713	
21 Account 353							23,499	
22 Account 354							1,097,308	
23 Account 355							355,577	
24 Account 356							1,226,966	
25 Account 358							21,799	
26 Account 359							185,926	
27 Leased (no account)							62,695	
28 Line total							2,975,484	
29 Intangibles (Account 303)		4,085	5,473				9,559	

Table 2
BPA Segmented Investment, through Sept. 30, 2014
(\$000)

A	B	C	D	E	F	G	H	I
	<u>Generation</u> <u>Integration</u>	<u>Network</u>	<u>Southern</u> <u>Intertie</u>	<u>Eastern</u> <u>Intertie</u>	<u>Utility</u> <u>Delivery</u>	<u>DSI Delivery</u>	<u>Segmented</u> <u>Total</u>	<u>Un-segmented</u>
30 Lines & Subs Total	99,752	5,345,806	840,926	118,181	11,474	10,331	6,426,470	-
31 % of Segmented Total	1.6%	83.2%	13.1%	1.8%	0.2%	0.2%	100.0%	
32 Depreciable Land (Account 350)								
33 Substations	-	46	-	-	-	-	46	
34 Lines	61	47,244	-	-	-	-	47,305	216
35 Other Facilities								670
36 Unseg.Allocation	14	737	116	16	2	1	886	(886)
37 Subtotal	75	48,027	116	16	2	1	48,236	-
Other							Ancillary Services	General Plant
38 Control							96,081	
39 Communications							51,272	448,329
40 General Plant								407,059
41 Subtotal							147,353	855,388
FERC Account Summary								
42 Account 352								44
43 Account 353 (Ancillary service is control equipment only)							77,904	(5)
44 Account 356								(2)
45 Account 390								194,049
46 Account 391 (Ancillary service is control equipment only)							18,177	32,206
47 Account 392								74,499
48 Account 393								3,006
49 Account 394								10,283
50 Account 395								25,593
51 Account 396								27,832
52 Account 397 (Ancillary service is control equipment only)							51,272	448,329
53 Account 398								39,554
54 Other total							147,353	855,388
55 Segmented Investment	99,827	5,393,833	841,042	118,197	11,475	10,333	147,353	855,388

Table 3.1
Future Plant in Service Summary
(\$000)

A	B	C	D	E	F	G	H	
	<u>Generation Integration</u>	<u>Network</u>	<u>Southern Intertie</u>	<u>Eastern Intertie</u>	<u>Utility Delivery</u>	<u>DSI Delivery</u>	<u>Total</u>	
Stations								
1	FY 2015	-	185,004	26,797	208	54	-	212,064
2	FY 2016	-	241,608	23,593	91	63	-	265,355
3	FY 2017	-	177,918	288,417	87	46	-	466,468
Lines								
4	FY 2015	-	147,123	1,762	-	-	-	148,886
5	FY 2016	-	182,584	1,754	-	-	-	184,339
6	FY 2017	-	129,702	34,336	-	-	-	164,038
Lines & Subs								
7	FY 2015	-	332,127	28,560	208	54	-	360,950
8	FY 2016	-	424,192	25,347	91	63	-	449,694
9	FY 2017	-	307,620	322,753	87	46	-	630,506
Other		<u>Ancillary Services</u>	<u>General Plant</u>					
10	FY 2015	52,109	116,239					
11	FY 2016	64,789	118,691					
12	FY 2017	40,038	119,561					

Table 3.2
Future Plant in Service Details
(\$000)

	A Project	B C D Total			E F G Substation			H I J Line			K L M General Plant		
		FY 15	FY16	FY 17	FY 15	FY16	FY 17	FY 15	FY16	FY 17	FY 15	FY16	FY 17
		1	BIG EDDY-KNIGHT 500KV PROJECT	39,500	-	-	3,950	-	-	31,600	-	-	3,950
2	CENTRAL FERRY- LOWER MONUMNTAL PROJECT	-	80,000	-	-	8,000	-	-	64,000	-	-	8,000	-
3	PSANI PROJECT	-	37,300	-	-	33,570	-	-	-	-	-	3,730	-
4	BONANZA SUBSTATION PROJECT	-	-	20,500	-	-	20,500	-	-	-	-	-	-
	MAIN GRID PROJECTS												
5	OLYMPIC PENINSULA REINFORCEMENT	-	-	-	-	-	-	-	-	-	-	-	-
6	CENTRAL OREGON REINFORCEMENT	-	-	-	-	-	-	-	-	-	-	-	-
	PORTLAND-VANCOUVER AREA												
7	Pearl Substation 500KV Bay 6 TFY1100141	-	-	-	-	-	-	-	-	-	-	-	-
8	Keeler Substation 500KV Bus Sect Brkr TFY110073	-	1,526	-	-	1,526	-	-	-	-	-	-	-
9	Ostrander 500KV Brkr TFY120123	-	1,094	-	-	1,094	-	-	-	-	-	-	-
10	Pearl Substation 500KV Expansion TS0140024	-	-	2,103	-	-	1,893	-	-	210	-	-	-
11	WEST OF CASCADES NORTH	-	-	-	-	-	-	-	-	-	-	-	-
12	WEST OF CASCADES SOUTH	-	-	-	-	-	-	-	-	-	-	-	-
13	SALEM- ALBANY-EUGENE AREA	4,810	-	-	-	-	-	4,810	-	-	-	-	-
	TRI-CITIES AREA												
14	White Bluff Sub Bus TFY090164	-	-	-	-	-	-	-	-	-	-	-	-
15	Franklin 115KV Shunt Cap TFY110037	2,011	-	-	2,011	-	-	-	-	-	-	-	-
16	White Bluffs 115KV Shunt Cap TFY120024	-	-	-	-	-	-	-	-	-	-	-	-
17	McNary 230KV Shunt Cap TFY120109	-	3,495	-	-	3,495	-	-	-	-	-	-	-
18	Red Mountain-Grandview L-RAS TS014006	-	453	-	-	-	-	-	-	-	-	453	-
19	MONTANA-WEST OF HATWAI	-	-	-	-	-	-	-	-	-	-	-	-
20	MISC MAIN GRID PROJECTS & COMPLIANCE	4,631	24,603	26,647	4,631	24,603	26,647	-	-	-	-	-	-
	AREA & CUSTOMER SERVICE PROJECTS												
21	LOWER VALLEY REINFORC. PROJECT (CARIBOU/HOO)	-	-	45,000	-	-	11,250	-	-	33,750	-	-	-
22	CITY OF CENTRALIA PROJECT	-	-	-	-	-	-	-	-	-	-	-	-
23	SOUTHERN IDAHO - LOWER VALLEY	-	-	-	-	-	-	-	-	-	-	-	-
24	MISC. AREA & CUSTOMER SERVICE	1,389	2,514	9,077	1,389	2,514	9,077	-	-	-	-	-	-
25	ROGUE SVC ADDITION	-	-	-	-	-	-	-	-	-	-	-	-
26	LONGVIEW AREA REINFORCEMENT	-	-	-	-	-	-	-	-	-	-	-	-
27	KALISPELL-FLATHEAD VALLEY	-	-	-	-	-	-	-	-	-	-	-	-
28	Security Enhancements	12,411	6,383	7,570	12,411	6,383	7,570	-	-	-	-	-	-
29	IT Projects	4,155	3,490	2,825	-	-	-	-	-	-	4,155	3,490	2,825
30	SYSTEM TELECOMM - UPGRADES & ADDITIONS PRO	12,668	11,000	29,274	-	-	-	-	-	-	12,668	11,000	29,274
	RIGHTS OF WAY PROGRAM												
31	ACCESS ROADS	15,520	17,100	19,000	-	-	-	-	-	-	15,520	17,100	19,000
32	LAND RIGHTS - TRIBAL RENEWALS	485	484	491	-	-	-	-	-	-	485	484	491
33	LAND RIGHTS- VEG MITIGATION	485	484	491	-	-	-	-	-	-	485	484	491
34	LAND RIGHTS - ACCESS ROADS	8,526	6,423	6,532	-	-	-	-	-	-	8,526	6,423	6,532
35	CC EXPAND PROGRAM	1,517	1,526	1,500	-	-	-	-	-	-	1,517	1,526	1,500
	CC SUSTAIN PROGRAM												
36	CC INFRASTRUCTURE COMPONENTS	2,897	2,899	3,521	-	-	-	-	-	-	2,897	2,899	3,521
37	CC SYSTEM & APPLICATION	2,755	2,899	2,375	-	-	-	-	-	-	2,755	2,899	2,375

Table 4.1
BPA Historical Operations and Maintenance (O&M)
Fiscal years 2008 through 2014 (Seven Years)
(Annual Average \$000)

A	B	C	D	E	F	G	H
	<u>Generation Integration</u>	<u>Network</u>	<u>Southern Intertie</u>	<u>Eastern Intertie</u>	<u>Utility Delivery</u>	<u>DSI Delivery</u>	<u>Total</u>
Stations							
1 Substations Direct Allocation	827	28,486	5,298	170	226	155	35,162
2 % Direct	2.35%	81.01%	15.07%	0.48%	0.64%	0.44%	100.00%
3 Unsegmented Allocation	150	5,182	964	31	41	28	6,396
4 Non-Direct Allocation	1,441	49,653	9,235	296	394	271	61,290
5 Metering Direct Allocation	13	271	-	-	30	-	314
6 % Direct	4.17%	86.30%	0.00%	0.00%	9.53%	0.00%	100.00%
7 Non-Direct Allocation	18	369	-	-	41	-	428
8 Total Station O&M	2,450	83,961	15,497	497	731	454	103,590
9 Station Percent	2.4%	81.1%	15.0%	0.5%	0.7%	0.4%	100.0%
Lines							
10 Direct Allocation	60	6,599	407	271	1	-	7,337
11 % Direct	0.81%	89.93%	5.54%	3.69%	0.02%	0.00%	100.00%
12 Unsegmented Allocation	1	147	9	6	0	-	163
13 Non-Direct Allocation	351	38,849	2,394	1,596	8	-	43,198
14 Total Line O&M	412	45,595	2,810	1,873	9	-	50,699
15 Line Percent	0.8%	89.9%	5.5%	3.7%	0.0%	0.0%	100.0%
16 Lines & Subs	2,862	129,556	18,306	2,370	740	454	154,289
17 % of Segmented Total	1.9%	84.0%	11.9%	1.5%	0.5%	0.3%	100.0%
Ancillary							
	<u>Overhead</u>	<u>Services</u>					
18 Other	44,434	45,935					

Table 4.2
Historical Operation and Maintenance (O&M) Expenses FY 2008 - FY 2014 (7 years)
Total O&M by category
(\$000)

A	B	C	D	E	F	G	H	I
	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>Average</u>
<u>O&M allocated to Lines and Stations</u>								
1 SUBSTATION OPERATIONS	18,712	19,168	20,239	21,286	21,947	21,750	22,787	20,841
2 HEAVY MOBILE EQUIPMENT MAINT	355	58	(79)	379	(0)	(125)	200	113
3 JOINT COST MAINTENANCE	207	142	97	58	146	123	134	130
4 NON-ELECTRIC MAINTENANCE	9,340	11,280	18,241	23,548	25,900	25,204	21,296	19,258
5 POWER SYSTEM CONTROL MAINT	10,328	10,271	11,579	11,958	12,637	17,623	20,791	13,598
6 ROW MAINTENANCE	6,787	7,003	7,965	10,386	5,243	7,298	7,396	7,440
7 SUBSTATION MAINTENANCE	25,154	25,522	23,809	25,522	28,056	27,726	30,365	26,594
8 SYSTEM MAINTENANCE MANAGEMENT	5,167	7,753	5,277	5,292	4,879	7,076	8,214	6,237
9 SYSTEM PROTECTION CONTRL MAINT	10,864	11,419	11,377	11,388	11,651	11,869	11,963	11,504
10 TECHNICAL TRAINING	2,149	2,466	2,588	2,530	2,443	2,211	2,087	2,353
11 TRANSMISSION LINE MAINTENANCE	20,182	21,983	21,076	22,921	24,984	26,570	27,782	23,643
12 VEGETATION MANAGEMENT	21,514	27,414	20,583	11,696	16,141	17,928	19,536	19,259
13 ENVIRONMENTAL ANALYSIS	86	67	48	21	10	0	5	34
14 POLLUTION PREVENTN & ABATEMENT	<u>3,050</u>	<u>2,907</u>	<u>2,870</u>	<u>3,236</u>	<u>3,288</u>	<u>3,427</u>	<u>4,221</u>	<u>3,286</u>
15 Subtotal Lines and Stations	133,896	147,452	145,669	150,224	157,323	168,681	176,776	154,289
<u>O&M allocated to Ancillary Services</u>								
16 CONTROL CENTER SUPPORT	10,978	11,400	11,088	14,753	13,646	14,062	19,368	13,614
17 INFORMATION TECHNOLOGY	4,465	4,572	5,334	6,768	9,098	9,115	12,522	7,410
18 POWER SYSTEM DISPATCHING	10,268	11,138	11,724	11,649	12,089	12,155	12,260	11,612
19 TECHNICAL OPERATIONS	4,193	5,242	4,557	4,725	3,816	4,410	5,854	4,685
20 SCHED-AFTER-THE-FACT	1,243	310	218	156	236	236	240	377
21 SCHED-MANAGE SPRVISION & ADMIN	491	237	0	(11)	0	0	0	103
22 SCHED-PRE-SCHEDULING	360	261	188	240	216	240	328	262
23 SCHED-REAL-TIME SCHEDULING	3,815	3,492	3,677	3,950	3,758	3,879	4,056	3,804
24 SCHED-RESERVATIONS	871	790	2,241	3,850	4,064	4,160	1,049	2,432
25 SCHED-TECHNICAL SUPPORT	<u>1,540</u>	<u>1,564</u>	<u>1,807</u>	<u>1,226</u>	<u>948</u>	<u>432</u>	<u>3,940</u>	<u>1,637</u>
26 Subtotal Ancillary Services	38,224	39,007	40,833	47,307	47,870	48,689	59,616	45,935
<u>O&M identified as Overhead</u>								
27 AIRCRAFT SERVICES	679	921	1,135	1,121	1,082	1,205	1,273	1,060
28 EXECUTIVE & ADMIN SERVICES	8,594	9,311	12,407	12,179	12,204	10,364	10,318	10,768
29 GENERAL ADMINISTRATIVE	10,679	6,453	5,339	10,191	13,995	9,199	13,469	9,904
30 LEGAL SUPPORT - EXPENSE	2,038	2,401	2,305	2,609	3,034	2,240	2,586	2,459
31 LOGISTICS SERVICES	4,040	3,756	4,120	3,532	4,839	4,710	5,340	4,334
32 MKTG BUSINESS STRAT & ASSESS	3,982	5,346	6,005	6,426	6,603	6,552	6,216	5,876
33 MKTG CONTRACT MANAGEMENT	3,530	3,556	3,880	4,058	4,442	4,498	4,509	4,068
34 MKTG INTERNAL OPERATIONS	137	0	0	2	(1)	0	0	20
35 MKTG TRANSMISSION BILLING	2,027	2,698	2,048	2,226	2,229	2,528	2,358	2,302
36 MKTG TRANSMISSION FINANCE	392	398	305	270	286	(6)	0	235
37 MKTG TRANSMISSION SALES	2,055	2,298	2,356	2,319	2,787	2,509	2,418	2,392
38 SECURITY ENHANCEMENTS EXPENSE	<u>1,226</u>	<u>3,186</u>	<u>542</u>	<u>482</u>	<u>475</u>	<u>705</u>	<u>507</u>	<u>1,018</u>
39 Subtotal Overhead	39,379	40,324	40,443	45,417	51,975	44,504	48,994	44,434
40 Total Historical O&M	211,499	226,783	226,945	242,948	257,169	261,873	285,385	244,657

Table 4.3
Historical Operation and Maintenance (O&M) Expenses FY 2008 - FY 2014 (7 years)
Allocation of average historical O&M to Lines, Substations, and Metering Locations
(\$000)

A	B	C	D	E	F	G	H	I
	Direct Charges				Non-direct Charges			
	<u>Lines</u>	<u>Subs</u>	<u>Metering</u>	<u>Subtotal</u>	<u>Lines</u>	<u>Subs</u>	<u>Metering</u>	<u>Subtotal</u>
1 SUBSTATION OPERATIONS	4	8,626	40	8,670	6	12,108	57	12,171
2 HEAVY MOBILE EQUIPMENT MAINT		4		4		108		108
3 JOINT COST MAINTENANCE		128		128		1		1
4 NON-ELECTRIC MAINTENANCE	1	7,409	20	7,430	1	11,792	36	11,829
5 POWER SYSTEM CONTROL MAINT		3,939	33	3,971		9,547	80	9,627
6 ROW MAINTENANCE 1/	15	27		42	7,398			7,398
7 SUBSTATION MAINTENANCE	6	16,403	59	16,468	4	10,084	37	10,125
8 SYSTEM MAINTENANCE MANAGEMENT		12		12		6,225		6,225
9 SYSTEM PROTECTION CONTRL MAINT	0	5,004	162	5,166	0	6,134	204	6,338
10 TECHNICAL TRAINING				0	355	1,984	15	2,353
11 TRANSMISSION LINE MAINTENANCE 1/	7,418	2		7,419	16,223			16,223
12 VEGETATION MANAGEMENT 1/	53			53	19,206			19,206
13 ENVIRONMENTAL ANALYSIS				0	5	29	0	34
14 POLLUTION PREVENTN & ABATEMENT	4	4		8		3,278		3,278
15 Total	7,501	41,558	314	49,373	43,198	61,290	428	104,916

Notes:

1/ Non-direct ROW MAINTENANCE, TRANSMISSION LINE MAINTENANCE, and VEGETATION MANAGEMENT allocated to lines

Table 5
U.S. Army Corps of Engineers and U.S. Bureau of Reclamation Project Segmentation
based on FY 2013 BOR/COE records

	A	B	C	D
		Generation Integration	Network	Utility Delivery
1	<u>BOR Project Transmission Facilities:</u>			
2	Columbia Basin (Grand Coulee) Project	180,591,020	82,101,305	2,447,740
3	Other Projects	<u>14,288,361</u>	<u>2,774,736</u>	<u>0</u>
4	Total BOR Projects	194,879,381	84,876,042	2,447,740
5	<u>COE Project Transmission Facilities:</u>			
6	Bonneville Project	30,039,120	2,700,096	0
7	TOTAL ALL PROJECTS:	224,918,502	87,576,137	2,447,740
8	TOTAL TRANSMISSION ALLOCATION:	90,023,877	97.30%	2.70%

This page intentionally left blank.

Appendix A
BP-16 Rate Case Final Proposal
Segmentation Details

This page intentionally left blank.

Appendix A
BP-16 Rate Case Final Proposal Segmentation Details

A	B	C	D	E
<u>Generation Integration Facilities</u>				
Transmission Lines	Owner	Investment (\$)	O&M (\$)	Multi %
1	ANDERSON RANCH-MOUNTAIN HOME NO 1	4,449,861	10,187	
2	BIG CLIFF-DETROIT PH NO 1	181,340	1,669	
3	BIG CLIFF-DETROIT PH NO 2	181,340	465	
4	BLACK CANYON-EMMETT NO 1	307,180	5,105	
5	BONNEVILLE PH 1-NORTH BONNEVILLE NO 1	85,578	141	
6	BONNEVILLE PH 1-NORTH BONNEVILLE NO 2	86,775	0	
7	BONNEVILLE PH 2-NORTH BONNEVILLE NO 3	98,469	276	
8	BONNEVILLE PH 2-NORTH BONNEVILLE NO 4	1,214,223	61	
9	CHANDLER TAP TO GRANDVIEW-RED MOUNTAIN NO 1	163,062	1,635	
10	CHIEF JOSEPH PH-CHIEF JOSEPH NO 1	68,924	688	
11	CHIEF JOSEPH PH-CHIEF JOSEPH NO 2	89,376	672	
12	CHIEF JOSEPH PH-CHIEF JOSEPH NO 3	82,433	183	
13	CHIEF JOSEPH PH-CHIEF JOSEPH NO 4	78,094	98	
14	CHIEF JOSEPH PH-CHIEF JOSEPH NO 5	475,202	253	
15	CHIEF JOSEPH PH-CHIEF JOSEPH NO 6	439,561	676	
16	COLUMBIA GENERATING STATION-ASHE NO 1	330,593	194	
17	COLUMBIA GENERATING STATION-ASHE NO 2	76,075	250	
18	COUGAR-THURSTON NO 1	123,688	1,632	5%
19	DETROIT PH-DETROIT NO 1	42,262	2,260	
20	DETROIT PH-DETROIT NO 2	42,262	457	
21	DETROIT-SANTIAM NO 1	1,916,208	5,809	
22	DWORSHAK PH-DWORSHAK NO 1	1,302,296	696	
23	GREEN PETER-LEBANON NO 1	357,224	4,418	35%
24	HILLS CREEK-LOOKOUT POINT NO 1	299,791	5,768	19%
25	ICE HARBOR-FRANKLIN NO 1	587,534	2,831	
26	ICE HARBOR-FRANKLIN NO 2	15,726	36	3%
27	ICE HARBOR-FRANKLIN NO 3	133,963	111	9%
28	JOHN DAY PH-JOHN DAY NO 1	485,647	438	
29	JOHN DAY PH-JOHN DAY NO 2	485,647	482	
30	JOHN DAY PH-JOHN DAY NO 3	485,647	462	
31	JOHN DAY PH-JOHN DAY NO 4	485,642	655	
32	LIBBY PH-LIBBY NO 1	278,220	531	
33	LIBBY PH-LIBBY NO 2	265,855	842	
34	LITTLE GOOSE PH-LITTLE GOOSE NO 1	290,246	968	
35	LOOKOUT POINT PH-LOOKOUT POINT NO 1	10,253	179	
36	LOWER GRANITE PH-LOWER GRANITE NO 1	433,123	734	
37	LOWER MONUMENTAL PH-LOWER MONUMENTAL NO 1	236,523	3,141	
38	MCNARY PH-MCNARY 3&4 NO 3	135,173	126	
39	MCNARY PH-MCNARY NO 1	76,683	201	
40	MCNARY PH-MCNARY NO 2	74,361	(1,226)	
41	MCNARY PH-MCNARY NO 5	101,717	128	
42	MCNARY PH-MCNARY NO 6	112,595	379	
43	THE DALLES PH-BIG EDDY NO 1	118,075	2,356	
44	THE DALLES PH-BIG EDDY NO 2	121,407	206	
45	THE DALLES PH-BIG EDDY NO 3	107,356	252	
46	THE DALLES PH-BIG EDDY NO 4	107,351	306	
47	THE DALLES PH-BIG EDDY NO 5	116,296	252	
48	THE DALLES PH-BIG EDDY NO 6	117,572	1,674	
49	Subtotal Lines	17,874,430	59,657	
Stations	Owner	Investment (\$)	O&M (\$)	Multi %
50	ALBENI FALLS SUBSTATION	365,644	6,389	25%
51	ASHE SUBSTATION	5,381,982	54,789	12%
52	BIG EDDY SUBSTATION	3,496,755	28,957	5%
53	BONNEVILLE POWERHOUSE #1	195,150	7,209	
54	CHIEF JOSEPH POWERHOUSE	102,351	9,291	
55	CHIEF JOSEPH SUBSTATION	8,648,620	178,889	25%
56	COLUMBIA GENERATING STATION SUBSTATION (ENERGY NORTHEW)	110,860	0	
57	COUGAR SUBSTATION	255,378	8,011	
58	DETROIT SUBSTATION	1,062,141	26,782	
59	DWORSHAK POWERHOUSE	190,858	4,519	
60	DWORSHAK SUBSTATION	4,502,639	27,935	18%
61	FOSTER SUBSTATION	42,312	6,502	
62	FRANKLIN SUBSTATION	1,857,163	40,076	12%
63	GRAND COULEE 115 KV SWITCHYARD	75,243	3,103	
64	GRAND COULEE 230 KV SWITCHYARD	82,186	1,183	
65	GRAND COULEE 500 KV SWITCHYARD	995,051	10,448	
66	GREEN PETER SUBSTATION	257,380	4,657	
67	HANFORD NO.2 CONSTRUCTION SUBSTATION	75,446	3,817	
68	HILLS CREEK SUBSTATION	374,351	9,136	
69	HUNGRY HORSE POWERHOUSE	333,182	9,930	
70	HUNGRY HORSE SWITCHYARD	89,046	0	
71	ICE HARBOR POWERHOUSE	187,633	3,949	
72	JOHN DAY POWERHOUSE	276,948	185	
73	JOHN DAY SUBSTATION	12,650,391	89,382	28%
74	LIBBY POWERHOUSE	112,091	2,394	
75	LIBBY SUBSTATION(BPA)	2,274,185	48,717	25%
76	LITTLE GOOSE POWERHOUSE	489,782	2,251	
77	LITTLE GOOSE SUBSTATION	16,633,416	25,767	20%
78	LOOKOUT POINT POWERHOUSE	222,084	449	
79	LOOKOUT POINT SUBSTATION	609,012	6,336	25%

Appendix A
BP-16 Rate Case Final Proposal Segmentation Details

A	B	C	D	E
80	LOST CREEK POWERHOUSE	53,123	716	
81	LOWER GRANITE POWERHOUSE	368,331	1,469	
82	LOWER GRANITE SUBSTATION	2,095,395	27,991	25%
83	LOWER MONUMENTAL POWERHOUSE	393,152	1,975	
84	LOWER MONUMENTAL SUBSTATION	2,721,084	17,299	12%
85	MCNARY POWERHOUSE	245,608	4,268	
86	MCNARY SUBSTATION	3,967,280	39,049	7%
87	MINIDOKA POWERHOUSE	147,898	6,143	
88	MOUNTAIN HOME SUBSTATION(BPA)	174,369	15,782	
89	NORTH BONNEVILLE SUBSTATION	4,180,700	66,350	37%
90	PALISADES POWERHOUSE	620,267	6,965	
91	ROZA POWERHOUSE	23,450	0	
92	SACAJAWEA SUBSTATION	200,906	501	1%
93	SANTIAM SUBSTATION	843,226	17,692	5%
94	THE DALLES POWERHOUSE	53,426	3,275	
95	WPPSS NO. 2 POWERHOUSE	463,746	9,510	
96	Subtotal Stations	78,501,238	840,038	
97	Total Generation Integration	96,375,668	899,695	

Network Facilities

Transmission Lines	Owner	Investment (\$)	O&M (\$)	Multi %
98	ABERDEEN TAP TO SATSOP PARK-COSMOPOLIS NO 1	1,597,354	4,304	
99	ACORD TAP TO GRANDVIEW-RED MOUNTAIN NO 1	256,732	0	
100	ADAIR TAP TO SALEM-ALBANY NO 2	92,848	163	
101	ADDY-COLVILLE NO 1	42,251	1,856	
102	ADDY-CUSICK NO 1	4,903,855	9,751	
103	ALBANY-BURNT WOODS NO 1	4,242,922	7,893	
104	ALBANY-EUGENE NO 1	26,755,092	19,772	
105	ALBANY-LEBANON NO 1	1,120,230	9,825	
106	ALBENI FALLS-PINE STREET NO 1	347,358	1,328	
107	ALBENI FALLS-SAND CREEK NO 1	11,194,113	19,017	
108	ALCOA-FELIDA NO 1	36,090	579	
109	ALLSTON-CLATSOP NO 1	2,810,270	23,484	
110	ALLSTON-DRISCOLL NO 1	1,423,237	6,333	
111	ALLSTON-DRISCOLL NO 2	2,469,261	26,927	
112	ALVEY 500/230 KV TIE LINE NO 1	347,565	395	
113	ALVEY-FAIRVIEW NO 1	9,366,177	68,246	
114	ALVEY-LANE NO 1	1,378,137	5,269	
115	ALVEY-MARTIN CREEK NO 1	279,685	3,535	
116	ANACONDA-SILVER BOW NO 1	696,546	11,538	
117	ANTELOPE-FOSSIL (LEASED FACILITIES)	16,642,388	0	
118	ASHE TAP TO MIDWAY-HEW NO 2	83,431	1,027	
119	ASHE-HANFORD NO 1	5,509,091	4,235	
120	ASHE-MARION NO 2	84,482,812	107,522	
121	ASHE-SLATT NO 1	25,272,636	14,907	
122	ASHE-WHITE BLUFFS NO 1	1,215,881	1,758	
123	BADGER CANYON-REATA NO 1	352,148	1,412	
124	BADGER CANYON-RICHLAND NO 1	613,122	1,557	
125	BAKERS CORNER TAP TO LEXINGTON-LONGVIEW NO 1	260,047	154	
126	BALD MOUNTAIN TAP TO UNDERWOOD TAP	119,704	0	
127	BANDON SUBSTATION TRANSFORMER TIE 1	30,869	1,815	
125	BANDON-ROGUE NO 1	29,246,772	21,209	
128	BELFAIR TAP TO SHELTON-KITSAP NO 2	1,313	0	
129	BELL-ADDY NO 1	4,981,040	8,775	
130	BELL-BOUNDARY NO 1	6,153,516	22,785	
131	BELL-BOUNDARY NO 3	29,181,294	40,428	
132	BELLINGHAM-CUSTER NO 1	149,475	1,860	
133	BELL-LANCASTER NO 1	2,431,074	8,848	
134	BELL-TRENTWOOD NO 1	763,212	6,726	
135	BELL-TRENTWOOD NO 2	627,870	4,223	
136	BELL-USK NO 1	1,831,208	9,401	
137	BENTON-451B NO 1	247,991	2,021	
138	BENTON-DOE B3-S4 NO 1	162,956	1,417	
139	BENTON-FRANKLIN NO 1	7,189,560	3,187	
140	BENTON-FRANKLIN NO 2	606,950	3,809	
141	BENTON-OTHELLO NO 1	4,921,504	1,312	
142	BENTON-SCOOTENEY NO 1	936,782	12,142	
143	BENTON-WHITE BLUFFS NO 1	557,626	1,830	
144	BERTELSEN-WILLOW CREEK NO 1	85,814	604	
145	BETTAS ROAD-COLUMBIA NO 1	1,900,410	2,270	
146	BIG EDDY-CHEMAWA NO 1	3,481,772	35,196	
147	BIG EDDY-CHENOWETH NO 1	885,593	4,495	
148	BIG EDDY-CHENOWETH NO 2	1,455,031	2,074	
149	BIG EDDY-DE MOSS NO 1	930,199	15,741	
150	BIG EDDY-MCLOUGHLIN 1&2 NO 1	4,965,983	15,654	
151	BIG EDDY-MCLOUGHLIN 1&2 NO 2	1,764,192	7,252	
152	BIG EDDY-OSTRANDER NO 1	11,925,415	20,923	
153	BIG EDDY-REDMOND NO 1	7,694,020	48,751	
154	BIG EDDY-SPRING CREEK NO 1	3,032,156	23,288	
155	BIG EDDY-THE DALLES FISHWAY HYDRO PLANT	2,955,999	0	
156	BIG EDDY-TROUTDALE NO 1	14,939,916	88,509	
157	BLUE RIVER TAP TO COUGAR-THURSTON NO 1	58,362	4,958	

Appendix A
BP-16 Rate Case Final Proposal Segmentation Details

	A	B	C	D	E
158	BOARDMAN TAP TO MCNARY-JONES CANYON NO 1		61,136	282	
159	BOARDMAN-IONE NO 1		898,335	7,411	
160	BOARDMAN-TOWER ROAD NO 1		645,689	1,218	
161	BONNEVILLE PH 1-HOOD RIVER NO 1		4,214,828	25,567	
162	BONNEVILLE PH 1-NORTH CAMAS NO 1		453,835	5,082	
163	BONNEVILLE PH1-ALCOA 1&2		1,008,644	8,345	
164	BOTHELL-SAMMAMISH (PSE)		575,499	0	
165	BOTHELL-SNO-KING NO 1		415,901	129	
166	BOTHELL-SNO-KING NO 2		693,960	633	
167	BOUNDARY-NELWAY 1		263,960	2,687	
168	BOUNDARY-WANETA 1		117,328	327	
169	BOYER-TILLAMOOK NO 1		3,056,539	22,953	
170	BRASADA-HARNEY NO 1		4,161,956	48,142	
171	BRONX-SAND CREEK NO 1		2,622,656	1,166	
172	BUCKLEY-GRIZZLY NO 1		7,514,539	9,827	43%
173	BUCKLEY-MARION NO 1		20,369,871	18,997	50%
174	BURBANK TAP TO FRANKLIN-WALLA WALLA NO 1		2,665	103	
175	CALPINE-MCNARY NO 1		428,117	3,611	
176	CANAL-SECOND LIFT NO 1		25,231	222	
177	CANAL-SECOND LIFT NO 2		19,804	16	
178	CANBY TAP TO MALIN-HILLTOP NO1		2,144,365	3,489	
179	CARDWELL-COWLITZ NO 1		4,096,304	1,885	
180	CARLTON-MCMINNVILLE NO 1		463,769	529	
181	CARLTON-SHERWOOD NO 1		2,102,679	2,726	
182	CARLTON-TILLAMOOK NO 1		8,866,407	38,144	
183	CARSON TAP TO UNDERWOOD TAP		267,329	1,598	
184	CASCADE LOCKS TAP TO BONNEVILLE PH 1-HOOD RIVER NO 1		108,499	672	
	CATTLE CREEK-GOSHEN NO 1		4,351,255	0	
185	CENTRALIA TAP TO CHEHALIS-COVINGTON NO 1		1,162	1,610	
186	CENTRALIA-MAY STREET NO 1		167,108	562	
187	CGS BACKUP BANK TAP TO BENTON - 451B NO 1		224,495	712	
188	CHEHALIS-CENTRALIA NO 1		5,126,661	3,798	
189	CHEHALIS-CENTRALIA NO 2		7,154,275	5,029	
190	CHEHALIS-COVINGTON NO 1		2,235,062	84,757	
191	CHEHALIS-MAYFIELD NO 1		1,591,612	11,185	
192	CHEHALIS-OLYMPIA NO 1		2,540,993	15,531	
193	CHEHALIS-RAYMOND NO 1		15,410,690	23,727	
194	CHEMAWA-SALEM ALUMINA NO 1		299,492	2,128	
195	CHEMAWA-SALEM NO 1		4,761,205	5,075	
196	CHEMAWA-SALEM NO 2		302,519	4,168	
197	CHENEY TAP TO SILVER LAKE-SUNSET		381,384	7,278	
198	CHENOWETH-GOLDENDALE NO 1		1,990,576	15,056	
199	CHIEF JOSEPH-EAST OMAK NO 1		5,148,496	17,880	
200	CHIEF JOSEPH-MONROE NO 1		23,730,487	74,282	
201	CHIEF JOSEPH-SICKLER NO 1		5,357,719	37,532	
202	CHIEF JOSEPH-SNOHOMISH NO 3		8,128,843	41,643	
203	CHIEF JOSEPH-SNOHOMISH NO 4		9,240,347	33,055	
204	CHRISTMAS VALLEY TAP TO BRASADA-HARNEY NO 1		1,640	0	
205	COLUMBIA FALLS-CONKELLEY NO 1		72,714	2,520	
206	COLUMBIA FALLS-FLATHEAD NO 1		756,209	3,222	
207	COLUMBIA FALLS-KALISPELL NO 1		411,651	5,304	
208	COLUMBIA FALLS-TREGO NO 1		1,640,840	26,531	
209	COLUMBIA-ELLENSBURG NO 1		6,426,552	8,020	
210	COLUMBIA-GRAND COULEE NO 1		1,417,945	22,773	
211	COLUMBIA-GRAND COULEE NO 3		1,722,738	13,770	
212	COLUMBIA-VALHALLA NO 1		207,161	4,857	
213	COLUMBIA-VALHALLA NO 2		545,380	3,342	
214	COLVILLE-BOUNDARY NO 1		4,976,973	6,466	
215	COLVILLE-REPUBLIC NO 1		10,734,858	23,904	
216	CONNELL TAP TO BENTON-SCOOTENEY NO 1		190,017	1,864	
217	COSMOPOLIS-ABERDEEN NO 1		6,928	257	
218	COUGAR-THURSTON NO 1		2,159,286	28,493	95%
219	COVINGTON SUBSTATION TIE NO 2		17,720	294	
220	COVINGTON-BETTAS ROAD NO 1		1,716,558	16,825	
221	COVINGTON-CRESTON SCL NO 1		398,640	3,201	
222	COVINGTON-DUWAMISH NO 1		752,610	5,120	
223	COVINGTON-MAPLE VALLEY NO 2		1,129,206	13,122	
224	COVINGTON-WHITE RIVER NO 1		216,902	4,677	
225	COWLITZ TAP TO CHEHALIS-COVINGTON NO 1		736,747	5,952	
226	COYOTE SPRINGS-SLATT NO 1		2,352,112	3,326	88%
227	CRESTON-BELL NO 1		27,863,228	15,698	
228	CRESWELL TAP TO ALVEY-MARTIN CREEK NO 1		92,141	0	
229	CUSTER-INGLEDOW NO 1		7,036,672	4,101	
230	CUSTER-INGLEDOW NO 2		1,768,518	4,920	
231	CUSTER-INTALCO NO 1		497,585	2,558	
232	CUSTER-INTALCO NO 2		531,003	2,114	
233	DAVIS CREEK TAP TO MILE-HI-ALTURAS		208,342	5,401	
234	DE MOSS-FOSSIL NO 1		5,514,816	34,231	
235	DEXTER TAP TO LOOKOUT POINT-ALVEY NO 1		27,559	816	
236	DISCOVERY-CHENOWETH NO 1		8,490	670	
237	DORENA TAP TO ALVEY-MARTIN CREEK NO. 1		221,415	3,036	
238	DRAIN-ELKTON NO 1		843	0	
239	DRAIN-OAKLAND NO 1		843	0	

Appendix A
BP-16 Rate Case Final Proposal Segmentation Details

	A	B	C	D	E
240	DRISCOLL-ASTORIA NO 1		4,149,463	2,981	
241	DRISCOLL-NASELLE NO 1		4,319,577	26,613	
242	DRISCOLL-WAUNA NO 1		27,438	95	
243	DRUMMOND - MACKS INN NO 1		584,721	45,897	
244	DUTCH CANYON TAP TO ST JOHNS-ST HELENS NO 1		139	156	
245	DWORSHAK PH-OROFINO NO 1		205,764	679	
246	DWORSHAK-TAFT NO 1		22,069,794	37,813	
247	EAST ELLENSBURG TAP TO COLUMBIA-ELLENSBURG NO 1 (KITTTITAS C		356,552	618	
248	EAST OMAK TAP TO GRAND COULEE-FOSTER CREEK NO 1		5,127,081	4,009	
249	EAST OMAK-OROVILLE NO 1		13,684	5,162	
250	EAST OMAK-TONASKET NO 2		13,691	3,314	
251	ECHO LAKE - MAPLE VALLEY NO 1 & 2		11,222,945	22,257	
252	ECHO LAKE-MONROE NO 1		4,938,957	13,901	
253	ELBE TAP TO ALDER-LAGRANDE NO1,2		1,898,624	3,842	
254	ELLENSBURG-MOXEE NO 1		4,540,019	20,882	
255	ELTOPIA TAP TO SMITH CANYON-REDD		415,578	1,016	
256	EUGENE-ALDERWOOD NO 1		3,965,075	13,508	
257	EUGENE-ALVEY NO 2		1,481,721	7,893	
258	EUGENE-BERTELTSEN NO 1		65,690	1,673	
259	EUGENE-LANE NO 1		111,977	3,730	
260	FAIRMOUNT-PORT ANGELES NO 1		1,878,901	8,304	
261	FAIRMOUNT-PORT ANGELES NO 2		1,529,338	14,039	
262	FAIRVIEW-BANDON NO 1		1,832,358	21,804	
263	FAIRVIEW-BANDON NO 2		2,199,172	8,249	
264	FAIRVIEW-ROGUE NO 1		6,893,302	23,686	
265	FIDALGO-LOPEZ ISLAND NO 3		1,929,609	1,629	
266	FIDALGO-LOPEZ ISLAND NO 4		4,794,685	0	
267	FIDALGO-LOPEZ ISLAND NO 5		13,833,755	1,160	
268	FILBERT TAP TO FOREST GROVE-MCMINNVILLE NO 1		290,501	275	
269	FLATHEAD-HOT SPRINGS NO 1		3,257,393	13,994	
270	FORDS PRAIRIE TAP TO CHEHALIS-CENTRALIA NO 2		23,009	234	
271	FOREST GROVE-MCMINNVILLE NO 1		1,632,477	7,577	
272	FOREST GROVE-TILLAMOOK NO 1		8,810,255	15,913	
273	FOSTER TAP TO GREEN PETER-LEBANON NO 1		254,650	4,481	
274	FOUR LAKES TAP TO SUNSET-EAST COLFAX		272,493	5,678	
275	FRANKLIN-BADGER CANYON NO 1		1,733,993	2,755	
276	FRANKLIN-BADGER CANYON NO 2		2,204,261	5,800	
277	FRANKLIN-HEDGES NO 1		305,411	1,440	
278	FRANKLIN-RUBY STREET NO 1		1,347,949	1,787	
279	FRANKLIN-WALLA WALLA NO 1		6,177,770	8,868	
280	FROMAN TAP TO ALBANY-LEBANON NO 1		592,229	522	
281	GARRISON-ANACONDA NO 1		5,184,668	21,822	
282	GARRISON-TAFT NO 1		86,218,545	120,781	
283	GARRISON-TAFT NO 2		86,218,545	87,290	
284	GLADE TAP TO BENTON-FRANKLIN NO 2		716	0	
285	GOSHEN-DRUMMOND NO 1		16,291,283	46,841	
286	GRAND COULEE-BELL NO 3		15,909,879	56,664	
287	GRAND COULEE-BELL NO 5		4,258,797	25,641	
288	GRAND COULEE-BELL NO 6		104,017,288	19,425	
289	GRAND COULEE-CHIEF JOSEPH NO 1		1,655,747	9,488	
290	GRAND COULEE-CHIEF JOSEPH NO 2		1,989,919	12,441	
291	GRAND COULEE-CHIEF JOSEPH NO 3		4,100,432	6,825	
292	GRAND COULEE-CRESTON NO 1		1,479,628	8,003	
293	GRAND COULEE-FOSTER CREEK NO 1		1,038,020	8,069	
294	GRAND COULEE-HANFORD NO 1		12,282,324	40,376	
295	GRAND COULEE-OKANOGAN NO 2		2,530,679	40,720	
296	GRAND COULEE-SCHULTZ NO 1		31,696,784	56,197	
297	GRAND COULEE-SCHULTZ NO 2		30,625,010	15,124	
298	GRAND COULEE-WESTSIDE(AVA) NO 1		11,751,635	15,789	
299	GRANDE ROND-BOYER NO 1		1,337,310	4,338	
300	GRANDVIEW-RED MOUNTAIN NO 1		1,778,851	9,527	
301	GREEN BLUFF TAP TO BELL-TRENTWOOD NO 2		397,505	3,317	
302	GREEN PETER-LEBANON NO 1		666,893	8,248	65%
303	GRIZZLY-SUMMER LAKE NO 1		14,696,081	20,795	43%
304	GROUSE CREEK-TECOMA (LEASED FACILITIES)		1,919,106	0	94%
305	HANFORD-WAUTOMA NO 1		3,298,689	2,354	
306	HANFORD-WAUTOMA NO 2		2,850,843	2,841	
307	HARRISBURG TAP TO ALBANY-EUGENE NO 1		15,159	145	
308	HARVALUM-BIG EDDY NO 1		2,717,106	5,571	
309	HAT ROCK TAP TO MCNARY-WALLULA		117,346	441	
310	HATTON TAP TO CONNELL TAP		1,062,007	5,052	
311	HATWAI-DWORSHAK NO 1		6,688,529	31,975	
312	HAWKINS-ALVEY NO 1		389,100	5,244	
313	HEBO TAP TO BOYER-TILLAMOOK NO 1		1,872	129	
314	HEDGES TAP TO FRANKLIN-BADGER CANYON NO 2		197,981	267	
315	HEYBURN-ADELAIDE NO 1		3,956,550	3,453	
316	HIDEAWAY TAP TO HAWKINS-ALVEY NO 1		505	178	
317	HILLS CREEK-LOOKOUT POINT NO 1		1,252,363	24,095	81%
318	HILLTOP-WARNER NO 1		4,824,687	4,587	
319	HOLCOMB TAP TO CHEHALIS-RAYMOND NO 1		343,953	246	
320	HOLCOMB-NASELLE NO 1		2,040,590	22,730	
321	HOOD RIVER-THE DALLES NO 1		3,502,756	3,927	
322	HORN BUTTE TAP TO TOWER ROAD-ALKALI NO 1		339,950	342	
323	HORSE HEAVEN-HARVALUM NO 1		773,114	9,740	

Appendix A
BP-16 Rate Case Final Proposal Segmentation Details

	A	B	C	D	E
324	HORSE RANCH TAP TO MONROE-SNOHOMISH NO 1&2		315,880	395	
325	HOT SPRINGS 500-230KV TIE NO 1		37,012	362	
326	HOT SPRINGS-RATTLESNAKE NO 1		6,631,847	46,302	
327	HUNGRY HORSE-COLUMBIA FALLS NO 1		4,979,851	1,336	
328	HUNGRY HORSE-CONKELLEY NO 1		981,905	1,541	
329	ICE HARBOR-FRANKLIN NO 2		554,825	1,277	97%
330	ICE HARBOR-FRANKLIN NO 3		1,331,565	1,099	91%
331	JACKSON TAP TO CANAL-SECOND LIFT NO. 2		54,669	355	
332	JOHN DAY-BIG EDDY NO 2		5,737,346	7,947	
333	JOHN DAY-MARION NO 1		17,485,758	49,928	
334	JONES CANYON-SANTIAM NO 1		11,604,614	37,656	
335	JUNCTION CITY TAP TO ALBANY-EUGENE NO 1		2,182	188	
336	KALISPELL-KERR NO 1		1,388,419	28,619	
337	KEELER-ALLSTON NO 1		5,141,827	19,592	
338	KEELER-FOREST GROVE NO 1		975,253	43,256	
339	KEELER-FOREST GROVE NO 2		654,053	9,634	
340	KEELER-OREGON CITY NO 2		1,675,630	9,521	
341	KELLER TAP TO GRAND COULEE-OKANOGAN NO 2		4,885,125	15,543	
342	KENNEWICK TAP TO FRANKLIN-BADGER CANYON NO 2		38,892	663	
343	KERR SUB TIE TO US ITS MP CO.115KV		77,150	751	
344	KITSAP-BANGOR NO 1		637,130	5,488	
345	KITSAP-STATION X NO 1		262,419	0	
346	KLONDIKE SCHOOLHOUSE-JOHN DAY NO 1		9,759,776	2,352	
347	LA PINE-CHILOQUIN NO 1		2,580,166	17,602	
348	LA PINE-FORT ROCK NO 1		6,761,746	9,783	
349	LANCASTER-NOXON NO 1		5,550,404	33,240	
350	LANE-WENDSON NO 1		3,904,159	31,965	
351	LANE-WENDSON NO 2		2,305,561	41,088	
352	LANGLOIS TAP TO BANDON-ROGUE NO 1		26,655	1,599	
353	LATHAM TAP TO ALVEY-MARTIN CREEK NO 1		1,381,946	1,134	
354	LEXINGTON-DELAMETER NO 1		144,674	0	
355	LEXINGTON-LONGVIEW NO 1		1,016,084	4,717	
356	LEXINGTON-LONGVIEW NO 2		1,406,126	29,290	
357	LIBBY-BONNERS FERRY NO 1		26,225,215	106,936	
358	LIBBY-CONKELLEY NO 1		9,627,742	51,336	
359	LITTLE GOOSE-LOWER GRANITE NO1		8,498,964	11,053	
360	LITTLE GOOSE-LOWER GRANITE NO2		11,712,702	4,158	
361	LONGVIEW-ALLSTON NO 1		333,525	7,040	
362	LONGVIEW-ALLSTON NO 2		69,437	6,456	
363	LONGVIEW-ALLSTON NO 3		1,078,592	4,769	
364	LONGVIEW-ALLSTON NO 4		658,953	18,183	
365	LONGVIEW-BAKERS CORNER (COWLITZ PUD LINE)		32,177	150	
366	LONGVIEW-CHEHALIS NO 1 & 3		2,945,500	56,063	
367	LONGVIEW-COWLITZ NO 1		597,381	3,387	
368	LONGVIEW-WASHINGTON WAY NO 1		629,897	0	
369	LOOKOUT POINT-ALVEY NO 1		855,860	9,790	
370	LOOKOUT POINT-ALVEY NO 2		715,344	7,819	
371	LOPEZ ISLAND-DECATUR NO 1		773,159	0	
372	LOST RIVER-SPAR CANYON NO 1		5,518,064	61,157	
373	LOWER GRANITE-HATWAI NO 1		8,692,113	23,543	
374	LOWER MONUMENTAL-ASHE NO 1		11,094,886	25,119	
375	LOWER MONUMENTAL-HANFORD NO 1		6,499,644	12,783	
376	LOWER MONUMENTAL-LITTLE GOOSE NO 1		3,302,542	12,660	
377	LOWER MONUMENTAL-LITTLE GOOSE NO 2		3,347,265	5,869	
378	LOWER MONUMENTAL-MCNARY NO 1		9,987,407	26,511	
379	LYNCH CREEK TAP TO CANYON-LAGRANDE NO 1,2		1,053,417	3,175	
380	MACKS INN-MADISON NO 1		3,799,620	20,390	
381	MALIN-HILLTOP NO 1		6,545,826	43,104	
382	MAPLE VALLEY-DUWAMISH NO 1		73,304	594	
383	MAPLE VALLEY-MASSACHUSETTS NO 1		23,317	134	
384	MARION-ALVEY NO 1		4,456,110	16,581	50%
385	MARION-LANE NO 1		9,078,140	29,858	
386	MARION-SANTIAM NO 1		619,487	1,658	
387	MARTIN CREEK TAP TO ALVEY-FAIRVIEW NO 1		11,094	408	
388	MARTIN CREEK-DRAIN NO 1		978,714	7,582	
389	MAUPIN-ANTELOPE (LEASED FACILITIES)		894,251	0	
390	MAUPIN-TYGH VALLEY NO 1		562,433	2,260	
391	MCCULLOUGH TAP TO COWLITZ-LAGRANDE NO 1,2		459,238	4,605	
392	MCNARY-BADGER CANYON NO 1		7,775,605	6,383	
393	MCNARY-BOARDMAN NO 1		777,180	2,040	
394	MCNARY-COYOTE SPRINGS NO 1		2,077,323	7,791	
395	MCNARY-FRANKLIN NO 2		1,743,743	10,473	
396	MCNARY-HORSE HEAVEN NO 1		13,284,119	4,906	
397	MCNARY-JOHN DAY NO 2		135,879,520	7,100	
398	MCNARY-JONES CANYON NO 1		1,657,299	7,570	
399	MCNARY-ROSS NO 1		16,691,500	52,267	
400	MCNARY-ROUNDUP NO 1		1,519,664	13,977	
401	MIDWAY-BENTON NO 1		18,693,724	3,873	
402	MIDWAY-BENTON NO 2		1,944,282	3,817	
403	MIDWAY-GRANDVIEW NO 1		1,254,400	11,240	
404	MIDWAY-MOXEE NO 1		1,385,757	11,898	
405	MIDWAY-POTHOLES NO 1		765,882	17,386	
406	MIDWAY-ROCKY FORD NO 1		1,620,448	10,972	
407	MIDWAY-VANTAGE NO 1		9,948,980	11,976	

Appendix A
BP-16 Rate Case Final Proposal Segmentation Details

	A	B	C	D	E
408	MILTON TAP TO WALLA WALLA-PENDLETON NO 1		2,196,321	1,385	
409	MINIDOKA PH-UNITY NO 1		2,146,839	20,633	
410	MINIDOKA SUB TAP TO DUFN43		1,099,937	189	
411	MIST TAP TO ALLSTON-DRISCOLL NO 2		9,302	1,082	
412	MONROE-CUSTER NO 1		20,992,448	59,141	
413	MONROE-CUSTER NO 2		8,704,892	38,913	
414	MONROE-NOVELTY HILL NO.1		1,736,161	0	
415	MONROE-SNOHOMISH NO 1 & 2		617,784	2,671	
416	MOSSYROCK-CHEHALIS NO 1		1,091,456	6,256	
417	MOUNTAIN AVENUE TAP TO (PACIFICORP) ASHLAND-OAK KNOLL		699,915	1,713	
418	MOXEE-ROZA NO 1		23,832	8,282	
419	MT SI-TANNER NO 1		6,226,960	1,615	
420	MT. VERNON TAP TO LOOKOUT POINT-ALVEY NO 2		68,601	1,823	
421	MURRAY-CUSTER NO 1		3,461,932	15,066	
422	NAPAVINE-ALLSTON NO 1		8,567,669	13,170	
423	NASELLE-TARLETT NO 1		2,551,258	23,389	
424	NASELLE-TARLETT NO 2		3,881,587	13,292	
425	NESPELEM TAP TO GRAND COULEE-OKANOGAN		579	0	
426	NINE MILE TAP TO FRANKLIN-WALLA WALLA NO 1		40,788	104	
427	NORTH BONNEVILLE-MIDWAY NO 1		8,203,155	81,760	
428	NORTH BONNEVILLE-ROSS NO 1		2,635,550	7,203	
429	NORTH BONNEVILLE-ROSS NO 2		1,843,674	39,260	
430	NORTH BONNEVILLE-TROUTDALE NO1		2,888,783	11,506	
431	NORTH BONNEVILLE-TROUTDALE NO2		2,881,488	6,658	
432	NORTH CAMAS-OAK PARK NO 1		113,773	1,194	
433	NORTH CAMAS-SIFTON NO 1		357,536	1,603	
434	NORTH MOUNTAIN-SNOHOMISH NO 1		149,405	360	
435	NOXON-HOT SPRINGS NO 1		3,019,998	33,854	
436	NOXON-LIBBY NO 1		2,845,525	53,709	
437	OLYMPIA 500-230 TIE LINE 1		992,129	0	
438	OLYMPIA-GRAND COULEE NO 1		20,578,215	98,281	
439	OLYMPIA-SATSOP NO 2		3,893,068	4,845	
440	OLYMPIA-SHELTON NO 1		343,650	0	
441	OLYMPIA-SHELTON NO 2		1,573,722	6,502	
442	OLYMPIA-SHELTON NO 3		3,225,852	4,473	
443	OLYMPIA-SHELTON NO 4		3,113,703	6,698	
444	OLYMPIA-SHELTON NO 5		8,300,352	7,509	
445	OLYMPIA-SOUTH ELMA NO 1		1,011,330	7,191	
446	OLYMPIA-ST CLAIR-S TACOMA NO 1		10,472,082	8,231	
447	OREGON CITY-CANBY PGE NO 1		434,424	1,985	
448	OREGON CITY-CHEMAWA NO 1		35,890	0	
449	OREGON CITY-CHEMAWA NO 2		2,867,294	37,337	
450	OSTRANDER-MCLOUGHLIN NO 1		1,415,214	5,922	
451	OSTRANDER-PEARL NO 1		2,001,443	21,866	
452	OSTRANDER-TROUTDALE NO 1		8,468,307	19,768	
453	PALISADES-CATTLE CREEK NO 1		19,797,433	22,514	
454	PALISADES-SWAN VALLEY NO 1		1,276,790	16,257	
455	PARKER TAP TO EUGENE-ALDERWOOD NO 1		9,970	80	
456	PAUL D. JOHNSON TAP TO ROSS-VANCOUVER SHIPYARD NO. 1		180,120	0	
457	PAUL-ALLSTON NO 2		9,278,477	37,428	
458	PAUL-NAPAVINE NO 1		1,699,815	8,925	
459	PAUL-OLYMPIA NO 1		3,514,676	10,720	
460	PAUL-SATSOP NO 1		30,139,100	19,283	
461	PEARL-KEELER NO 1		2,245,471	11,300	
462	PEARL-MARION NO 1		5,744,117	75,829	
463	PEARL-SHERWOOD NO. 1 & 2		1,503,457	1,205	
464	PILOT BUTTE-LA PINE NO 1		2,153,291	18,217	
465	PINE HOLLOW TAP TO THE DALLES-TYGH VALLEY NO 1		0	0	
466	POMEROY TAP TO TUCANNON RIVER-NORTH LEWISTON NO 1		29,550	430	
467	PONDEROSA-PILOT BUTTE NO 1		5,666,359	11,014	
468	PORT ANGELES-SAPPHO NO 1		2,996,647	29,845	
469	POTHOLES-GRAND COULEE NO 1		1,377,363	8,982	
470	POTLATCH TAP TO SHELTON-FAIRMOUNT NO 1		6,824	230	
471	POWERLINE TAPS TO DIAMOND HILL-COBURG		81,433	0	
472	PRIEST RIVER TAP TO ALBENI FALLS-SAND CREEK NO 1		297,117	2,387	
473	PROSSER TAP TO GRANDVIEW-RED MOUNTAIN NO 1		720,575	6,767	
474	RADAR TAP (USBR) TO SCOOTENEY TAP		65,675	2,052	
475	RAINBOW VALLEY TAP TO LANE-WENDSON NO 1		152,368	2,540	
476	RALSTON TAP TO EAST COLFAX-LIND		532,216	1,768	
477	RATTLESNAKE-GARRISON NO 1		2,391,146	30,826	
478	RAVER TAP TO SCHULTZ-ECHO LAKE NO 1		922,569	1,260	
479	RAVER-COVINGTON NO 1		2,290,045	10,359	
480	RAVER-COVINGTON NO 2		1,295,592	8,609	
481	RAVER-ECHO LAKE NO 1		2,190,125	5,728	
482	RAVER-PAUL NO 1		12,744,114	40,620	
483	RAYMOND-COSMOPOLIS NO 1		10,746,393	14,849	
484	RAYMOND-HENKLE ST. NO 1		85,625	1,354	
485	RAYMOND-WILLAPA RIVER NO 1		403,846	6,806	
486	RED MOUNTAIN-RICHLAND NO 1		442,352	3,532	
487	RED MOUNTAIN-WHITE BLUFFS NO 1		1,222,907	3,245	
488	REDMOND SUBSTATION 230/115KV TIE NO 1		315,227	63	
489	REDMOND-BRASADA NO 1		169,035	5,314	
490	REDMOND-PILOT BUTTE NO 1		286,641	6,749	
491	REEDSPORT-FAIRVIEW NO 1		5,816,014	29,657	

Appendix A
BP-16 Rate Case Final Proposal Segmentation Details

	A	B	C	D	E
492	RESTON-FAIRVIEW NO 2		1,801,177	15,264	
493	RIVERGATE-KEELER NO 1		512,780	1,951	
494	RIVERLAND-MIDWAY NO 1		21,591	955	
495	ROCK CREEK-JOHN DAY NO 1		6,249,974	5,634	
496	ROCKY FORD-GRAND COULEE NO 1		1,627,129	5,323	
497	ROCKY REACH-COLUMBIA NO 1		1,231,827	4,844	
498	ROCKY REACH-MAPLE VALLEY NO 1		15,011,139	106,449	
499	ROE'S CORNER TAP TO HEYBURN-ADELAIDE NO 1		1,116,651	1,546	
500	ROGUE-GOLD BEACH NO 1		3,485,431	2,611	
501	ROGUE-GOLD BEACH NO 2		4,805,288	11,422	
502	ROSS-ALCOA NO 2 & 4 (ROSS-ALCOA NO 2 SECTION)		136,560	648	
503	ROSS-ALCOA NO 3		1,252,366	781	
504	ROSS-CARBORUNDUM NO 1		104,720	1,354	
505	ROSS-LEXINGTON NO 1		2,619,691	12,804	
506	ROSS-RIVERGATE NO 1		558,459	19,772	
507	ROSS-ST JOHNS NO 1		1,623,576	12,035	
508	ROSS-VANCOUVER SHIPYARD NO 1		405,008	1,699	
509	ROUNDUP-LAGRANDE NO 1		2,419,806	22,674	
510	SACAJAWEA TAP TO ICE HARBOR-FRANKLIN NO 2		217,457	683	
511	SACAJAWEA TAP TO LOWER MONUMENTAL-MCNARY NO 1		2,108,920	2,526	
512	SACAJAWEA-SUN HARBOR NO 1		(0)	0	
513	SACHEEN-ALBENI FALLS NO 1		1,124,557	7,689	
514	SALEM-ALBANY NO 1		1,478,512	16,925	
515	SALEM-ALBANY NO 2		1,285,126	16,280	
516	SALEM-GRAND RONDE NO 1		5,230,549	9,747	
517	SAMMAMISH-MAPLE VALLEY NO 1		1,801,866	0	
518	SAND CREEK-BONNERS FERRY NO. 1 & 2		13,316,799	15,713	
519	SANTIAM SUBSTATION TRANSF BAYTAP TO SANTIAM-ALBANY NO 1		2,323,017	149	
520	SANTIAM-ALBANY NO 1		984,717	9,264	
521	SANTIAM-ALVEY 1 & 2		6,327,867	35,077	
522	SANTIAM-BETHEL NO 1		12,617,338	1,500	
523	SANTIAM-CHEMAWA NO 1		1,744,710	7,113	
524	SANTIAM-TOLEDO NO 1		8,340,579	40,385	
525	SATSOP PARK-COSMOPOLIS NO 1		1,136,908	8,516	
526	SATSOP-ABERDEEN NO 2		5,398,614	11,336	
527	SATSOP-ABERDEEN NO 3		2,402,175	7,147	
528	SATSOP-SHELTON NO 1		12,019,495	3,682	
529	SCHRAG TAP TO RUFF-WARDEN		765,888	2,424	
530	SCHULTZ-ECHO LAKE NO 1		65,603,696	17,871	
531	SCHULTZ-RAVER NO 1		29,438,856	17,272	
532	SCHULTZ-RAVER NO 3		10,273,142	17,067	
533	SCHULTZ-RAVER NO 4		12,045,265	19,785	
534	SCHULTZ-WAUTOMA NO 1		95,466,530	59,565	
535	SCOOTENEY TAP TO MIDWAY-BENTON NO 1		1,107,361	5,393	
536	SHELTON-FAIRMOUNT NO 1		4,565,620	25,984	
537	SHELTON-FAIRMOUNT NO 2		3,303,929	17,456	
538	SHELTON-FAIRMOUNT NO 3		3,179,420	10,174	
539	SHELTON-FAIRMOUNT NO 4		2,926,202	11,026	
540	SHELTON-KITSAP NO 2		9,376,899	5,240	
541	SHELTON-KITSAP NO 3		4,553,776	15,626	
542	SHELTON-KITSAP NO 4		4,172,674	7,382	
543	SHELTON-SOUTH BREMERTON NO 1		9,302,539	2,675	
544	SICKLER-SCHULTZ NO 1		11,725,105	11,467	
545	SIFTON TAP TO N. BONN-ROSS 2		222,180	93	
546	SIFTON TAP TO NORTH BONNEVILLE-ROSS NO 1		222,180	815	
547	SIFTON-FISHERS ROAD NO 1		55,704	728	
548	SIFTON-LACAMAS NO 1		354	1,136	
549	SIFTON-ROSS NO 1		344,041	1,127	
550	SILVERADO TAP TO PORT ANGELES-SAPPHO NO 1		458,627	15	
551	SLATT-BUCKLEY NO 1		21,181,550	33,600	
552	SLATT-JOHN DAY NO 1		4,797,158	18,914	93%
553	SNOHOMISH-BEVERLY PARK NO 3		328,629	731	
554	SNOHOMISH-BEVERLY PARK NO 4		379,809	382	
555	SNOHOMISH-BOTHELL NO 1		472,423	3,661	
556	SNOHOMISH-BOTHELL NO 2		148,752	652	
557	SNOHOMISH-EVERETT		427,071	665	
558	SNOHOMISH-MURRAY NO 1		458,122	10,205	
559	SNOHOMISH-PUD NO 9		2,362,466	919	
560	SNOHOMISH-PUD NO. 8		2,377,231	815	
561	SNO-KING TAP TO ECHO LAKE-MONROE NO 1		4,503,601	7,137	
562	SNO-KING-MAPLE VALLEY NO 1		1,845,243	588	
563	SNO-KING-MAPLE VALLEY NO. 2		651,009	240	
564	SOUTH ELMA-SATSOP PARK NO 1		209,546	1,857	
565	SOUTH FORK TAP TO FOREST GROVE-TILLAMOOK NO 1		9,989	0	
566	SOUTH TACOMA-SOUTHWEST NO 1		1,251,272	4,843	
567	SOUTH TACOMA-WHITE RIVER NO 1		339,175	6,231	
568	SPAR CANYON - ROUND VALLEY		1,264,435	8,694	
569	SPEARFISH TAP TO CHENOWETH-GOLDENDALE NO 1		113,617	2,355	
570	SPIRIT TAP TO COLVILLE-BOUNDARY NO 1		436,487	3,185	
571	SPRING CREEK-WINE COUNTRY NO 1		3,787,668	15,403	
572	ST HELENS-ALLSTON NO 1		5,218,501	11,083	
573	ST JOHNS TAP TO KEELER-OREGONCITY NO 2		2,120	157	
574	ST JOHNS-KEELER NO 2		456,607	10,897	
575	ST JOHNS-ST HELENS NO 1		2,004,386	13,646	

Appendix A
BP-16 Rate Case Final Proposal Segmentation Details

	A	B	C	D	E
576	SWAN VALLEY-GOSHEN NO 1		4,291,759	14,436	
577	SWAN VALLEY-TETON NO 1		2,764,378	16,962	
578	SWAN VALLEY-TETON NO 2		12,256,729	10,880	
579	SWIFT TAP TO ROSS-LEXINGTON NO 1		17,434	466	
580	T3BADAS TAP TO SHELTON-FAIRMONT NO 2 (MASON COUNTY PUD NO		423,156	0	
581	TACOMA-COVINGTON NO 2		1,907,335	4,342	
582	TACOMA-COVINGTON NO 3		1,240,294	7,621	
583	TACOMA-COVINGTON NO 4		1,240,294	6,690	
584	TACOMA-RAVER NO 1&2		6,899,623	14,628	
585	TAFT-BELL NO 1		84,342,970	84,610	
586	TAFT-HOT SPRINGS NO 1		11,863,226	60,648	
587	TAHKENITCH-GARDINER NO 1		181,891	2,821	
588	TAHKENITCH-REEDSPORT NO 1		462,340	8,162	
589	TARGHEE TAP TO SWAN VALLEY-TETON NO 1		949,781	9,921	
590	TARGHEE-DRUMMOND NO 1		87,417	51,979	
591	THATCHER JUNCTION TAP TO FOREST GROVE-TILLAMOOK NO 1		1,689	0	
592	THE DALLES-DISCOVERY NO 1		221,839	9,604	
593	THURSTON-MCKENZIE NO 1		2,435,522	3,074	
594	TILLAMOOK-TRASK RIVER NO 1		358,808	336	
595	TIMBER TAP TO FOREST GROVE-TILLAMOOK NO 1		646,363	10,225	
596	TOLEDO-WENDSON NO 1		5,931,612	40,859	
597	TOWER ROAD-ALKALI NO 1		430,310	2,170	
598	TRENTWOOD-VALLEY WAY NO 1		249,698	3,476	
599	TROJAN-ALLSTON NO 1		1,595,833	1,758	
600	TROJAN-ALLSTON NO 2		1,584,040	522	
601	TUCANNON RIVER-NORTH LEWISTON NO 1		11,818,725	15,511	
602	UNDERWOOD TAP NO 1		1,486,352	16,386	
603	UNITY-HEYBURN NO 1		549,469	5,464	
604	UNITY-WEST BURLEY NO 1		1,931,734	10,488	
605	USK-BOUNDARY NO 1		2,080,111	9,465	
606	VANTAGE-COLUMBIA NO 1		1,207,066	9,923	
607	VANTAGE-HANFORD NO 1		438,614	16,749	
608	VANTAGE-SCHULTZ NO 1		5,237,336	9,593	
609	VERA TAP TO TRENTWOOD-VALLEY WAY NO 1		225,518	2,133	
610	VICTOR TAP TO TARGHEE TAP		96,996	91	
611	WAGNER LAKE TAP TO WILBUR TAP		441,963	7,294	
612	WALLA WALLA-FREEWATER		1,331,932	1,428	
613	WALLA WALLA-PENDLETON NO 1		4,299,006	11,936	
614	WALLA WALLA-TUCANNON RIVER NO 1		19,810,996	15,650	
615	WALNUT CITY TAP TO FOREST-GROVE-MCMINNVILLE NO 1		240,725	3,628	
616	WAUNA-DRISCOLL NO 1		19,639	38	
617	WAUTOMA-OSTRANDER NO 1		36,136,282	61,878	
618	WAUTOMA-ROCK CREEK NO 1		9,564,886	27,969	
619	WENDSON-TAHKENITCH NO 1		3,700,155	15,529	
620	WENDSON-TAHKENITCH NO 2		2,343,750	10,023	
621	WEST BURLEY-HEYBURN NO. 1 (LEASED FACILITY)		21,218	4,695	
622	WESTSIDE (AVA)-BELL NO 1		1,198,367	586	
623	WHITE BLUFFS-451B NO 1		1,025,555	771	
624	WHITE BLUFFS-RICHLAND NO 1		1,698,054	4,784	
625	WILLOW CREEK-HAWKINS #1		477,053	954	
626	WINE COUNTRY-MIDWAY NO 1		2,763,766	3,956	
627	WINTHROP TAP TO TWISP-OKANOGAN		702,769	8,895	
628	WNP1-ASHE NO 2		76,075	3,925	
629	Subtotal Lines		2,645,758,049	6,598,520	

Stations	Owner	Investment (\$)	O&M (\$)	Multi %
630	ABERDEEN SUBSTATION	5,979,530	117,051	
631	ACORD SUBSTATION (BENTON REA)	22,142	0	
632	ACTON SUBSTATION	136,198	9,352	73%
633	ADAIR SUBSTATION(BPA)	771,251	23,647	
634	ADDY SUBSTATION	10,446,952	77,622	90%
635	AFTON COGENERATION POWER PLANT	8,654	0	
636	AHSAHKA SUBSTATION	22,139	968	
637	AIRWAY HEIGHTS SUBSTATION	27,894	315	
638	ALBANY SUBSTATION	12,173,126	107,981	93%
639	ALBENI FALLS SUBSTATION	1,096,932	19,167	75%
640	ALCOA SUBSTATION	8,350,470	161,148	95%
641	ALDER METERING POINT	27,765	223	
642	ALDERWOOD SUBSTATION	323,277	4,547	48%
643	ALFALFA SUBSTATION	1,787,280	24,062	
644	ALKALI SUBSTATION	61,692	253	
645	ALLSTON SUBSTATION	50,722,215	584,947	
646	ALTURAS SUBSTATION	21,364	328	
647	ALVEY SUBSTATION	27,439,677	226,843	78%
648	AMES LAKE SUBSTATION	30,075	850	
649	ANACONDA SUBSTATION	3,797,415	85,605	
650	ANGUS SUBSTATION (BENTON CO PUD)	15,475	329	
651	APPLEWAY SUBSTATION	18,816	403	
652	ARCO SUBSTATION (BPA/LREC)	32,413	691	
653	ARIEL SUBSTATION	35,332	363	
654	ARM RELIFT SUBSTATION	8,900	0	
655	ARMSTRONG SUBSTATION(INLAND POWER & LIGHT)	8,286	487	
656	ARTONDALE SUBSTATION	88,106	1,871	
657	ASHE SUBSTATION	39,562,732	402,749	88%

Appendix A
BP-16 Rate Case Final Proposal Segmentation Details

A	B	C	D	E
658	ASHLAND SUBSTATION	PAC	85,217	0
659	ATHOL SUBSTATION(KOOTENAI ELEC COOP)	KEC/NLI	44,937	1,423
660	AUSTIN SWITCHYARD	SVEC	13,635	1,089
661	BADGER CANYON SUBSTATION		2,163,129	33,574
662	BALD MOUNTAIN SUBSTATION		4,080,029	33,923
663	BANDON SUBSTATION		4,654,717	66,579
664	BANGOR SUBSTATION	USN	67,321	1,238
665	BANNACK SUBSTATION	VEC	109,110	1,029
666	BARRETT'S SUBSTATION(VIGILANTEELECTRIC)	VEC	28,520	0
667	BAXTER SUBSTATION (BIG BEND)	BBEC	15,519	804
668	BEACON SUBSTATION	AVA	1,931	0
669	BEAVER BAY SUBSTATION (COWLITZ PUD)		24,843	226
670	BEAVER SUBSTATION (PGE)		46,143	2,773
671	BEAVER SUBSTATION(TILLAMOOK PUD)		61,093	4,416
672	BELL SUBSTATION		75,534,730	1,094,513
673	BELLINGHAM SUBSTATION(BPA)		12,569,848	36,124
674	BELLINGHAM SUBSTATION(PUGET SOUND ENERGY)		2,432	594
675	BENTON CITY SUBSTATION(BENTONCO PUD)		15,267	337
676	BENTON SUBSTATION		7,772,465	83,649
677	BERRIAN SUBSTATION	BPUD	25,904	183
678	BERRYDALE SUBSTATION (CLP)		36,801	338
679	BERTELSEN SUBSTATION	EWEB	59,277	152
680	BETHEL SUBSTATION	PGE	12,410	222
681	BETTAS ROAD SUBSTATION		5,183,108	21,109
682	BEVERLY PARK SUBSTATION	SNPUD	86,702	1,636
683	BIG EDDY SUBSTATION		11,067,525	91,651
684	BIG FORK SUBSTATION (FEC)		6,087	0
685	BIG HORN SUBSTATION (IBERDOLA)		19,558	4,247
686	BIG PASCO	FPUD	13,215	240
687	BIGLOW CANYON SUBSTATION	PGE	61,573	3,883
688	BINGEN SUBSTATION(KLICKITAT CO PUD)		32,116	526
689	BLACKROCK SUBSTATION	BREA	10,803	1,656
690	BLAINE SUBSTATION	PSE	128,593	702
691	BLAKESLEE JUNCTION SWITCHING STATION		1,082,385	0
692	BLANTON ROAD SUBSTATION	FPUD	22,796	135
693	BOARDMAN SUBSTATION		7,391,701	59,518
694	BONNER SUBSTATION	MEC	49,904	751
695	BONNERS FERRY SUBSTATION		1,974,212	40,595
696	BOOTH BEND SUBSTATION	MWL	11,060	654
697	BOUNDARY SUBSTATION		4,116,281	98,458
698	BOX CANYON POWERHOUSE	POPD	56,157	411
699	BOYER SWITCHING STATION	PAC	21,947	4,478
700	BRASADA SUBSTATION (CENTRAL ELECTRIC COOPERATIVE)		492,476	18,086
701	BREMERTON SUBSTATION (PSE)		57,828	139
702	BREWSTER SUBSTATION	OPUD	36,031	313
703	BRIDGE SUBSTATION		4,925,792	52,522
704	BRIDGEPORT BAR	DPUD	16,007	643
705	BRINCKEN'S CORNER SUBSTATION		922,405	14,037
706	BROADMOOR SUBSTATION	FPUD/BBEC	57,308	322
707	BROADVIEW SUBSTATION	NWE	123,479	692
708	BROOKDALE SUBSTATION(ELMHURSTMUTUAL PWR & LIGHT)		82,392	1,218
709	BROOKDALE SUBSTATION(TACOMA PUBLIC UTILITIES)		43,391	0
710	BUCKLEY SUBSTATION		3,489,220	36,642
711	BURBANK #2 METERING POINT	GPUD	10,340	0
712	BURBANK #3 METERING POINT	GPUD	9,282	0
713	BURBANK SUBSTATION		426,473	8,672
714	BURLEY SUBSTATION(CITY OF BURLEY)		8,862	416
715	BURNT WOODS SUBSTATION		178,451	9,614
716	CABINET GORGE SUBSTATION	AVA	51,098	631
717	CALPINE SUBSTATION	CPN	25,548	13,224
718	CANAL SUBSTATION		1,819,347	22,912
719	CANBY SUBSTATION(BPA)		1,636,563	25,807
720	CANBY SUBSTATION(PGE)		28,591	647
721	CANBY SUBSTATION(SURPRISE VALLEY ELEC)		84,531	3,098
722	CAPE HORN SUBSTATION	SKPUD	28,175	1,795
723	CARDWELL SUBSTATION		2,286,790	53,899
724	CARLIN SUBSTATION	WREC	7,918	186
725	CARLSON SUBSTATION	VEC	29,249	0
726	CARLTON SUBSTATION		6,294,326	86,914
727	CARMEN POWERHOUSE	EWEB	31,287	304
728	CARSON SUBSTATION	SKPUD	2,593	1,283
729	CASCADE LOCKS SUBSTATION		377,377	9,848
730	CASCADE STEEL SUBSTATION	MWL	87,356	1,074
731	CATHLAMET SUBSTATION	WPUD	101,018	2,487
732	CEDARVILLE CITY SUBSTATION	SVEC	22,896	0
733	CEDARVILLE JUNCTION SUBSTATION		731,274	42,552
734	CENTRAL FERRY SUBSTATION		1,352,131	44,152
735	CENTRALIA MINES SUBSTATION	TACG	5,778	0
736	CENTRALIA SUBSTATION		1,680,624	31,073
737	CENTRALIA SWITCHING STATION	TACG	176,972	1,365
738	CENTRALIA THERMAL POWERHOUSE	PAC	15,230	381
739	CHALLIS SUBSTATION	SREC	65,343	0
740	CHEHALIS SUBSTATION		16,260,553	308,610
741	CHELATCHIE SUBSTATION	CPU	17,442	230

Appendix A
BP-16 Rate Case Final Proposal Segmentation Details

A	B	C	D	E
742	CHEMAWA SUBSTATION	16,845,810	387,127	
743	CHEMICAL SUBSTATION	CWPUD 127,756	0	
744	CHENEY SUBSTATION	IPL/CHNY 338,981	1,509	
745	CHENOWETH SUBSTATION	7,752,690	54,601	
746	CHERRY CREEK SUBSTATION	NWE 8,426	1,826	
747	CHESHIRE SUBSTATION (EPUD)	EPUD 104,113	606	
748	CHEVRON SUBSTATION	BPUD 34,271	595	
749	CHEWELAH SUBSTATION	AVA 26,994	710	
750	CHIEF JOSEPH SUBSTATION	25,227,509	521,808	
751	CHRISTMAS VALLEY SUBSTATION	MSEC 36,342	2,325	72%
752	CITY VIEW SUBSTATION	RICH 29,453	558	
753	CLARK SUB	CPU 21,851	0	
754	CLARKSTON SUBSTATION	532,252	18,410	
755	CLATSKANIE SWITCHING STATION (CLATSKANIE PUD)	CTPUD 12,340	1,819	
756	CLATSOP SUBSTATION	3,040,424	135,453	
757	CLAYTON SUBSTATION	IPL 28,441	961	
758	CLINTON SUBSTATION (MISSOULA)	MEC 5,411	970	
759	COASTAL ENERGY GENERATING PLANT	COAST 10,371	2,049	
760	COCHRANE SUBSTATION	57,919	122	
761	COEUR D'ALENE 15TH STREET SUBSTATION	AVA 37,103	147	
762	COFFIN BUTTE GENERATING PLANT	PNGC 10,273	1,175	
763	COLD CREEK SUBSTATION	BPUD 41,821	1,509	
764	COLLINS LAKE SUBSTATION	M3PUD 15,858	0	
765	COLLINS SUBSTATION	KPUD 18,228	398	
766	COLUMBIA CREST SUBSTATION	BREA 15,608	373	
767	COLUMBIA FALLS SUBSTATION -- 115 YARD	3,436,193	120,855	
768	COLUMBIA FALLS SUBSTATION - 230 KV YARD	14,837,780	34,726	
769	COLUMBIA SUBSTATION	25,497,882	319,980	
770	COLVILLE SUBSTATION	4,151,056	64,022	
771	COMBINE HILLS II SUBSTATION (EURUS EGY)	EURUS 47,138	2,653	
772	CONDON SUBSTATION	CBEC 41,086	672	
773	CONDON WIND SUBSTATION(SEAWEST)	SEAWEST 72,793	9,762	
774	CONKELLEY SUBSTATION	9,125,433	163,911	80%
775	CONNELL SUBSTATION	BPA/FPUD 746,801	7,532	
776	CORVALLIS SUBSTATION	RCEC 14,452	486	
777	COSMOPOLIS SUBSTATION	1,392,400	51,745	
778	COTTONWOOD METERING POINT(BPA)	AVA 54,681	480	
779	COVINGTON SUBSTATION	36,950,343	1,050,593	
780	COW CREEK SUBSTATION (UIUC)	UIUC 14,830	417	
781	COWLITZ FALLS POWERHOUSE	LPUD 72,665	1,746	
782	COWLITZ SUBSTATION(TACOMA PUBLIC UTILITIES)	TPWR 368,188	1,416	
783	COWLITZ SUBSTATION(BPA)	2,701,463	36,497	
784	COYOTE SPRINGS SUBSTATION	PGE 4,532,741	26,376	
785	CRAIGMONT SUBSTATION	AVA 56,390	817	
786	CRESTON SUBSTATION(BPA)	BPA/IPL 1,579,537	31,398	
787	CRESWELL SUBSTATION	EPUD 31,204	707	
788	CURLEW SUBSTATION	RREC 10,717	564	
789	CUSICK SUBSTATION	1,806,564	24,505	
790	CUSTER SUBSTATION	39,194,983	802,682	
791	DARBY SUBSTATION	RCEC 23,882	648	
792	DAVIS CREEK SUBSTATION	73,632	1,764	
793	DAY MT. SPOKANE	IPL 17,108	317	14%
794	DAYTON SUBSTATION(BPA & COLUMBIA REA)	CREA 103,536	4,685	
795	DAYTON SUBSTATION(MASON COUNTY)	M3PUD 42,516	619	
796	DE MOSS SUBSTATION(BPA)	9,053,982	52,013	
797	DECLO METERING POINT	SSE 43,494	893	
798	DEER PARK SUBSTATION	BPA/IPL/AVA 461,637	11,828	
799	DELENA SUBSTATION	CTPUD 60,981	2,097	
800	DELIGHT SUBSTATION	BBEC 34,597	543	
801	DELL SUBSTATION	VEC 30,156	1,057	
802	DEXTER SUBSTATION (LANE ELECTRIC)	LEC 24,525	446	
803	DILLARD SUBSTATION	EWEB 17,335	313	
804	DILLON SUBSTATION	VEC 28,985	600	
805	DILLON-SALMON SUBSTATION	NWE 110,343	575	
806	DISCOVERY BAY SUBSTATION	JPUD 54,874	284	
807	DISCOVERY SUBSTATION (N. WASCO PUD)	NWPUD 124,219	5,714	
808	DIVIDE SUBSTATION	VEC 22,748	254	
809	DIXIE SUBSTATION	405,202	9,299	55%
810	DIXON SUBSTATION	3,481,862	26,868	
811	DOE 251W SUBSTATION	DOE 12,982	237	
812	DOE 451A SUBSTATION	DOE 11,839	142	
813	DOE 451B SUBSTATION	DOE 21,042	4,714	
814	DONALD NYS SUBSTATION	CRPUD 9,822	0	
815	DOOLEY SUBSTATION (WINDY POINT)	WPP 164,759	4,995	
816	DORENA SUBSTATION	257,465	12,267	
817	DOVER SWITCHING STATION	NLI 18,324	172	
818	DOWER SUBSTATION	KEC 1,570	140	
819	DRAIN SUBSTATION	2,658,929	35,117	90%
820	DREWSEY METERING POINT (IPCO)	IPC 6,039	937	
821	DRISCOLL SUBSTATION	6,534,477	76,485	
822	DROP PLANT PUMPING PLANT	YPWR 8,779	0	
823	DRUMMOND MONTANA SUBSTATION	NWE 4,352	0	
824	DRUMMOND SUBSTATION	BPA/FREC 10,960,333	179,279	
825	DUCKABUSH SUBSTATION	M1PUD 37,560	2,396	

Appendix A
BP-16 Rate Case Final Proposal Segmentation Details

A	B	C	D	E
826	DUTCH CANYON SUBSTATION	CRPUD	15,947	0
827	DWORSHAK SUBSTATION		20,299,284	125,938
828	EAGLE LAKE SUBSTATION		197,482	6,971
829	EAGLE POINT METERING POINT	MWL	23,907	176
830	EAST BENCH SUBSTATION	VEC	29,447	477
831	EAST COLFAX SUBSTATION	AVA	6,054	588
832	EAST FOSSIL SUBSTATION	CBEC	50,617	285
833	EAST GREENACRES #1 METERING POINT	KEC	9,045	0
834	EAST GREENACRES #2 METERING POINT	AVA	7,420	0
835	EAST GREENACRES #3 METERING POINT	AVA	8,778	0
836	EAST HILLS SUBSTATION	BPA/SSE	537,847	9,952
837	EAST OMAK SUBSTATION		5,755,109	83,779
838	EAST PINE SUBSTATION	SCL	19,963	0
839	EAST SUBSTATION	TPUD	4,388	0
840	ECHO LAKE SUBSTATION		32,667,627	112,607
841	EGYPT SUBSTATION	IPL	29,691	206
842	EIGHT MILE CREEK METERING POINT	WREC	229,192	0
843	ELBE SUBSTATION	LPUD	27,620	1,326
844	ELLENSBURG SUBSTATION	BPA/ELN	1,339,007	107,487
845	ELM STREET SUBSTATION	OTEC	14,496	1,290
846	ELMA SUBSTATION	BPA/GHPUD	686,902	19,157
847	ELMAR SUBSTATION	MEC	33,016	423
848	ELMO SUBSTATION(MVP)	MVP	48,586	497
849	ELTOPIA BRANCH CANAL POWERHOUSE	SCBID	14,336	220
850	ELTOPIA SUBSTATION (BIG BEND)	BBEC	24,590	255
851	ELY SUBSTATION	BPUD	35,905	324
852	EMERGENCY OPERATING FACILITY	ENW	44,194	3,229
853	ENDERSBY SUBSTATION	WEC	9,311	1,284
854	ENERGIZER SUBSTATION (KPUD)	KPUD	147,359	6,520
855	ENTERPRISE SUBSTATION	WHPUD	21,193	664
856	EUGENE SUBSTATION		6,100,239	66,185
857	EUREKA SUBSTATION (LINCOLN ELEC)	LINC	37,497	1,296
858	EVERGREEN PUMP STATION	QCBID	24,923	692
859	EWAN SUBSTATION	AVA	8,238	20
860	FAIRCHILD AIR FORCE BASE NORTH SUBSTATION	USAF	25,055	656
861	FAIRCHILD AIR FORCE BASE SOUTH SUBSTATION	USAF	34,734	1,074
862	FAIRFIELD SUBSTATION	IPC	22,634	0
863	FAIRMOUNT SUBSTATION		16,113,564	136,768
864	FAIRVIEW SUBSTATION(BPA)		11,888,796	211,788
865	FEEDVILLE SUBSTATION (UEC)	UEC	6,548	902
866	FERN HILL SUBSTATION	PAC	13,666	525
867	FERN RIDGE SUBSTATION (LANE ELECTRIC)	LEC	16,530	755
868	FERNDALE SUBSTATION	WHPUD	17,315	404
869	FIDALGO SUBSTATION		4,976,266	59,170
870	FILBERT SUBSTATION(CITY OF FOREST GROVE)	FORG	15,622	199
871	FINLEY SUBSTATION (BENTON COUNTY PUD)	BPUD	11,011	1,384
872	FIRST LIFT SUBSTATION		28,131	0
873	FIRST STREET SUBSTATION	RICH	69,550	1,271
874	FISHERS ROAD SUBSTATION	CPU	6,861	0
875	FLATHEAD SUBSTATION(BPA & FLATHEAD ELEC)	BPA/FEC	5,621,981	44,788
876	FLORENCE SUBSTATION (CENTRAL LINCLON PUD)	CLPUD	17,351	541
877	FORDS PRAIRIE SUBSTATION(CITYOF CENTRALIA)	CCL	38,555	387
878	FORDS PRAIRIE SUBSTATION(LEWIS CO PUD)	LPUD	25,993	793
879	FOREST GROVE SUBSTATION	BPA/FORG	5,137,437	53,336
880	FORT ROAD METERING POINT	YPWR	23,768	237
881	FORT ROCK SUBSTATION (MIDSTATE ELECTRIC COOP)	MEC	2,580	0
882	FOSSIL SUBSTATION		5,987,277	49,399
883	FOSTER CREEK SUBSTATION(NESPELEM VALLEY ELEC)	NVEC	56,093	3,020
884	FOSTER CREEK SUBSTATIONDOUGLAS CO PUD)	DOPD	33,214	0
885	FOSTER WELLS SUBSTATION	FPUD	87,711	609
886	FOUR LAKES SUBSTATION	IPL/CHNY	67,720	3,244
887	FOURTH AND HERALD SUBSTATION	AVA	18,003	0
888	FRANKLIN SUBSTATION	BPA/FPUD	14,092,919	304,116
889	FRANZ HOLMES SUBSTATION	ELM	152,954	570
890	FREEWATER SUBSTATION(BPA)	BPA/CMF	1,737,784	9,867
891	FRENCHMAN HILLS SUBSTATION	USBR	14,788	266
892	FRENCHMAN SPRINGS SUBSTATION	USBR	19,285	541
893	FRENCHTOWN SUBSTATION (MISSOULA)	MEC	24,770	574
894	FROMAN SUBSTATION	CPI	10,025	387
895	GARDINER SUBSTATION		544,752	21,997
896	GARIBALDI SUBSTATION(TILLAMOOK PUD)	TPUD	350,237	2,188
897	GARRISON SUBSTATION		51,261,183	387,447
898	GATES OF THE MOUNTAINS METERING POINT	NWE	7,949	1,017
899	GEISEL MONUMENT SUBSTATION	CCEC	37,685	187
900	GEM STATE HYDRO PLANT	IFP	10,421	53
901	GEORGIA PACIFIC SUBSTATION(PSE)	PSE	69,838	64
902	GIG HARBOR SUBSTATION	TPWR	59,167	962
903	GILMER SUBSTATION(KLICKITAT CO PUD)	KPUD	22,504	322
904	GLADE SUBSTATION		154,871	3,334
905	GLASGOW SUBSTATION	CLPUD	30,939	471
906	GLENOMA SUBSTATION	LPUD	52,158	379
907	GLENWOOD SUBSTATION	KPUD	40,100	532
908	GOBLE SUBSTATION	CRPUD	29,349	394
909	GOLD BAR SUBSTATION	SNOPUD	20,053	391

Appendix A
BP-16 Rate Case Final Proposal Segmentation Details

	A	B	C	D	E
910	GOLD BEACH SUBSTATION		129,528	6,231	
911	GOLDENDALE SUBSTATION(BPA)		1,220,930	25,175	
912	GOOSE LAKE SUBSTATION(NESPELEM VALLEY ELEC)	NVEC	6,433	991	
913	GORMLEY SUBSTATION (MCMINNVILLE W & L)	MWL	47,378	0	
912	GOSHEN SUBSTATION(PACIFICORP)	PAC	2,375,647	0	
913	GOSHEN SUBSTATION(UTAH POWER & LIGHT)	PAC	5,909,499	109,523	
914	GRAND COULEE #2 METERING POINT	GPUD	10,705	1,145	
915	GRAND COULEE SUBSTATION	GPUD	1,099,412	1,540	
916	GRAND RONDE SUBSTATION	PGE	31,005	352	
917	GRANDVIEW SUBSTATION	BPA/BREA	3,490,379	62,161	
918	GRANGEVILLE SUBSTATION	AVA	1,434	0	
919	GRANTSDALE SUBSTATION	RCEC	5,648	470	
920	GRAYS HARBOR FACILITY NO 1 (GRAYS HARBOR ENE	GHE	11,252	4,494	
921	GRAYS RIVER SUBSTATION	WPUD	61,344	2,744	
922	GREEN VALLEY SUBSTATION		2,734,025	16,607	
923	GREENTIMBER SUBSTATION	FREC	37,716	1,191	
924	GROUSE CREEK METERING POINT	RREC	13,002	431	
925	GUM STREET SUBSTATION	BPUD	20,554	211	
926	H2F SUBSTATION	BPUD	23,867	278	
927	HAAKENSON SUBSTATION	ELM	106,056	1,084	
928	HAGEN SUBSTATION	PPUD	48,927	329	
929	HALF MOON SUBSTATION(INLAND POWER & LIGHT)	IPL	20,346	160	
930	HAMPTON SUBSTATION	CEC	73,268	1,717	
931	HANFORD SUBSTATION		24,793,044	204,208	
932	HANNA SUBSTATION(DOUGLAS CO PUD)	GNC	5,942	0	
933	HAPPY VALLEY SUBSTATION		3,835,998	33,297	
934	HARNEY SUBSTATION(BPA)		7,682,298	71,216	
935	HARRISBURG SUBSTATION		4,893,940	17,483	96%
936	HARVALUM SUBSTATION		3,172,717	56,458	
937	HARVEST WIND SUBSTATION (KPUD)	KPUD	121,495	5,201	
938	HARVEY SUBSTATION	NWA	292,372	2	
939	HASKILL SUBSTATION	FEC	35,947	5,898	
940	HASKINS METERING POINT	WOEC	7,710	638	
941	HAT ROCK SUBSTATION		5,040,308	28,175	
942	HATTON SUBSTATION (BIG BEND)	BBEC	21,007	557	
943	HATWAI SUBSTATION		10,839,430	227,176	
944	HAUSER SUBSTATION(BPA)		185,541	10,100	
945	HAUSER SUBSTATION(CENTRAL LINCOLN PUD)	CLPUD	27,964	23	
946	HAWK ROAD METERING POINT	YPWR	17,340	3,736	
947	HAWKINS SUBSTATION	EWEB	10,130	159	
948	HAY CANYON SUBSTATION (IBERDOLA)	IBER	130,483	3,485	
949	HAY MILL SUBSTATION (UNITED ELEC & CITY OF RUPERT)	UEC/RUPT	228,286	15,954	
950	HAYDEN SUBSTATION	KEC	35,420	123	
951	HAYFORD SUBSTATION(INLAND POWER & LIGHT)	IPL	14,000	223	
952	HEBO SUBSTATION	BPA/TPUD	389,712	16,198	
953	HEDGES SUBSTATION(BENTON CO PUD)	BPUD	14,917	365	
954	HEGLAR SUBSTATION	RREC	34,766	1,647	
955	HEIMARK METERING POINT	APUD	37,535	0	
956	HEPPNER GENERATING STATION	MORR	27,447	0	
957	HERMISTON BUTTE (UEC)	UEC	20,111	457	
958	HEYBURN SUBSTATION		9,390,009	67,012	
959	HIDEAWAY SUBSTATION (LANE ELECTRIC)	LEC	10,025	350	
960	HIGHLANDS SUBSTATION(BENTON CO PUD)	BPUD	13,750	560	
961	HILLTOP SUBSTATION	BPA/NEV	1,907,532	29,386	
962	HILTON LAKE SUBSTATION	SNOPUD	28,003	459	
963	HINES SUBSTATION	OTEC	32,533	464	
964	HOLCOMB SUBSTATION		653,608	28,928	
965	HOOD RIVER SUBSTATION		950,633	33,343	79%
966	HOODOO SUBSTATION	IPL	9,803	240	
967	HOOPER SPRINGS SUBSTATION		5,250,785	0	
968	HOPE VALLEY METERING POINT	QCBID	13,403	177	
969	HOPKINS RIDGE SUBSTATION	PSE	30,813	3,036	
970	HORN BUTTE SUBSTATION (INVENERGY WIND)	INVER	30,813	5,052	
971	HORN RAPIDS SUBSTATION	BREA	30,595	1,683	
972	HORSE HEAVEN SUBSTATION		2,982,891	38,553	
973	HOT SPRINGS SUBSTATION		18,375,338	440,812	
974	HUGHS SUBSTATION(SALEM ELEC COOP)	SEC	40,198	1,344	
975	IDAHO FALLS SUBSTATION	PAC	2,983	2,200	
976	IDAHOME SUBSTATION		471,469	17,792	
977	IMRIE SUBSTATION (PACW)	PAC	29,094	7,056	
978	INTALCO SUBSTATION		11,435,969	179,152	64%
979	IONE SUBSTATION		661,669	22,951	83%
980	IRBY SUBSTATION	BPA/IPL	337,734	8,197	
981	IRRIGRO SUBSTATION	BPUD	4,436	0	
982	JENKINS SUBSTATION	KTPUD	183,601	534	
983	JERICHO PUMPING PLANT	GPUD	36,866	713	
984	JIGGS-LEE METERING POINT	IPC	22,773	0	
985	JIM CREEK SUBSTATION	USN	20,733	737	
986	JOHN CURTIS SUBSTATION	PLW	76,330	647	
987	JOHN DAY CONSTRUCTION SUBSTATION	KPUD	38,025	457	
988	JOHN DAY SUBSTATION		20,419,607	144,276	45%
989	JOHN DAY SUBSTATION - 230 YARD		28,937,869	45,526	
990	JOHNS PRAIRIE SUBSTATION	M3PUD	36,662	261	
991	JONES CANYON SUBSTATION		16,712,468	42,051	

Appendix A
BP-16 Rate Case Final Proposal Segmentation Details

	A	B	C	D	E
992	JONES SUBSTATION	VEC	5,407	113	
993	HOOPER SPRINGS SUBSTATION		26,666	0	
994	JULIAETTA SUBSTATION	AVA	11,005	283	
995	JUNCTION CITY SUBSTATION(BLACHLY-LANE CO ELEC COOP)	BLEC	5,106	315	
996	JUNIPER CANYON I SUBSTATION (IR INC.)	IBER	9,144	4,641	
997	KAH-NEE-TA SUBSTATION	WEC	53,561	727	
998	KALISPELL SUBSTATION(BPA)		5,339,069	83,390	
999	KAMIAH SUBSTATION	AVA	19,894	566	
1000	KEELER SUBSTATION		68,036,148	1,118,273	
1001	KELLER SUBSTATION		464,356	9,506	
1002	KELTON SUBSTATION	RREC	21,825	1,500	
1003	KENNEDY SUBSTATION	BREA	34,007	2,506	
1004	KENNEWICK SUBSTATION(BENTON CO PUD)	BPUD	23,070	358	
1005	KERR SUBSTATION(BPA)		1,485,650	22,701	
1006	KETTLE FALLS SUBSTATION	AVA	5,249	665	
1007	KITSAP SUBSTATION		13,617,165	152,801	
1008	KLONDIKE SCHOOLHOUSE SUBSTATION (IBERDOLA)	IBER	29,337	7,447	
1009	KLONDIKE SCHOOLHOUSE SUBSTATION(BPA)		382,745	0	
1010	KLONDIKE SUBSTATION	WEC	99,532	3,566	
1011	KNAPPA SVENSEN SUBSTATION	PAC	2,188	386	
1012	KNIGHTS BRIDGE (CANBY UTILITY BOARD)		32,888	0	
1013	KOOSKIA SUBSTATION	AVA	21,459	302	
1014	LA GRANDE SUBSTATION		7,319,965	53,655	
1015	LA PINE SUBSTATION		12,670,907	92,580	
1016	LAGOON SUBSTATION	CMF	22,101	489	
1017	LAGRANDE POWERHOUSE	TPWR	18,997	0	
1018	LAKE BAY SUBSTATION	PLC	7,193	835	
1019	LAKE GROVE SUBSTATION	LLP	62,954	663	
1020	LAKE LENORE #1 IRRIGATION PUMP	QCBID	12,122	421	
1021	LAKE LENORE #2 IRRIGATION PUMP	QCBID	12,736	339	
1022	LAKESIDE SUBSTATION (CLP)	CLPUD	21,534	989	
1023	LAKESIDE SUBSTATION (FEC)	FEC	22,744	540	
1024	LAKEVIEW SUBSTATION	SVEC	71,364	647	
1025	LANCASTER SUBSTATION(BPA)		538,048	60,848	
1026	LANE SUBSTATION		16,005,316	202,708	
1027	LANGLOIS SUBSTATION		897,249	13,274	
1028	LARENE SUBSTATION (INLAND)	IPL	440	228	81%
1029	LATERAL 4 METERING POINT	YPWR	42,935	1,749	
1030	LATHAM SUBSTATION	EPUD	89,194	637	
1031	LEBANON SUBSTATION		3,701,597	26,348	
1032	LEVEY SUBSTATION		810,177	19,189	
1033	LEWIS & CLARK SUBSTATION	PAC	7,015	0	
1034	LEXINGTON SUBSTATION		4,647,114	126,481	
1035	LIBBY SUBSTATION(BPA)		6,645,661	142,363	75%
1036	LIBBY SUBSTATION(BPA/FLATHEADELEC)	BPA/FEC	674,984	10,570	
1037	LINDEN SUBSTATION (KPUD)	KPUD	10,273	0	
1038	LION MOUNTAIN SUBSTATION	FEC	47,515	1,186	
1039	LITTLE FALLS GENERATING PLANT	AVA	3,547	0	
1040	LITTLE GOOSE SUBSTATION		66,533,666	103,068	80%
1041	LOCUST SUBSTATION	MEWC	32,812	774	
1042	LODHOLM SUBSTATION	PLC	59,434	345	
1043	LOLO SUBSTATION (NWE)	NWE	16,060	166	
1044	LONE PINE SUBSTATION(PACIFICORP)	NVEC	26,796	0	
1045	LONGVIEW SUBSTATION		36,373,822	270,638	
1046	LOOKINGGLASS SUBSTATION(BPA)		329,093	3,538	
1047	LOOKOUT POINT SUBSTATION		1,827,035	19,008	75%
1048	LOPEZ ISLAND SUBSTATION(BPA)		6,976,971	82,173	
1049	LOST RIVER SUBSTATION	BPA/LREC	1,860,060	32,218	
1050	LOW GAP METERING POINT	QCBID	11,133	394	
1051	LOWER BULB GENERATING PLANT	IFP	16,027	0	
1052	LOWER GRANITE SUBSTATION		6,286,185	83,972	75%
1053	LOWER MONUMENTAL SUBSTATION		19,829,601	126,062	88%
1054	LOWER WOODCHUCK SUBSTATION	RCEC	34,740	241	
1055	LUHR BEACH SUBSTATION	PSE	58,733	940	
1056	LUMP GULCH SUBSTATION	NWE	20,312	998	
1057	LYLE SUBSTATION	KPUD	48,978	307	
1058	LYN PUMPS PUMPING PLANT	USBR	28,149	0	
1059	LYNCH CREEK SUBSTATION		726,128	13,314	57%
1060	MABTON SUBSTATION		1,352,795	11,156	
1061	MACKAY SUBSTATION	LREC	198,886	233	
1062	MACKS INN SUBSTATION	FREC	429,291	41,995	
1063	MADISON SUBSTATION		1,559,262	21,935	
1064	MAPLE VALLEY SUBSTATION		68,425,474	476,127	
1065	MAPLETON SUBSTATION		716,261	28,125	93%
1066	MARENGO SUBSTATION	AVA	28,220	583	
1067	MARION SUBSTATION		36,726,615	370,809	91%
1068	MARTIN CREEK SUBSTATION		4,342,343	33,132	
1069	MASHEL PRAIRIE SUBSTATION (OHOP)	OHOP	131,931	1,638	
1070	MASON SUBSTATION(MASON CO PUDNO 3)	M3PUD	56,492	416	
1071	MAUPIN SUBSTATION		1,872,509	48,550	
1072	MAYFIELD POWERHOUSE	TPWR	3,167	0	
1073	MAYFIELD SWITCHYARD	TPWR	202,128	1,619	
1074	MAYVIEW SUBSTATION (INLAND POWER)	IPL	0	0	
1075	MCCULLOUGH SUBSTATION	ELM	29,139	408	

Appendix A
BP-16 Rate Case Final Proposal Segmentation Details

	A	B	C	D	E
1076	MCKENZIE SUBSTATION(EWEB)	EWEB	47,720	449	
1077	MCLOUGHLIN SUBSTATION	PGE	316,731	26,316	
1078	MCMINNVILLE SUBSTATION	BPA/MWL	1,913,615	62,434	
1079	MCNARY SUBSTATION		51,561,532	507,507	93%
1080	MESA SUBSTATION	BBEC	91,656	1,007	
1081	METALINE FALLS SUBSTATION(PEND OREILLE CO PUD)	POPD	14,425	241	
1082	MIDWAY SUBSTATION(BPA)		16,732,077	261,926	
1083	MILAN SUBSTATION	AVA	27,672	318	
1084	MILL PLAIN SUBSTATION	CPU	3,331	0	
1085	MILL PRIMARY SUBSTATION	PTPC	44,409	0	
1086	MILLER SUBSTATION(LAKEVIEW LIGHT & PWR)	LLP	123,121	1,150	
1087	MILTON SUBSTATION(CITY OF MILTON FREEWATER)	CMF	141,908	7,486	
1088	MINICO SUBSTATION (UNITED ELECTRIC)	UEC	12,493	1,181	
1089	MINIDOKA SUBSTATION		139,342	3,716	36%
1090	MINT FARM SWITCHING STATION	MFEC	12,566	5,221	
1091	MISSION SUBSTATION	UEC	4,255	307	
1092	MIST SUBSTATION	WOEC	50,488	2,891	
1093	MOAB SUBSTATION	IPL	27,824	1,060	
1094	MOHLER SUBSTATION(TILLAMOOK PUD)	TPUD	29,278	2,739	
1095	MONMOUTH SUBSTATION		667,937	14,345	54%
1096	MONROE SUBSTATION		40,431,005	712,503	
1097	MORRISON SUBSTATION	CCEC	17,456	0	
1098	MOSSYROCK SUBSTATION	LPUD	17,122	0	
1099	MOSSYROCK SWITCHYARD	TPWR	47,727	1,249	
1100	MOUNTAIN AVENUE SUBSTATION		1,641,497	14,511	78%
1101	MOUNTAIN HOME SUBSTATION(IDAHO POWER)	IPC	67,338	1,848	
1102	MOUNTAIN VIEW SUBSTATION(MASON CO PUD NO 3)	M3PUD	29,452	272	
1103	MOXEE SUBSTATION		2,368,692	42,278	
1104	MOYIE DAM	BFY	32,179	1,446	
1105	MT. HALL SUBSTATION	NLI	15,208	616	
1106	MT. VERNON SUBSTATION(SPRINGFIELD UTILITY BOARD)	SUB	7,307	152	
1107	MURRAY SUBSTATION		9,700,371	211,929	
1108	NAPAVINE SUBSTATION		926,168	31,306	
1109	NARROWS SUBSTATION	PLC	96,416	3,033	
1110	NASELLE SUBSTATION		4,335,834	73,236	
1111	NECANICUM SUBSTATION		86,662	5,302	68%
1112	NEFF ROAD METERING POINT	CEC	46,637	3,638	
1113	NEWCOMB SUBSTATION(SOLD)	SSE	28,362	752	
1114	NEWPORT SUBSTATION(INLAND POWER)	IPL	262,565	1,693	
1115	NINE CANYON SUBSTATION (BENTON PUD)	BPUD	87,961	9,485	
1116	NINE MILE SUBSTATION (FPLE)	FPLE	42,950	5,579	
1117	NORTH BENCH SUBSTATION		512,217	5,633	97%
1118	NORTH BEND SUBSTATION	PSE	39,582	290	
1119	NORTH BONNEVILLE SUBSTATION	BPA/SKPUD	7,199,807	114,264	63%
1120	NORTH BROOKINGS SUBSTATION	CCEC	439,706	7,199	
1121	NORTH BUTTE SUBSTATION		121,781	3,228	65%
1122	NORTH LEWISTON SUBSTATION	AVA	20,900	98	
1123	NORTH PASCO SUBSTATION	FPUD	59,484	511	
1124	NORTH PORT SUBSTATION (CCL)	CCL	25,067	168	
1125	NORTH POWDER SUBSTATION	IPC	4,392	0	
1126	NOTI CREEK SUBSTATION	EPUD	114,195	2,196	
1127	NOXON CONSTRUCTION SUBSTATION	AVA	207,354	876	
1128	NOXON DAM POWERHOUSE	AVA	50,959	0	
1129	NOXON SWITCHYARD	AVA	3,248	1,112	
1130	OAK KNOLL SUBSTATION	PAC	17,403	667	
1131	OAKRIDGE SUBSTATION (LANE ELECTRIC)	LEC	156,911	2,005	
1132	ODESSA SUBSTATION		816,570	15,221	
1133	O'GARA SUBSTATION	AVA	1,305	307	
1134	OHOP SUBSTATION	TPWR	61,175	2,915	
1135	OKANOGAN SUBSTATION	OPUD	10,025	1,571	
1136	OLD LOWER GENERATING PLANT	IFP	7,514	0	
1137	OLINDA SUBSTATION	WAPA	357,021	140	
1138	OLNEY METERING POINT	WOEC	35,014	719	
1139	OLYMPIA SUBSTATION		36,829,689	590,979	
1140	OLYMPIC PIPELINE	SNOPUD	12,580	334	
1141	OMAK SUBSTATION	OPUD	13,613	413	
1142	OPHIR SUBSTATION	OPUD	11,385	0	
1143	OPPORTUNITY SUBSTATION	AVA	15,961	251	
1144	OREGON CITY SUBSTATION		6,641,869	80,166	
1145	OREMET SUBSTATION	PAC	31,352	0	
1146	OSTRANDER SUBSTATION		54,679,426	396,112	
1147	OTHELLO SUBSTATION	AVA	69,527	14	
1148	OUTBACK SOLAR GENERATING PLANT (OUTBACK SOLAR, LLC)	OSLLC	14,510	291	
1149	OVANDO SUBSTATION		2,074,525	28,405	
1150	OXBOW SUBSTATION(PACIFIC CO PUD)	PPUD	14,180	918	
1151	PACIFIC SUBSTATION	UEC	39,385	743	
1152	PACKWOOD POWERHOUSE	ENW	21,911	1,000	
1153	PACKWOOD SUBSTATION	LPUD	59,119	0	
1154	PARKDALE SUBSTATION		1,071,795	18,997	87%
1155	PARKLAND SUBSTATION	PLW	20,439	0	
1156	PASCO SUBSTATION	PAC	97,900	723	
1157	PATEROS SUBSTATION	OPUD	11,455	0	
1158	PATERSON SUBSTATION	BPUD	19,705	289	
1159	PATTON VALLEY METERING POINT	WOEC	17,235	442	

Appendix A
BP-16 Rate Case Final Proposal Segmentation Details

	A	B	C	D	E
1160	PATU SUBSTATION	PATU	6,177	42	
1161	PAUL SUBSTATION		14,693,037	229,266	
1162	PE ELL SUBSTATION LEWIS CO PUD)	LPUD	16,913	621	
1163	PEARL SUBSTATION		49,706,209	300,335	
1164	PEBBLE SPRINGS SUBSTATION (IBERDOLA)	IBER	193,916	0	
1165	PENDERGAST SUBSTATION	VEC	5,409	156	
1166	PENDLETON SUBSTATION	BPA/UEC	43,283	18,184	
1167	PHILLIPS SUBSTATION	BPUD	51,248	652	
1168	PIHL ROAD METERING POINT	WOEC	12,687	235	
1169	PIKE METERING POINT	WOEC	46,084	942	
1170	PILOT ROCK SUBSTATION	PAC	166,943	451	
1171	PINE HOLLOW SUBSTATION	WEC	9,950	1,770	
1172	PIONEER SUBSTATION	M3PUD	26,068	63	
1173	PLEASANT HILL SUBSTATION	EPUD	25,938	102	
1174	PLEASANT VIEW SUBSTATION	AVA	6,044	383	
1175	PLUMMER SUBSTATION	AVA	55,840	894	
1176	PLYMOUTH SUBSTATION	BREA	41,633	170	
1177	POINT OF ROCKS SUBSTATION	VEC	47,044	1,048	
1178	POMEROY SUBSTATION(BPA)	BPA/IPL	85,125	16,828	
1179	PONDEROSA SUBSTATION(BPA)		53,590,509	97,658	
1180	POPCORN HILL METERING POINT	PGE	22,116	0	
1181	PORT ANGELES SUBSTATION(BPA)		18,125,208	305,301	
1182	PORT ANGELES SUBSTATION(ITT RAYONIER)	NPI	465,014	0	
1183	PORT ORFORD SUBSTATION		296,514	15,208	63%
1184	PORT TOWNSEND SUBSTATION	PTPC	106,937	1,288	
1185	POTHOLES EAST CANAL GENERATING PLANT	SCBID	14,299	116	
1186	POTHOLES SUBSTATION		4,230,633	101,621	
1187	POTLATCH SUBSTATION(AVISTA)	AVA	34,912	544	
1188	POTLATCH SUBSTATION(BPA)		1,003,683	21,641	89%
1189	POWERLINE SUBSTATION	EPUD	22,086	403	
1190	PRAIRIE SUBSTATION(WWP & KOOTENAI ELEC COOP)	KEC/VWP	15,691	213	
1191	PRIEST RIVER SUBSTATION(AVISTA)	AVA	30,389	322	
1192	PRIEST RIVER SUBSTATION(BPA)		784,499	13,245	
1193	PROSSER SUBSTATION(BENTON CO PUD)	BPUD	12,087	434	
1194	PURDY SUBSTATION	PLC	59,163	785	
1195	PYRAMID SUBSTATION	CSCL	26,868	526	
1196	QUARTZ SUBSTATION (IDAHO POWER)	IPC	9,766	537	
1197	QUILCENE SUBSTATION	JPUD	25,406	0	
1198	QUINCY SUBSTATION	GPUD	16,867	560	
1199	RADAR PUMPING PLANT	USBR	13,763	999	
1200	RAFT SUBSTATION	RREC	2,177	2,827	
1201	RAINIER SUBSTATION	CTPUD	146,713	773	
1202	RALSTON SUBSTATION (BIG BEND)	BBEC	5,604	268	
1203	RANDLE SUBSTATION	LPUD	32,099	0	
1204	RATHDRUM SUBSTATION	AVA	28,219	1,335	
1205	RATTLESNAKE ROAD SUBSTATION (HORIZON WIND)	AWPP	16,318	0	
1206	RATTLESNAKE SUBSTATION(BENTONREA)	BREA	43,829	626	
1207	RAVER SUBSTATION		48,222,426	359,841	
1208	RAYMOND SUBSTATION		2,961,404	86,048	
1209	REATA SUBSTATION(BENTON CO PUD)	BPUD	50,929	319	
1210	RED MOUNTAIN SUBSTATION		4,273,462	33,458	
1211	REDMOND SUBSTATION(BPA)		34,627,829	254,040	
1212	REEDSPORT SUBSTATION (BPA)		3,351,046	44,599	94%
1213	REPUBLIC SUBSTATION		537,888	15,217	
1214	RESTON SUBSTATION		347,850	12,504	
1215	RICHLAND SUBSTATION		2,451,184	70,525	
1216	RILEY SUBSTATION	HEC	50,777	413	
1217	RIMROCK LAKE SUBSTATION (BENTON REA)	BREA	30,789	316	
1218	RINGOLD SUBSTATION		309,844	8,967	59%
1219	RIVER ROAD GENERATION PLANT SUBSTATION	CPU	10,244	5,077	
1220	RIVERBEND LANDFILL GENERATING PLANT (WM LLC)	WMLLC	10,273	1,289	
1221	RIVERFRONT SUBSTATION	BPUD	21,522	426	
1222	RIVERGATE SUBSTATION	PGE	4,468	495	
1223	RIVERTON SUBSTATION(CITY OF HEYBURN)	HEYB	22,577	1,088	
1224	ROBBINS ROAD METERING POINT	YPWR	20,394	365	
1225	ROCK CREEK SUBSTATION		43,322,389	99,188	
1226	ROCKY BROOK POWERHOUSE	M1PUD	2,016	1,022	
1227	ROCKY REACH SUBSTATION		4,230,844	14,527	
1228	ROE'S CORNER SUBSTATION	RUPT/EEM/REC	38,236	1,889	
1229	ROGUE SUBSTATION		15,902,419	117,518	
1230	ROSALIA SUBSTATION	AVA	28,425	396	
1231	ROSS SUBSTATION		14,540,829	453,915	
1232	ROUND VALLEY SUBSTATION		1,580,338	29,219	
1233	ROUNDUP SUBSTATION		5,356,636	72,001	
1234	ROXBORO SUBSTATION	AVA	21,585	809	
1235	ROY L ZIMMERMAN SUBSTATION	CCL	45,535	289	
1236	ROZA SUBSTATION		3,368	0	
1237	RUBY STREET SUBSTATION (FRANKLIN CO PUD)	FPUD	61,727	396	
1238	RUSSELL SMITH POWERHOUSE	SCBID	11,906	144	
1239	SACAJAWEA SUBSTATION		23,172,838	57,775	99%
1240	SACHEEN SUBSTATION		2,175,355	53,104	
1241	SAGEHILL SUBSTATION	FPUD	1,506	508	
1242	SALEM ALUMINA SUBSTATION(SALEM ELEC COOP)	SEC	18,224	326	
1243	SALEM SUBSTATION (SALEM ELEC)	BPA/SEC	5,502,971	99,896	

Appendix A
BP-16 Rate Case Final Proposal Segmentation Details

A	B	C	D	E	
1244	SAMMAMISH SUBSTATION	PSE	1,911	37	
1245	SAMUELS SUBSTATION	NLI	42,869	7,530	
1246	SAND CREEK SUBSTATION		5,934,882	41,909	
1247	SAND DUNES SUBSTATION	GPUD	3,510,776	0	
1248	SAND HILL CRANE SUBSTATION	RICH	70,897	957	
1249	SANDPOINT SUBSTATION(BPA)		1,106,305	25,704	85%
1250	SANTIAM SUBSTATION		16,477,370	345,715	95%
1251	SAPPHO SUBSTATION		1,702,063	78,222	
1252	SATSOP PARK SUBSTATION (GHPUD)	GHPUD	171,077	3,423	
1253	SATSOP SUBSTATION(BPA)		19,689,183	120,264	
1254	SATUS 2 SUBSTATION	YPWR	9,693	0	
1255	SATUS 3 SUBSTATION	YPWR	28,953	0	
1256	SCAPPOOSE SUBSTATION	PGE	39,482	706	
1257	SCARCELLO SUBSTATION (KOOTENAI ELECTRIC)	KEC	10,025	286	
1258	SCHULTZ SUBSTATION		65,195,157	197,559	
1259	SCOGGINS VALLEY METERING POINT	WOEC	27,685	1,030	
1260	SCOOTENEY SUBSTATION		1,346,338	23,564	91%
1261	SEDRO WOOLLEY SUBSTATION	PSE	41,393	747	
1262	SELLE SUBSTATION		233,060	4,082	41%
1263	SETTERS SUBSTATION	KEC	18,961	135	
1264	SEVEN FEATHERS SUBSTATION (UIUC)	UIUC	10,387	911	
1265	SHANO SUBSTATION	BBEC	32,045	318	
1266	SHELTON SUBSTATION		28,488,959	148,589	
1267	SHEPHERDS FLAT SUBSTATION (CAITHNESS SF)	CASH	63,847	0	
1268	SHORT MOUNTAIN GENERATING PLANT	EPUD	17,681	506	
1269	SICKLER SUBSTATION		11,563,952	444,768	
1270	SIFTON SUBSTATION		6,042,486	120,325	
1271	SILVER BOW SUBSTATION		1,751,947	27,269	
1272	SILVER CREEK SUBSTATION		3,478,023	62,437	
1273	SILVER STAR SUBSTATION	VEC	44,433	888	
1274	SILVERADO SUBSTATION (CLALLAM CO. PUD)	CMPUD	119,823	251	
1275	SKOOKUM SUBSTATION	M3PUD	68,054	387	
1276	SLATT SUBSTATION		68,192,266	194,671	94%
1277	SMITH CREEK POWERHOUSE	SFH	4,962	311	
1278	SMITHSON SUBSTATION (KITITITAS CO PUD)	KTPUD	29,513	0	
1279	SNIPES SUBSTATION	BREA	90,899	1,082	
1280	SNIPTION SUBSTATION	CBEC	47,195	208	
1281	SNOHOMISH SUBSTATION		44,750,810	567,237	
1282	SNO-KING SUBSTATION		31,753,004	290,876	
1283	SNYDER SUBSTATION	RICH	24,522	496	
1284	SODA SPRINGS SUBSTATION	SODA	6,336	0	
1285	SOUTH BUTTE SUBSTATION	SREC	12,037	0	
1286	SOUTH CUT BANK SUBSTATION	GEC	11,955	0	
1287	SOUTH ELMA SUBSTATION	GHPUD	342,096	2,862	
1288	SOUTH FORK SUBSTATION	TPUD	49,334	616	
1289	SOUTH SLOPE SUBSTATION	BREA	31,283	237	
1290	SOUTH SUBSTATION (SEATTLE CITY LIGHT)	SCL	62,772	0	
1291	SOUTH TACOMA SUBSTATION		4,284,160	66,700	
1292	SPALDING SUBSTATION	CPC	51,421	238	
1293	SPANGLE SUBSTATION	AVA	18,957	376	
1294	SPAR CANYON SUBSTATION	SREC	703,741	43,610	
1295	SPAW SUBSTATION	BPUD	11,078	0	
1296	SPEARFISH SUBSTATION(KLICKITAT CO PUD)	KPUD	35,741	608	
1297	SPRING CREEK SUBSTATION		9,530,317	37,894	
1298	SPRINGFIELD SUBSTATION(SPRINGFIELD UTILITY BOARD)	SUB	23,401	0	
1299	SPRINGHILL SUBSTATION(INLAND POWER & LIGHT)	IPL	23,544	281	
1300	ST. HELENS SUBSTATION	PGE	18,502	2,199	
1301	ST. JOHNS SUBSTATION		8,475,658	173,054	
1302	STATELINE SUBSTATION		35,972	5,489	25%
1303	STEILACOOM SUBSTATION		754,305	9,119	69%
1304	STEVENS DRIVE SUBSTATION(CITYOF RICHLAND)	RICH	51,835	358	
1305	STEVENSON SUBSTATION	SKPUD	25,896	1,245	
1306	STEVENSVILLE SUBSTATION	RCEC	2,086	749	
1307	STILLWATER SUBSTATION(LINCOLNELECTRIC COOP)	LINC	37,172	804	
1308	SUBSTATION FG	USN	15,482	3,498	
1309	SUGAR MILL SUBSTATION	IFP	185,017	1,333	
1310	SULLIVAN SUBSTATION(VERA WATER & POWER)	VWP	5,684	196	
1311	SUMAS SUBSTATION	SUM	13,840	963	
1312	SUMMER LAKE SUBSTATION	PAC	2,478,528	38,120	43%
1313	SUMNER SUBSTATION	CCEC	22,970	715	
1314	SUN HEAVEN NO. 2 SUBSTATION	BPUD	31,152	609	
1315	SUNNYSIDE PORT SUBSTATION	BREA	35,471	0	
1316	SUNSET ROAD SUBSTATION (BENTON CO PUD)	BPUD	26,467	708	
1317	SURPRISE LAKE SUBSTATION		604,747	12,221	80%
1318	SWAN VALLEY SUBSTATION		6,687,453	62,620	98%
1319	SWEETWATER SUBSTATION	AVA	22,846	550	
1320	T3BA'DAS SUBSTATION (MASON COUNTY PUD NO 1)		41,693	0	
1321	TACOMA SUBSTATION		18,511,243	446,772	96%
1322	TAFT SUBSTATION		34,758,866	256,926	
1323	TAHKENITCH SUBSTATION		7,131,072	59,144	
1324	TAPTEAL SUBSTATION	RICH	92,685	851	
1325	TARBELL SUBSTATION	CRPUD	18,665	383	
1326	TARGHEE SUBSTATION	BPA/FREC	1,886,679	51,986	
1327	TARGHEE TAP SWITCHING STATION		317,710	6,351	

Appendix A
BP-16 Rate Case Final Proposal Segmentation Details

A	B	C	D	E
1328	TARKIO SUBSTATION (MISSOULA)	MEC	3,886	391
1329	TAYLOR FLATS SUBSTATION	FPUD	53,710	398
1330	TEANAWAY SUBSTATION	KTPUD	398	275
1331	TECOMA METERING POINT	RREC	15,357	2,490
1332	TETON SUBSTATION		3,243,793	63,823
1333	THAYER DRIVE SUBSTATION(CITY OF RICHLAND)	RICH	85,951	1,014
1334	THE DALLES SUBSTATION	BPA/NWPUD/WEC	2,378,051	51,205
1335	THOMPSON FALLS SUBSTATION	NWE	41,428	1,130
1336	THURSTON SUBSTATION	EWEB	27,476	435
1337	TIDE FLATS SUBSTATION	TPWR	(1,389)	0
1338	TILLAMOOK SUBSTATION		7,875,123	139,129
1339	TIMBER SUBSTATION		748,498	25,375
1340	TINCUP SUBSTATION	LVE	559,127	12,684
1341	TOLEDO SUBSTATION		12,832,803	140,039
1342	TOPPENISH SUBSTATION (YAKIMA POWER)		42,761	0
1343	TOSTON SUBSTATION	NWE	24,600	2,647
1344	TOWNSEND METERING POINT	VEC	35,194	1,208
1345	TRASK RIVER SUBSTATION	TPUD	19,987	2,130
1346	TREGO SUBSTATION(LINCOLN ELECTRIC COOP)	BPA/LINC	588,787	13,282
1347	TRENTWOOD SUBSTATION		5,615,681	65,045
1348	TROUT CREEK SUBSTATION	NLI	45,108	403
1349	TROUTDALE SUBSTATION(BPA)		30,792,653	204,401
1350	TROY SUBSTATION		526,491	15,153
1351	TRUMBULL CREEK SUBSTATION	FEC	51,518	590
1352	TUCANNON RIVER SUBSTATION		9,276,214	41,068
1353	TUM TUM SUBSTATION	IPL	26,909	649
1354	TUMBLE CREEK SUBSTATION		809,064	12,480
1355	TWILIGHT SUBSTATION	PGE	20,840	110
1356	TWISP SUBSTATION	OPUD	66,883	0
1357	TWO MILE ROAD SUBSTATION		1,074,631	11,173
1358	TYEE SUBSTATION	LLP	86,912	979
1359	TYGH VALLEY SUBSTATION (WASCO ELEC. COOP)	WEC	27,349	408
1360	U. S. PLYWOOD SUBSTATION	LPUD	15,723	0
1361	UKIAH SUBSTATION	CPCA	81,846	1,272
1362	UNDERWOOD SUBSTATION	SKPUD	29,277	1,574
1363	UNDERWOOD TAP AUTO-SECTIONALIZING STATION		698,308	3,327
1364	UNITY SUBSTATION (IDAHO POWERCOMPANY)	IPC	6,894	0
1365	UNITY SUBSTATION(BPA)	BPA/UEC	1,553,224	49,238
1366	UPPER GENERATING PLANT	IFP	17,829	0
1367	USK SUBSTATION(BPA)	BPA/POPD	142,835	31,774
1368	VALHALLA SUBSTATION	BPA/CHPD	3,643,840	119,825
1369	VALLEY SUBSTATION(RAFT RIVER ELEC COOP)	RREC	23,392	2,192
1370	VANCOUVER SHIPYARD SUBSTATION	CPU	26,421	0
1371	VANTAGE STATE PARK METERING POINT	GPUD	20,238	0
1372	VANTAGE SUBSTATION		31,928,431	212,079
1373	VAUGHN SUBSTATION	PLC	29,287	968
1374	VERA SUBSTATION (VERA W&P, INLAND P&L)	IPL/VWP	10,025	959
1375	VICTOR SUBSTATION (RAVALLI COUNTY ELEC COOP)	RCEC	6,943	195
1376	VICTOR SUBSTATION(FALL RIVER RURAL ELEC COOP)	FREC	81,618	588
1377	VIEW SUBSTATION	CPU	13,906	264
1378	VINSON METERING POINT	UEC	27,323	272
1379	VISTA SUBSTATION	BPUD	25,231	347
1380	WAGNER LAKE SUBSTATION		543,101	13,929
1381	WAHLUKE SUBSTATION	GPUD	10,343	0
1382	WALLA WALLA SUBSTATION(BPA)		10,779,244	83,340
1383	WALLA WALLA SUBSTATION(PACIFICORP)	PAC	224,061	0
1384	WALNUT CITY SUBSTATION(CITY OF MCMINNVILLE)	MWL	9,653	223
1385	WALTON SUBSTATION		225,051	12,447
1386	WARDEN POLE METERING POINT	GPUD	14,752	980
1387	WARDEN POLE NO 2 METERING POINT	GPUD	13,121	0
1388	WARNER SUBSTATION		3,553,133	64,596
1389	WARREN SUBSTATION		594,774	30,773
1390	WAUTOMA SUBSTATION		23,661,602	96,400
1391	WEIPPE SUBSTATION	AVA	18,934	275
1392	WELLS SUBSTATION(IDAHO POWER)	IPC	53,246	746
1393	WENDSON SUBSTATION		6,660,753	110,016
1394	WEST BURLEY SUBSTATION(UNITEDELEC COOP)	UEC/BURL	156,561	4,102
1395	WEST JOHN DAY SUBSTATION	OTEC	51,941	1,662
1396	WEST PLAINS SUBSTATION (IP&L)	IPL	20,162	269
1397	WEST REXBURG METERING POINT	PAC	21,513	0
1398	WEST WELLS SUBSTATION	WREC	18,036	170
1399	WEST WENDOVER METERING POINT	WREC	59,200	995
1400	WESTCOTT SUBSTATION (CANBY ELECTRIC)	CUB	6,150	130
1401	WESTMORELAND SUBSTATION	EWEB	5,482	0
1402	WESTSIDE SUBSTATION(BPA)		6,749,386	32,516
1403	WEYERHAEUSER INDUSTRIAL WAY WEYCO NO 1 SUBSTATION (C CWPUD		20,731	348
1404	WHEAT FIELD SUBSTATION (WFWPP)	EDP	10,273	0
1405	WHEELER SUBSTATION	GPUD	10,359	0
1406	WHITCOMB SUBSTATION	BPUD	95,864	264
1407	WHITE BLUFFS SUBSTATION		11,028,641	80,969
1408	WHITE CREEK SUBSTATION (KPUD)	KPUD	200,409	9,101
1409	WHITE RIVER SUBSTATION	PSE	10,703	28
1410	WHITE SWAN SUBSTATION(BENTON REA)	BREA	10,025	1,089
1411	WHITEHALL SUBSTATION	VEC	48,014	1,101

Appendix A
BP-16 Rate Case Final Proposal Segmentation Details

A	B	C	D	E
1412	WILLAKENZIE SUBSTATION	EWEB	32,420	0
1413	WILLARD JOHNSON SUBSTATION(HOOD RIVER ELEC)	HREC	90,662	238
1414	WILLIS SUBSTATION (KPUD)	KPUD	152,498	4,701
1415	WILSON RIVER SUBSTATION	TPUD	46,669	750
1416	WINCHESTER SUBSTATION	USBR	3,851	857
1417	WINDISHAR SUBSTATION	MWL	32,018	7,093
1418	WINE COUNTRY SUBSTATION	BPA/PAC	6,342,281	22,881
1419	WINNEMUCCA SUBSTATION	NVE	134,454	1,500
1420	WINTHROP SUBSTATION		1,349,024	32,774
1421	WOODLAND SWITCHING STATION	PAC	250,630	937
1422	WOODSIDE SUBSTATION (RAVALLI CO ELEC COOP)	RCEC	17,660	0
1423	WREN SUBSTATION		1,656,489	19,658
1424	WYNOOCHEE HYDRO PLANT	TPWR	73,355	1,482
1425	YAAK SUBSTATION		177,617	7,890
1426	ZEPHYR HEIGHTS SUBSTATION		46,512	196
1427	Subtotal Stations		2,571,781,797	28,756,899
1428	Total Network		5,217,539,846	35,355,419

Southern Intertie Facilities

Transmission Lines		Owner	Investment (\$)	O&M (\$)	Multi %
1429	ALVEY-DIXONVILLE NO 1	BPA/PAC	25,192,398	0	
1430	BIG EDDY 500/230KV TIE NO 1		51,352	2,473	
1431	BIG EDDY-CELILO NO 1		1,284,742	2,600	
1432	BIG EDDY-CELILO NO 2		1,463,788	2,492	
1433	BIG EDDY-CELILO NO 3		373,697	261	
1434	BIG EDDY-CELILO NO 4		249,132	196	
1435	BUCKLEY-GRIZZLY NO 1		9,961,133	13,027	57%
1436	BUCKLEY-MARION NO 1		20,369,871	18,997	50%
1437	CAPTAIN JACK-MALIN NO 1		844,154	3,217	
1438	CAPTAIN JACK-OLINDA NO 1		7,393,503	1,396	
1439	CELILO-SYLMAR NO 1		27,022,357	127,694	
1440	COYOTE SPRINGS-SLATT NO 1		328,931	465	12%
1441	DIXONVILLE-MERIDIAN		32,272,663	939	
1442	GRIZZLY-CAPTAIN JACK NO 1		22,226,974	111,858	
1443	GRIZZLY-SUMMER LAKE NO 1		19,480,851	27,565	57%
1444	JOHN DAY-BIG EDDY NO 1		2,008,149	2,437	
1445	JOHN DAY-GRIZZLY NO 1		12,099,924	42,853	
1446	JOHN DAY-GRIZZLY NO 2		10,521,016	30,126	
1447	MARION-ALVEY NO 1		4,456,110	16,581	50%
1448	SLATT-JOHN DAY NO 1		361,130	1,424	7%
1449	Subtotal Lines		197,961,875	406,599	

Stations		Owner	Investment (\$)	O&M (\$)	Multi %
1450	ALVEY SUBSTATION		7,675,452	63,453	22%
1451	BAKEOVEN COMPENSATION STATION		22,847,075	30,992	
1452	BIG EDDY 500 KV SWITCHYARD		12,674,128	59,860	
1453	BIG EDDY SUBSTATION		61,786,958	511,662	81%
1454	BUCKLEY SUBSTATION		6,248,137	65,615	64%
1455	CAPTAIN JACK SUBSTATION		42,224,516	166,060	
1456	CELILO CONVERTER NO 3		880,128	7,180	
1457	CELILO CONVERTER NO 4		864,806	3,086	
1458	CELILO DC CONVERTER STATION		305,555,386	3,337,160	
1459	CHIEF JOSEPH SUBSTATION		1,158,977	23,972	3%
1460	DIXONVILLE SUBSTATION	PAC	7,837,854	0	
1461	FORT ROCK COMPENSATION STATION		17,324,612	78,167	
1462	GRIZZLY SUBSTATION		32,776,475	323,280	
1463	JOHN DAY SUBSTATION		12,791,870	90,382	28%
1464	MALIN SUBSTATION	BPA/PAC	25,454,761	258,863	
1465	MARION SUBSTATION		3,425,338	34,584	9%
1466	MERIDIAN SUBSTATION(PACIFICORP)	PAC	7,458,872	0	
1467	ROUND MOUNTAIN SUBSTATION	PG&E	65,046	0	
1468	SAND SPRING COMPENSATION STATION		18,256,352	94,630	
1469	SLATT SUBSTATION		4,025,421	11,492	6%
1470	SUMMER LAKE SUBSTATION	PAC	3,285,491	50,531	57%
1471	SYCAN COMPENSATION STATION		16,208,451	87,045	
1472	SYLMAR DC CONVERTER STATION	LADWP	2,784	0	
1473	Subtotal Stations		610,828,891	5,298,013	
1474	Total Southern Intertie		808,790,766	5,704,612	

Appendix A
BP-16 Rate Case Final Proposal Segmentation Details

A	B	C	D	E	
<u>Eastern Intertie Facilities</u>					
	Transmission Lines	Owner	Investment (\$)	O&M (\$)	Multi %
1475	BROADVIEW-GARRISON NO 1	BPA/COTP	47,280,913	146,100	
1476	BROADVIEW-GARRISON NO 2	BPA/COTP	46,990,310	124,945	
1477	Subtotal Lines		94,271,222	271,046	
	Stations	Owner	Investment (\$)	O&M (\$)	Multi %
1478	COLSTRIP SUBSTATION	NWE	43,099	1,362	
1479	GARRISON SUBSTATION		22,317,681	168,684	30%
1480	Subtotal Stations		22,360,780	170,046	
1481	Total Eastern Intertie		116,632,002	441,091	

<u>Utility Delivery Facilities</u>					
	Transmission Lines	Owner	Investment (\$)	O&M (\$)	Multi %
1482	ALBANY-BUREAU OF MINES NO 1		23,660	650	
1483	GROUSE CREEK-TECOMA (LEASED FACILITIES)		121,332	0	6%
1484	HOOD RIVER-COOP SERVICE NO 1		23,808	681	
1485	Subtotal Lines		168,799	1,331	
	Stations	Owner	Investment (\$)	O&M (\$)	Multi %
1486	ACTON SUBSTATION		50,261	3,451	27%
1487	ALBANY SUBSTATION		885,735	7,857	7%
1488	ALDERWOOD SUBSTATION		354,390	4,985	52%
1489	BANDON SUBSTATION		227,939	3,260	5%
1490	BONNERS FERRY SUBSTATION		332,623	6,840	14%
1491	BURBANK SUBSTATION		114,552	2,329	18%
1492	BURNT WOODS SUBSTATION		141,126	7,603	44%
1493	CASCADE LOCKS SUBSTATION		235,592	6,148	38%
1494	DAVIS CREEK SUBSTATION		471,589	11,298	86%
1495	DIXIE SUBSTATION	BPA/SVEC	337,515	7,746	45%
1496	DRAIN SUBSTATION		283,499	3,744	10%
1497	EAGLE LAKE SUBSTATION		242,431	8,557	54%
1498	GARDINER SUBSTATION		313,901	12,675	37%
1499	GLADE SUBSTATION		289,994	6,242	58%
1500	HARRISBURG SUBSTATION		190,947	682	4%
1501	HOOD RIVER SUBSTATION		254,433	8,924	21%
1502	IONE SUBSTATION		131,198	4,551	17%
1503	LACLEDE SUBSTATION	BPA/NLI	31,715	8,278	100%
1504	LANGLOIS SUBSTATION		203,884	3,016	19%
1505	LYNCH CREEK SUBSTATION		545,682	10,005	43%
1506	MAPLETON SUBSTATION		54,533	2,141	7%
1507	MINIDOKA SUBSTATION		246,447	6,573	64%
1508	MONMOUTH SUBSTATION		576,749	12,387	46%
1509	MOUNTAIN AVENUE SUBSTATION		457,106	4,041	22%
1510	NECANICUM SUBSTATION	BPA/WOEC	40,602	2,484	32%
1511	NORTH BENCH SUBSTATION		15,179	167	3%
1512	NORTH BUTTE SUBSTATION	BPA/CPI	65,029	1,724	35%
1513	PARKDALE SUBSTATION		161,852	2,869	13%
1514	PORT ORFORD SUBSTATION		174,549	8,953	37%
1515	POTLATCH SUBSTATION(BPA)		117,768	2,539	11%
1516	REEDSPORT SUBSTATION (BPA)		199,231	2,652	6%
1517	RINGOLD SUBSTATION		116,044	3,358	22%
1518	SANDPOINT SUBSTATION(BPA)		198,146	4,604	15%
1519	SCOOTENEY SUBSTATION		136,876	2,396	9%
1520	SELLE SUBSTATION		332,559	5,824	59%
1521	STATELINE SUBSTATION	BPA/CREA	105,755	16,139	75%
1522	STEILACOOM SUBSTATION		346,790	4,192	31%
1523	SURPRISE LAKE SUBSTATION		155,330	3,139	20%
1524	SWAN VALLEY SUBSTATION		165,343	1,548	2%
1525	TROY SUBSTATION		431,599	12,422	45%
1526	TUMBLE CREEK SUBSTATION		170,214	2,626	17%
1527	TWO MILE ROAD SUBSTATION	BPA/CCEC	443,047	4,606	29%
1528	WALTON SUBSTATION		125,401	6,936	36%
1529	WINTHROP SUBSTATION		180,015	4,373	12%
1530	YAAK SUBSTATION		197,944	8,793	53%
1531	Subtotal Stations		10,853,114	255,676	
1532	Total Utility Delivery		11,021,914	257,007	

Appendix A
BP-16 Rate Case Final Proposal Segmentation Details

A	B	C	D	E
<u>DSI Delivery Facilities</u>				
	Owner	Investment (\$)	O&M (\$)	Multi %
1533	None			
1534	Subtotal Lines	0	0	
	Owner	Investment (\$)	O&M (\$)	Multi %
1535	CONKELLY SUBSTATION	2,269,682	40,768	20%
1536	INTALCO SUBSTATION	6,354,775	99,552	36%
1537	TRENTWOOD SUBSTATION	1,295,002	15,000	19%
1538	Subtotal Stations	9,919,459	155,320	
1539	Total DSI Delivery	9,919,459	155,320	

Unsegmented Facilities (segmented pro-rata)

Transmission Lines (allocated by direct line segmentation)				
	Owner	Investment (\$)	O&M (\$)	Multi %
1540		6,914	0	
1541		128,524	0	
1542		44,711	0	
1543		6,044,940	142,975	
1544		81,982	286	
1545		81,980	162	
1546		61,063	0	
1547		2,743	0	
1548		312,761	0	
1549		80,126	0	
1550		17,342	0	
1551		360,930	0	
1552		185,538	0	
1553		276,241	0	
1554		18,644	0	
1555		47,234	397	
1556		1,018,867	0	
1557		845,570	0	
1558		1,889	219	
1559		615,992	103	
1560		357,479	0	
1561		155	0	
1562		113,714	0	
1563		24,936	13,022	
1564		3,312,226	0	
1565		4,670,521	0	
1566		126,000	0	
1567		610,574	6,275	
1568	Subtotal Lines	19,449,596	163,438	

Stations (allocated according to direct station segmentation)				
	Owner	Investment (\$)	O&M (\$)	Multi %
1569		1,217,569	9,047	10%
1570		479,123	9,246	5%
1571	KEC	24,252	0	
1572	FPUD	55,722	0	
1573	M3PUD	19,501	0	
1574		78,480	1,596	13%
1575	SKPUD	14,135	0	
1576		13,477	0	
1577		22,761	0	
1578		9,048	319	2%
1579		683,793	16,308	
1580	PAC	4,456	0	
1581		52,906	1,139	11%
1582	CPU	9,499	0	
1583	M3PUD	49,049	0	
1584		6,709	0	
1585		168,870	7,841	
1586	CCEC	13,242	15,160	
1587		2,847,803	4,060	
1588		96,391	2,789	18%
1589		3,636,989	6,299,766	
1590		759,932	18,341	4%
1591		14,931	173	0%
1592	BPA/CHPD	317,754	10,449	8%
1593	Subtotal Stations	10,596,392	6,396,234	

Other Locations (allocated by direct station segmentation)				
	Owner	Investment (\$)		
1594		5,494,284		
1595		11,893		
1596		130,284		
1597		536,791		
1598		163,480		
1599		91,805		
1600		49,179		
1601		14,820,814		

Appendix A
BP-16 Rate Case Final Proposal Segmentation Details

A	B	C	D	E
1602	BPA SYSTEM-MICROWAVE &RADIO STATIONS	182,611		
1603	BPA SYSTEM-NON ELECTRIC PLANT& MISC	4,919,823		
1604	BURLEY MAINTENANCE HEADQUARTERS	6,969		
1605	CAPE BLANCO RADIO STATION (BPA)	58,688		
1606	CHEHALIS MAINTENANCE HEADQUARTERS	88,062		
1607	CHEMAWA MAINTENANCE HEADQUARTERS	74,117		
1608	COVINGTON MAINTENANCE HEADQUARTERS	15,113		
1609	COYOTE HILLS RADIO STATION	25,472		
1610	CULDESAC RADIO STATION	6,995		
1611	CYRUS NOE RADIO STATION	358,292		
1612	DECATUR EAST RADIO STATION	50,787		
1613	DECATUR WEST RADIO STATION	47,229		
1614	DEL RIO RADIO STATION	13,084		
1615	DITTMER BPA SYSTEM CONTROL CENTER	18,650,883		
1616	EASTERN CONTROL CENTER	32,523		
1617	EUGENE C. STARR COMPLEX	9,922,339		
1618	GRAND COULEE RADIO STATION	47,372		
1619	GRANITE MOUNTAIN RADIO STATION	144,812		
1620	GREEN MOUNTAIN PASSIVE REPEATER SITE	3,007		
1621	HORSE ROCK RADIO STATION	(2,444)		
1622	KAHLOTUS RADIO STATION	370,232		
1623	KALISPELL MAINTENANCE HEADQUARTERS	29,664		
1624	KEELER MAINTENANCE HEADQUARTERS	40,199		
1625	KENNEWICK RADIO STATION	49,374		
1626	LAKESIDE RADIO STATION	91,184		
1627	LEWISTON MAINTENANCE HEADQUARTERS	59,008		
1628	LONGVIEW ANNEX I	4,117,276		
1629	LONGVIEW MAINTENANCE HEADQUARTERS	6,038,256		
1630	LOWELL BUTTE RADIO STATION	7,559		
1631	MALAGA RADIO STATION	17,384		
1632	MALIN MAINTENANCE HEADQUARTERS	398,113		
1633	MARYS PEAK RADIO STATION	5,002		
1634	MEGLER RADIO STATION	11,556		
1635	MILLER PEAK RADIO STATION	117,099		
1636	MINT FARM GENERATING PLANT (INACTIVE)	36,768		
1637	MT. HEBO RADIO STATION	12,244		
1638	MUNRO BPA SYSTEM CONTROL CENTER	5,514,992		
1639	NASELLE RIDGE RADIO STATION	295,505		
1640	NORTH BEND MAINTENANCE HEADQUARTERS	723,564		
1641	NORTH BONNEVILLE ANNEX	29,495		
1642	ODELL BUTTE RADIO STATION	92,507		
1643	OLYMPIA MAINTENANCE HEADQUARTERS	166,376		
1644	OSTRANDER PASSIVE REPEATER SITE	25,022		
1645	PASCO MAINTENANCE HEADQUARTERS	89,312		
1646	POMEROY RADIO STATION	458,885		
1647	REDMOND MAINTENANCE HEADQUARTERS	247,649		
1648	ROCKDALE PASSIVE REPEATER N1 SITE	85,587		
1649	ROCKY RIDGE RADIO STATION	114,415		
1650	ROOSEVELT RADIO STATION	13,534		
1651	ROSS AMPERE BUILDING	723,768		
1652	ROSS COMPLEX	29,506,700		
1653	ROSS CONSTRUCTION AND SERVICES BUILDING	153,407		
1654	ROSS FOG TEST BUILDING	81,579		
1655	ROSS HEATLINE	6,923,624		
1656	ROSS MOBILE STORAGE	8,112		
1657	ROSS RADIO STATION	7,516		
1658	SCHULTZ MAINTENANCE HEADQUARTERS	1,377,094		
1659	SEATTLE RADIO STATION	3,939		
1660	SHANIKO RADIO STATION	17,135		
1661	SICKLER MAINTENANCE HEADQUARTERS	50,012		
1662	SKYROCKET RADIO STATION	6,481		
1663	SNOHOMISH MAINTENANCE HEADQUARTERS	58,551		
1664	SOUTH MOUNTAIN RADIO STATION	2,770		
1665	SPOKANE HANGAR	75,378		
1666	SQUAK MOUNTAIN RADIO STATION	4,272		
1667	TACOMA PUBLIC UTILITIES DISPATCH CENTER	36,618		
1668	TACOMA RADIO STATION	161,686		
1669	WALKER MOUNTAIN RADIO STATION	625,240		
1670	Subtotal Other	<u>115,025,905</u>		
	Emergency Stock (allocated by direct sub segmentation)	Owner	Investment (\$)	
1671	ROSS WAREHOUSE		11,559,951	
1672	Subtotal Emergency Stock		<u>11,559,951</u>	

Appendix A
BP-16 Rate Case Final Proposal Segmentation Details

A	B	C	D	E
<u>Depreciable Land</u>				
	Station Land (segmented to Network)	Owner	Investment (\$)	
1673	LA PINE SUBSTATION		18,619	
1674	NOXON CONSTRUCTION SUBSTATION		1	
1675	OKANOGAN SUBSTATION		14,156	
1676	SIFTON SUBSTATION		12,810	
1677	Subtotal Stations		<u>45,586</u>	
	Transmission Line Land (segmented to Network)	Owner	Investment (\$)	
1678	ALBANY-BURNT WOODS NO 1		307,619	
1679	ASHE-SLATT NO 1		19,806	
1680	BELL-ADDY NO 1		5,046	
1681	BELL-BOUNDARY NO 3		5,046	
1682	BELL-LANCASTER NO 1		8,276	
1683	BIG EDDY-CHENOWETH NO 1		387,831	
1684	BIG EDDY-CHENOWETH NO 2		387,596	
1685	BIG EDDY-SPRING CREEK NO 1		391,887	
1686	CHEHALIS-OLYMPIA NO 1		793	
1687	CHEHALIS-RAYMOND NO 1		47,011	
1688	CHIEF JOSEPH-EAST OMAK NO 1		10,724	
1689	CHIEF JOSEPH-MONROE NO 1		141,953	
1690	CHIEF JOSEPH-SNOHOMISH NO 3		31,581	
1691	COLUMBIA-ELLENSBURG NO 1		181,965	
1692	DE MOSS-FOSSIL NO 1		320	
1693	DWORSHAK PH-OROFINO NO 1		400	
1694	EAST OMAK TAP TO GRAND COULEE-FOSTER CREEK NO 1		174,817	
1695	FAIRVIEW-BANDON NO 2		1,602	
1696	FIDALGO-LOPEZ ISLAND NO 5		63,802	
1697	FLATHEAD-HOT SPRINGS NO 1		10,728,941	
1698	FOREST GROVE-TILLAMOOK NO 1		1,731	
1699	FRANKLIN-BADGER CANYON NO 1		1,432	
1700	GARRISON-ANACONDA NO 1		1,524	
1701	GOSHEN-DRUMMOND NO 1		3,924	
1702	GRAND COULEE-BELL NO 5		2,114,751	
1703	GRAND COULEE-HANFORD NO 1		14,375	
1704	GRAND COULEE-OKANOGAN NO 2		470	
1705	GRAND COULEE-SCHULTZ NO 1		24,380	
1706	HARVALUM-BIG EDDY NO 1		19,142,567	
1707	HORSE HEAVEN-HARVALUM NO 1		387,596	
1708	HOT SPRINGS-RATTLESNAKE NO 1		6,007,072	
1709	HUNGRY HORSE-CONKELLEY NO 1		6,043	
1710	KEELER-OREGON CITY NO 2		8,729	
1711	KELLER TAP TO GRAND COULEE-OKANOGAN NO 2		3,200	
1712	KLONDIKE SCHOOLHOUSE-JOHN DAY NO 1		657,883	
1713	LANCASTER-NOXON NO 1		82,527	
1714	LIBBY-BONNERS FERRY NO 1		5,851	
1715	LOWER MONUMENTAL-MCNARY NO 1		1,071	
1716	MCNARY-ROSS NO 1		387,596	
1717	OLYMPIA-GRAND COULEE NO 1		16,745	
1718	OLYMPIA-SATSOP NO 3		27,986	
1719	OSTRANDER-PEARL NO 1		45,358	
1720	PALISADES-CATTLE CREEK NO 1		89,749	
1721	PAUL-ALLSTON NO 2		236	
1722	RAVER-COVINGTON NO 2		387,596	
1723	RAYMOND-COSMOPOLIS NO 1		36,335	
1724	ROCKY REACH-MAPLE VALLEY NO 1		210,071	
1725	ROSS-LEXINGTON NO 1		82,898	
1726	ROUNDUP-LAGRANDE NO 1		645,809	
1727	SANTIAM-TOLEDO NO 1		78,122	
1728	SCHULTZ-WAUTOMA NO 1		2,277,742	
1729	SPIRIT TAP TO COLVILLE-BOUNDARY NO 1		24,206	
1730	SWAN VALLEY-TETON NO 1		54,679	
1731	TAFT-BELL NO 1		133,069	
1732	TUCANNON RIVER-NORTH LEWISTON NO 1		862,880	
1733	WALLA WALLA-PENDLETON NO 1		126,393	
1734	WALLA WALLA-TUCANNON RIVER NO 1		1,340	
1735	WAUTOMA-OSTRANDER NO 1		1,747	
1736	WAUTOMA-ROCK CREEK NO 1		391,431	
1737	Subtotal Network Line Land		<u>47,244,131</u>	
	Transmission Line Land (segmented to Generation Integration)	Owner	Investment (\$)	
1738	ANDERSON RANCH-MOUNTAIN HOME NO 1		60,166	
1739	DETROIT-SANTIAM NO 1		677	
1740	Subtotal GI Line Land		<u>60,843</u>	

Appendix A
BP-16 Rate Case Final Proposal Segmentation Details

A	B	C	D	E
Transmission Line Land (segmented pro-rata)				
	Owner	Investment (\$)		
1741	COVINGTON-MAPLE VALLEY FIBER SYSTEM	23,437		
1742	FRANKLIN-HATWAI FIBER SYSTEM	35,889		
1743	HOT SPRINGS-GARRISON FIBER SYSTEM	58,561		
1744	PENDLETON-LAGRANDE	195		
1745	ROSS-FRANKLIN FIBER SYSTEM	97,757		
1746	Subtotal Line Land pro-rata	215,839		
Other Facility Land (segmented pro-rata)				
	Owner	Investment (\$)		
1747	ALBION BUTTE RADIO STATION	6,356		
1748	APPLEGATE BUTTE RADIO STATION	49,780		
1749	BOISTFORT PEAK RADIO STATION(WEYERHOUSER)	9,081		
1750	CAPITOL PEAK RADIO STATION(BPA)	1,916		
1751	INDIAN MOUNTAIN RADIO STATION	72,672		
1752	ELLIS RADIO STATION	6,824		
1753	HAYSTACK BUTTE RADIO STATION	388,346		
1754	SICKLER PASSIVE REPEATER SITE	913		
1755	CAPE BLANCO RADIO STATION (BPA)	118,992		
1756	SEVEN MILE HILL METEOROLOGICAL TOWER	15,105		
1757	Subtotal Other pro-rata	669,985		
<u>Ancillary Service Facilities</u>				
Communication and Control Equipment ***				
	Owner	Investment (\$)		
1758	ABERDEEN SUBSTATION	124,433		
1759	ADAIR SUBSTATION(BPA)	2,942		
1760	ADDY SUBSTATION	270,287		
1761	ALBANY SUBSTATION	19,130		
1762	ALBENI FALLS SUBSTATION	5,807		
1763	ALCOA SUBSTATION	36,284		
1764	ALFALFA SUBSTATION	5,205		
1765	ALLSTON SUBSTATION	254,669		
1766	ALVEY SUBSTATION	1,105,177		
1767	ANACONDA SUBSTATION	164,488		
1768	ASHE SUBSTATION	221,074		
1769	BALD MOUNTAIN SUBSTATION	425,844		
1770	BANDON SUBSTATION	16,566		
1771	BEAVER SUBSTATION (PGE)	210,386		
1772	BELL SUBSTATION	805,634		
1773	BENTON SUBSTATION	3,839		
1774	BETTAS ROAD SUBSTATION	213,160		
1775	BIDDLE BUTTE RADIO STATION	19,866		
1776	BIG EDDY 500 KV SWITCHYARD	345,912		
1777	BIG EDDY SUBSTATION	1,404,818		
1778	BOARDMAN SUBSTATION	143,981		
1779	BONNERS FERRY SUBSTATION	151,071		
1780	BONNEVILLE BUILDING PORTLAND	92,338		
1781	BONNEVILLE POWERHOUSE #1	343,690		
1782	BOUNDARY SUBSTATION	55,264		
1783	BPA HEADQUARTERS BUILDING	6,225		
1784	BPA SYSTEM	5,278,582		
1785	BPA SYSTEM-NON ELECTRIC PLANT& MISC	57,849		
1786	BRASADA SUBSTATION (CENTRAL ELECTRIC COOPERATIVE)	187,017		
1787	BRIDGE SUBSTATION	34,676		
1788	BUCK BUTTE RADIO STATION	8,923		
1789	BUCKLEY SUBSTATION	42,924		
1790	CALPINE SUBSTATION	170,566		
1791	CAPTAIN JACK SUBSTATION	1,881,486		
1792	CARLTON SUBSTATION	9,310		
1793	CASCADE STEEL SUBSTATION	7,187		
1794	CELILO DC CONVERTER STATION	6,190,761		
1795	CHEHALIS RADIO STATION	2,057		
1796	CHEHALIS SUBSTATION	323,618		
1797	CHEMAWA SUBSTATION	65,891		
1798	CHENOWETH SUBSTATION	22,055		
1799	CHIEF JOSEPH SUBSTATION	38,604		
1800	COLUMBIA FALLS ALUMINUM COMPANY SUBSTATION	19,459		
1801	COLUMBIA FALLS SUBSTATION - 230 KV YARD	167,581		
1802	COLUMBIA SUBSTATION	67,350		
1803	COLVILLE SUBSTATION	11,883		
1804	CONDON SUBSTATION	29,512		
1805	CONDON WIND SUBSTATION(SEAWEST)	283,503		
1806	CONKELLEY SUBSTATION	103,189		
1807	CONNELL SUBSTATION	14,474		
1808	COSMOPOLIS SUBSTATION	69,807		
1809	COVINGTON SUBSTATION	192,502		
1810	COWLITZ SUBSTATION(BPA)	32,603		
1811	COYOTE SPRINGS SUBSTATION	22,177		
1812	CRESTON SUBSTATION(BPA)	69,343		
1813	CULDESAC RADIO STATION	533		

Appendix A
BP-16 Rate Case Final Proposal Segmentation Details

A	B	C	D	E
1814	CUSTER SUBSTATION			272,810
1815	DE MOSS SUBSTATION(BPA)			619,435
1816	DEER PARK SUBSTATION	BPA/IPL/AVA		3,886
1817	DITTMER BPA SYSTEM CONTROL CENTER			78,910,332
1818	DRAIN SUBSTATION			22,237
1819	DRISCOLL SUBSTATION			46,177
1820	DRUMMOND SUBSTATION	BPA/FREC		230,117
1821	DWORSHAK POWERHOUSE			130,599
1822	DWORSHAK SUBSTATION			129,362
1823	EAST OMAK SUBSTATION			164,065
1824	EASTERN CONTROL CENTER			3,697
1825	EASTSIDE SYSTEM CONTROL CENTER(PSE)	PSE		8,768
1826	ECHO LAKE SUBSTATION			64,433
1827	EUGENE C. STARR COMPLEX			31,743
1828	EUGENE SUBSTATION			75,533
1829	FAIRMOUNT SUBSTATION			243,792
1830	FAIRVIEW SUBSTATION(BPA)			204,101
1831	FIDALGO SUBSTATION			6,872
1832	FLATHEAD SUBSTATION(BPA & FLATHEAD ELEC)	BPA/FEC		270,109
1833	FOREST GROVE SUBSTATION	BPA/FORG		112,995
1834	FORT ROCK COMPENSATION STATION			1,965,842
1835	FORT ROCK SUBSTATION (MIDSTATE ELECTRIC COOP)	MSEC		27,484
1836	FOSSIL SUBSTATION			68,698
1837	FRANKLIN SUBSTATION	BPA/FPUD		201,996
1838	FREEWATER SUBSTATION(BPA)	BPA/CMF		15,432
1839	GARRISON SUBSTATION			1,874,531
1840	GOSHEN SUBSTATION(UTAH POWER & LIGHT)	BPA/PAC-ID		321,926
1841	GRAND COULEE 115 KV SWITCHYARD			869,968
1842	GRAND COULEE 230 KV SWITCHYARD			709,551
1843	GRAND COULEE 500 KV SWITCHYARD			167,375
1844	GRAND COULEE RADIO STATION			208,028
1845	GRAND COULEE SUBSTATION	GPUD		93,082
1846	GRANDVIEW SUBSTATION	BPA/BREA		13,048
1847	GRIZZLY SUBSTATION			7,315
1848	HANFORD SUBSTATION			913,762
1849	HAPPY CAMP RADIO STATION(PG&E)	PG&E		44,805
1850	HARNEY SUBSTATION(BPA)			142,960
1851	HARRISBURG SUBSTATION			21,040
1852	HARVALUM SUBSTATION			87,668
1853	HARVEY SUBSTATION			2,678
1854	HATWAI SUBSTATION			59,328
1855	HAY CANYON SUBSTATION (IBERDOLA)	IBER		52,792
1856	HEYBURN SUBSTATION			14,446
1857	HILLTOP SUBSTATION	BPA/NVE		30,653
1858	HOOD RIVER SUBSTATION			4,519
1859	HOOPER SPRINGS SUBSTATION			5,782
1860	HORN BUTTE SUBSTATION (INVENERGY WIND)	INVER		245,607
1861	HORSE HEAVEN SUBSTATION			135,366
1862	HOT SPRINGS SUBSTATION			165,605
1863	HUNGRY HORSE POWERHOUSE			468,842
1864	IONA BUTTE RADIO STATION			2,590
1865	JOHN DAY SUBSTATION			781,170
1866	JONES CANYON SUBSTATION			568,665
1867	KALISPELL SUBSTATION(BPA)			21,140
1868	KEELER SUBSTATION			49,605
1869	KENNEWICK RADIO STATION			3,749
1870	KITSAP SUBSTATION			112,892
1871	LA GRANDE SUBSTATION			69,987
1872	LA PINE SUBSTATION			31,226
1873	LANCASTER SUBSTATION(BPA)			181,691
1874	LANE SUBSTATION			69,052
1875	LEBANON SUBSTATION			81,133
1876	LEXINGTON SUBSTATION			427,143
1877	LIBBY SUBSTATION(BPA)			25,470
1878	LITTLE GOOSE POWERHOUSE			26,862
1879	LITTLE GOOSE SUBSTATION			1,447,540
1880	LONGVIEW SUBSTATION			472,536
1881	LOOKOUT POINT SUBSTATION			62,551
1882	LOPEZ ISLAND SUBSTATION(BPA)			6,079
1883	LOST RIVER SUBSTATION	BPA/LREC		9,581
1884	LOWER GRANITE SUBSTATION			419,399
1885	LOWER MONUMENTAL SUBSTATION			799,028
1886	MACKS INN SUBSTATION	FREC		8,757
1887	MALIN MAINTENANCE HEADQUARTERS			18,700
1888	MALIN SUBSTATION	BPA/PAC		106,743
1889	MAPLE VALLEY SUBSTATION			111,863
1890	MARION SUBSTATION			56,141
1891	MARTIN CREEK SUBSTATION			42,765
1892	MAUPIN SUBSTATION			50,782
1893	MCLOUGHLIN SUBSTATION	PGE		77,459
1894	MCMINNVILLE SUBSTATION	BPA/MWL		10,910
1895	MCNARY SUBSTATION			579,109
1896	MIDWAY SUBSTATION(BPA)			105,155
1897	MONMOUTH SUBSTATION			3,517

Appendix A
BP-16 Rate Case Final Proposal Segmentation Details

A	B	C	D	E
1898	MONROE SUBSTATION			185,580
1899	MOXEE SUBSTATION			36,140
1900	MT. HEBO RADIO STATION			147
1901	MUNRO BPA SYSTEM CONTROL CENTER			11,138,154
1902	MURRAY SUBSTATION			20,792
1903	NAPAVINE SUBSTATION			170,420
1904	NASELLE SUBSTATION			188,956
1905	NINE CANYON SUBSTATION (BENTON PUD)	BPUD		209,461
1906	NINE MILE SUBSTATION (FPLE)	FPLE		266,939
1907	NORTH BONNEVILLE SUBSTATION	BPA/SKPUD		241,494
1908	NOXON CONSTRUCTION SUBSTATION	AVA		982
1909	OLYMPIA SUBSTATION			56,398
1910	OREGON CITY SUBSTATION			28,997
1911	OSTRANDER SUBSTATION			62,412
1912	PALISADES POWERHOUSE			31,408
1913	PAUL SUBSTATION			117,041
1914	PEARL SUBSTATION			154,434
1915	PLUM RADIO STATION			60,316
1916	PONDEROSA SUBSTATION(BPA)			3,557
1917	PORT ANGELES SUBSTATION(BPA)			307,221
1918	RATTLESNAKE SUBSTATION(MPC)	NWE		93,655
1919	RAVER SUBSTATION			160,690
1920	RAYMOND SUBSTATION			73,048
1921	RED MOUNTAIN SUBSTATION			353,542
1922	REDMOND SUBSTATION(BPA)			163,249
1923	REEDSPORT SUBSTATION (BPA)			347,724
1924	ROCK CREEK SUBSTATION			167,443
1925	ROCKY REACH SWITCHYARD			10,008
1926	ROGUE SUBSTATION			454,162
1927	ROSS AMPERE BUILDING			36,338
1928	ROSS SUBSTATION			72,916
1929	ROUND VALLEY SUBSTATION			9,332
1930	ROUNDUP SUBSTATION			103,350
1931	SACAJAWEA SUBSTATION			5,969
1932	SAND CREEK SUBSTATION			10,972
1933	SAND SPRING COMPENSATION STATION			2,243,283
1934	SANDPOINT SUBSTATION(BPA)			11,082
1935	SANTIAM SUBSTATION			52,080
1936	SAPPHO SUBSTATION			4,868
1937	SATSOP PARK SUBSTATION (GHPUD)	GHPUD		10,920
1938	SATSOP SUBSTATION(BPA)			108,841
1939	SCHULTZ SUBSTATION			137,683
1940	SEDRO WOOLLEY SUBSTATION	PSE		25,481
1941	SHANO SUBSTATION	BBEC		4,255
1942	SHELTON SUBSTATION			216,256
1943	SICKLER SUBSTATION			181,871
1944	SIFTON SUBSTATION			94,714
1945	SILVER CREEK SUBSTATION			235,115
1946	SKYROCKET RADIO STATION			8,902
1947	SLATT SUBSTATION			381,029
1948	SNOHOMISH SUBSTATION			748,606
1949	SNO-KING SUBSTATION			93,709
1950	SOUTH TACOMA SUBSTATION			187,314
1951	SPAR CANYON SUBSTATION	SREC		8,749
1952	SPRING CREEK SUBSTATION			34,581
1953	ST. JOHNS SUBSTATION			34,628
1954	STEILACOOM SUBSTATION			2,911
1955	SUMMER LAKE SUBSTATION			35,875
1956	SWAN VALLEY RADIO STATION			8,904
1957	SWAN VALLEY SUBSTATION			195,904
1958	SYCAN COMPENSATION STATION			1,206,219
1959	SYSTEM WIDE			819,368
1960	TACOMA RADIO STATION			15,376
1961	TACOMA SUBSTATION			83,008
1962	TAFT SUBSTATION			982
1963	TAHKENITCH SUBSTATION			139,952
1964	TARGHEE SUBSTATION	BPA/FREC		12,526
1965	TEAKEAN BUTTE RADIO STATION			66,706
1966	TETON SUBSTATION			364,191
1967	THE DALLES SUBSTATION	BPA/NWPUD/WEC		102,870
1968	TILLAMOOK SUBSTATION			25,845
1969	TINCUP SUBSTATION	LVE		147,498
1970	TOLEDO SUBSTATION			299,940
1971	TRENTWOOD SUBSTATION			3,184
1972	TROUTDALE SUBSTATION(BPA)			66,253
1973	TUCANNON RIVER SUBSTATION			209,349
1974	UNITY SUBSTATION(BPA)	BPA/UEC		8,457
1975	USK SUBSTATION(BPA)			308,498
1976	VALHALLA SUBSTATION	BPA/CHPD		715,402
1977	VANSYCLE RIDGE WIND GENERATION FACILITY			68,676
1978	VANTAGE SUBSTATION			648,063
1979	WALLA WALLA SUBSTATION(BPA)			345,896
1980	WARNER SUBSTATION			17,012
1981	WAUTOMA SUBSTATION			610,929

Appendix A
BP-16 Rate Case Final Proposal Segmentation Details

	A	B	C	D	E
1982	WENDSON SUBSTATION		303,201		
1983	WEYERHAEUSER INDUSTRIAL WAY WEYCO NO 1 SUBSTATION (COWLITZ)		8,630		
1984	WHITE BLUFFS SUBSTATION		205,980		
1985	WHITE CREEK SUBSTATION (KPUD)	KPUD	436,404		
1986	WILLIS SUBSTATION (KPUD)	KPUD	353,448		
1987	WINE COUNTRY SUBSTATION	BPA/PAC	162,189		
1988	Total Ancillary Service		147,352,557		

*** FERC Account 353(1) Control, 391(2.2) Hardware, 391(3.2) Software, and 397(104,108) SCADA Communications

General Plant Facilities

General Plant	Owner	Investment (\$)
1989	ABERDEEN SUBSTATION	51,922
1990	ADDY SUBSTATION	42,118
1991	ADEL RADIO STATION	1,153,729
1992	ALBANY SUBSTATION	212,996
1993	ALBANY-EUGENE NO 1	417,035
1994	ALBENI FALLS RADIO STATION (USCE)	167,336
1995	ALBENI FALLS SUBSTATION	3,992
1996	ALBION BUTTE RADIO STATION	855,859
1997	ALCOA SUBSTATION	32,262
1998	ALDER METERING POINT	9,317
1999	ALFALFA SUBSTATION	109,518
2000	ALLSTON SUBSTATION	1,763,040
2001	ALVEY MAINTENANCE HEADQUARTERS	844,250
2002	ALVEY SUBSTATION	4,955,368
2003	ANACONDA SUBSTATION	198,847
2004	APPLEGATE BUTTE RADIO STATION	1,813,502
2005	ARTONDALE SUBSTATION	38,647
2006	ASHE MAINTENANCE HEADQUARTERS	2,409,638
2007	ASHE SUBSTATION	6,523,083
2008	ASHTON HILL RADIO STATION	155,791
2009	AUGSPURGER MOUNTAIN RADIO STATION	320,586
2010	BADGER CANYON SUBSTATION	1,318,867
2011	BAKEOVEN COMPENSATION STATION	20,113
2012	BALD MOUNTAIN RADIO STATION	1,373,383
2013	BALD PEAK RADIO STATION	75,521
2014	BANDON SUBSTATION	719,357
2015	BEAVER SUBSTATION (PGE)	85,273
2016	BELL MAINTENANCE HEADQUARTERS	6,887,522
2017	BELL SUBSTATION	4,051,541
2018	BELLINGHAM SUBSTATION(BPA)	999,731
2019	BELLINGHAM-CUSTER FIBER SYSTEM	3,760,858
2020	BELL-NOXON FIBER SYSTEM	3,981,955
2021	BENNETT MOUNTAIN RADIO STATION	89,534
2022	BENTON SUBSTATION	503,559
2023	BENTON-FRANKLIN NO 1	15,180
2024	BETTAS ROAD SUBSTATION	482,404
2025	BEVERLY RADIO STATION	75,088
2026	BIDDLE BUTTE RADIO STATION	24,562
2027	BIG EDDY 500 KV SWITCHYARD	302,746
2028	BIG EDDY SUBSTATION	3,206,314
2029	BIG EDDY-TROUTDALE NO 1	63,155
2030	BIRCH CREEK RADIO STATION	29,191
2031	BLACK MOUNTAIN RADIO STATION	142,573
2032	BLACKTAIL PEAK RADIO STATION	899,388
2033	BLUE RIDGE RADIO STATION	441,312
2034	BOARDMAN SUBSTATION	418,466
2035	BOARDMAN-TOWER ROAD NO 1	(5,942)
2036	BOISTFORT PEAK RADIO STATION(WEYERHOUSER)	55,063
2037	BONNERS FERRY SUBSTATION	53,864
2038	BONNEVILLE POWERHOUSE #1	3,513
2039	BOUNDARY SUBSTATION	1,001,895
2040	BPA HEADQUARTERS BUILDING	94,536
2041	BPA SYSTEM	20,769,344
2042	BPA SYSTEM-LINES	144,773
2043	BPA SYSTEM-MICROWAVE &RADIO STATIONS	474,285
2044	BPA SYSTEM-NON ELECTRIC PLANT& MISC	111,721,106
2045	BRADFORD ISLAND RADIO STATION	58,502
2046	BRASADA SUBSTATION (CENTRAL ELECTRIC COOPERATIVE)	606,534
2047	BRIDGE SUBSTATION	271,662
2048	BROADVIEW SUBSTATION	36,126
2049	BROOKDALE SUBSTATION(ELMHURSTMUTUAL PWR & LIGHT)	44,058
2050	BUCK BUTTE RADIO STATION	1,598,343
2051	BUCKLEY SUBSTATION	1,809,855
2052	BURLEY MAINTENANCE HEADQUARTERS	57,779
2053	BURNS RADIO STATION	130,112
2054	CABBAGE HILL RADIO STATION	84,401

Appendix A
BP-16 Rate Case Final Proposal Segmentation Details

	A	B	C	D	E
2055	CALPINE SUBSTATION		420,965		
2056	CAPE BLANCO RADIO STATION (BPA)		902,315		
2057	CAPITOL PEAK RADIO STATION(BPA)		583,519		
2058	CAPTAIN JACK SUBSTATION		2,705,029		
2059	CARDWELL SUBSTATION		213,502		
2060	CARLTON SUBSTATION		396,407		
2061	CARLTON-SHERWOOD NO 1		556		
2062	CASCADE STEEL SUBSTATION		28,301		
2063	CATHLAMET SUBSTATION		17,960		
2064	CELILO DC CONVERTER STATION		5,537,486		
2065	CELILO MAINTENANCE HEADQUARTERS		21,287		
2066	CENTRAL FERRY SUBSTATION		28,916		
2067	CENTRALIA SUBSTATION		31,477		
2068	CHEHALIS MAINTENANCE HEADQUARTERS		79,987		
2069	CHEHALIS RADIO STATION		128,615		
2070	CHEHALIS SUBSTATION		1,463,795		
2071	CHEMAWA MAINTENANCE HEADQUARTERS		93,505		
2072	CHEMAWA SUBSTATION		6,939,559		
2073	CHENOWETH SUBSTATION		247,042		
2074	CHIEF JOSEPH POWERHOUSE		508,107		
2075	CHIEF JOSEPH SUBSTATION		2,381,494		
2076	CLATSOP SUBSTATION		10,265		
2077	CLINTON SUBSTATION (SOLD)	MEC	1,193		
2078	COBURG RADIO STATION		225,732		
2079	COBURG SUBSTATION		140,618		
2080	COLSTRIP SES		41,676		
2081	COLSTRIP SUBSTATION		165,332		
2082	COLUMBIA FALLS SUBSTATION -- 115 YARD		406,902		
2083	COLUMBIA FALLS SUBSTATION - 230 KV YARD		963,013		
2084	COLUMBIA FALLS-KALISPELL NO 1		31,810		
2085	COLUMBIA GENERATING STATION SUBSTATION (ENERGY NORTHWEST)		3,701,030		
2086	COLUMBIA GENERATING STATION-ASHE FIBER SYSTEM		126,744		
2087	COLUMBIA SUBSTATION		1,586,453		
2088	COLVILLE SUBSTATION		185,792		
2089	CONDON WIND SUBSTATION(SEAWEST)		17,366		
2090	CONKELLEY SUBSTATION		1,404,185		
2091	COSMOPOLIS SUBSTATION		4,164		
2092	COVINGTON MAINTENANCE HEADQUARTERS		785,206		
2093	COVINGTON SUBSTATION		4,031,084		
2094	COVINGTON-BELL FIBER SYSTEM		18,377,621		
2095	COVINGTON-BETTAS ROAD NO 1		402,607		
2096	COVINGTON-MAPLE VALLEY FIBER SYSTEM		2,941,491		
2097	COVINGTON-MUNRO FIBER SYSTEM(INACTIVE SEE NOTES)		1,383,291		
2098	COWLITZ SUBSTATION(BPA)		15,915		
2099	COYOTE HILLS RADIO STATION		1,373,033		
2100	COYOTE SPRINGS SUBSTATION		513,666		
2101	CRESTON SUBSTATION(BPA)		337,151		
2102	CULDESAC RADIO STATION		12,970		
2103	CUSICK SUBSTATION		9,748		
2104	CUSTER MAINTENANCE HEADQUARTERS		724,085		
2105	CUSTER SUBSTATION		2,285,165		
2106	CUSTER-INGLEDOW NO 1		190,843		
2107	CYRUS NOE RADIO STATION		31,091		
2108	DAVENPORT RADIO STATION		85,991		
2109	DE MOSS SUBSTATION(BPA)		425,014		
2110	DECATUR SUBSTATION		134,517		
2111	DEL RIO RADIO STATION		220,873		
2112	DEVILS MOUNTAIN RADIO STATION		316,863		
2113	DITTMER BPA SYSTEM CONTROL CENTER		30,874,132		
	DIXON SUBSTATION		330,194		
2114	DIXONVILLE SUBSTATION		164,947		
2115	DOUGLAS SWITCHYARD		68,042		
2116	DRAIN SUBSTATION		21,211		
2117	DRISCOLL SUBSTATION		411,453		
2118	DRISCOLL-NAELLE NO 1		274,886		
2119	DRUMMOND SUBSTATION		130,515		
2120	DWORSHAK POWERHOUSE		31,350		
2121	DWORSHAK SUBSTATION		470,427		
2122	EAST OMAK SUBSTATION		71,149		
2123	EASTERN CONTROL CENTER		1,102,074		
2124	EASTON RADIO STATION		399,978		
2125	EASTSIDE SYSTEM CONTROL CENTER(PSE)	PSE	14,423		
2126	ECHO LAKE SUBSTATION		1,445,718		
2127	ECHO LAKE-MONROE-SNOHOMISH FIBER SYSTEM		4,908,397		

Appendix A
BP-16 Rate Case Final Proposal Segmentation Details

A	B	C	D	E
2128	ELLENSBURG SUBSTATION			377,775
2129	ELLENSBURG-MOXEE NO 1			254,038
2130	ELLIS MOUNTAIN RADIO STATION			32,352
2131	ELLIS RADIO STATION			556
2132	EUGENE C. STARR COMPLEX			3,497,144
2133	EUGENE SUBSTATION			348,327
2134	EUGENE-ALDERWOOD NO 1			417,035
2135	FAIRMOUNT SUBSTATION			192,425
2136	FAIRVIEW SUBSTATION(BPA)			786,326
2137	FIDALGO SUBSTATION			434,263
2138	FIDALGO-LOPEZ ISLAND NO 5			95,100
2139	FLATHEAD SUBSTATION(BPA & FLATHEAD ELEC)	BPA/FEC		1,133,521
2140	FOLSOM CONTROL CENTER (CAL ISO)	CAISO		3,416
2141	FOREST GROVE SUBSTATION			94,094
2142	FOREST GROVE-MCMINNVILLE NO 1			6,668
2143	FOREST GROVE-TILLAMOOK NO 1			14,894
2144	FORT ROCK COMPENSATION STATION			1,130,390
2145	FORT ROCK SUBSTATION (MIDSTATE ELECTRIC COOP)	MSEC		3,351
2146	FOSSIL SUBSTATION			65,317
2147	FOSTER CREEK RADIO STATION			48,736
2148	FOSTER SUBSTATION			16,933
2149	FRANKLIN MAINTENANCE HEADQUARTERS			233,605
2150	FRANKLIN SUBSTATION			3,803,002
2151	FRANKLIN-MUNRO FIBER SYSTEM			16,440,087
2152	FRANZ HOLMES SUBSTATION			2,341
2153	FREDERICKSON GENERATING PLANT(FREDERICKSON POWER LP) FRED PWR			119,537
2154	FREDERICKSON GENERATION-SOUTH TACOMA FIBER SYSTEM			619,854
2155	FRENCHMAN SPRINGS SUBSTATION			766
2156	GARDINER RIDGE RADIO STATION(BPA)			23,654
2157	GARRISON MAINTENANCE HEADQUARTERS			158,654
2158	GARRISON SUBSTATION			4,439,226
2159	GIG HARBOR SUBSTATION			46,027
2160	GOLDENDALE SUBSTATION(BPA)			11,710
2161	GOODWIN PEAK RADIO STATION			390,889
2162	GOSHEN SUBSTATION(UTAH POWER & LIGHT)	PAC-ID		258,016
2163	GRAND COULEE 115 KV SWITCHYARD			634,783
2164	GRAND COULEE 115KV-GRAND COULEE RS FIBER SEG			249,005
2165	GRAND COULEE 230 KV SWITCHYARD			314,427
2166	GRAND COULEE 500 KV SWITCHYARD			1,351,367
2167	GRAND COULEE MAINTENANCE BUILDING			629,567
2168	GRAND COULEE PASSIVE REPEATERSITE			556
2169	GRAND COULEE RADIO STATION			386,369
2170	GRAND COULEE SUBSTATION			113,077
2171	GRAND COULEE THIRD POWERHOUSE			152,907
2172	GRAND COULEE-BELL NO 5			22,276
2173	GRANDVIEW SUBSTATION			38,617
2174	GRANITE MOUNTAIN RADIO STATION			920,613
2175	GRASSY MOUNTAIN RADIO STATION			556
2176	GRAZZINI SUBSTATION			69,978
2177	GREEN MOUNTAIN PASSIVE REPEATER SITE			18,681
2178	GREENBERRY SUBSTATION			645
2179	GRIZZLY MOUNTAIN RADIO STATION			1,629,468
2180	GRIZZLY SUBSTATION			2,305,611
2181	GROUSE PEAK RADIO STATION			375,503
2182	HAAKENSEN SUBSTATION			24,891
2183	HALL RIDGE RADIO STATION			358,707
2184	HAMPTON BUTTE RADIO STATION			291,690
2185	HANFORD SUBSTATION			1,472,404
2186	HANFORD-WAUTOMA NO 1			1,770
2187	HAPPY CAMP RADIO STATION(PG&E)	PG&E		485,754
2188	HAPPY CAMP RADIO STATION(TANC)	TANC		52,708
2189	HAPPY VALLEY SUBSTATION			1,657
2190	HARNEY SUBSTATION(BPA)			195,610
2191	HARRISBURG SUBSTATION			383,612
2192	HARVALUM SUBSTATION			421,935
2193	HARVEY SUBSTATION			82,521
2194	HAT ROCK SUBSTATION			85,428
2195	HATWAI SUBSTATION			1,346,190
2196	HAUSER SUBSTATION(BPA)			9,889
2197	HAUSER-NORTH BEND MAINTENANCE HQ FIBER SYSTEM			52,648
2198	HAYDEN SUBSTATION			4,128
2199	HAYSTACK BUTTE RADIO STATION			86,253
2200	HEYBURN SUBSTATION			26,048
2201	HILLTOP SUBSTATION			27,330

Appendix A
BP-16 Rate Case Final Proposal Segmentation Details

A	B	C	D	E
2202	HOLCOMB RADIO STATION	270,971		
2203	HOLCOMB SUBSTATION	16,087		
2204	HOOD RIVER SUBSTATION	143,515		
2205	HOOD RIVER-THE DALLES NO 1	95,770		
2206	HORN BUTTE TAP TO TOWER ROAD-ALKALI NO 1	7,512		
2207	HORSE HEAVEN SUBSTATION	11,423		
2208	HOT SPRINGS SUBSTATION	2,290,805		
2209	HOT SPRINGS-GARRISON FIBER SYSTEM	9,027,301		
2210	HUNGRY HORSE POWERHOUSE	543,650		
2211	HUNGRY HORSE RADIO STATION	653,256		
2212	ICE HARBOR POWERHOUSE	388,526		
2213	IDAHO FALLS DISTRICT OFFICE AND MAINTENANCE HEADQUARTERS	4,447,679		
2214	IDAHO FALLS STORAGE YARD	380,162		
2215	INDIAN MOUNTAIN RADIO STATION	1,782,548		
2216	INTALCO SUBSTATION	868,855		
2217	IONA BUTTE RADIO STATION	747		
2218	JOHN CURTIS SUBSTATION	68,395		
2219	JOHN DAY POWERHOUSE	234,863		
2220	JOHN DAY SUBSTATION	3,437,542		
2221	JOHN DAY SUBSTATION - 230 YARD	971,128		
2222	JONES CANYON SUBSTATION	2,467,180		
2223	KAHLOTUS RADIO STATION	2,032,977		
2224	KALISPELL MAINTENANCE HEADQUARTERS	7,090,084		
2225	KALISPELL SUBSTATION(BPA)	2,006,863		
2226	KEELER MAINTENANCE HEADQUARTERS	521,342		
2227	KEELER SUBSTATION	2,495,013		
2228	KEELER-ALVEY FIBER SYSTEM	8,601,493		
2229	KEELER-COVINGTON FIBER SYSTEM	18,105,622		
2230	KEELER-FOREST GROVE NO 1	3,269		
2231	KENNEDY SUBSTATION	3,017		
2232	KENNEWICK RADIO STATION	2,227,984		
2233	KENNEWICK SUBSTATION(BENTON CO PUD)	7,152	BPUD	
2234	KENYON MOUNTAIN RADIO STATION	309,028		
2235	KITSAP SUBSTATION	1,332,003		
2236	KLONDIKE SCHOOLHOUSE SUBSTATION (IBERDOLA)	130,842	IBER	
2237	LA GRANDE SUBSTATION	242,369		
2238	LA PINE SUBSTATION	969,060		
2239	LAKE BAY SUBSTATION	119,816		
2240	LAKE GROVE SUBSTATION	56,584		
2241	LAKESIDE RADIO STATION	26,125		
2242	LANCASTER SUBSTATION(BPA)	601,029		
2243	LANE SUBSTATION	862,938		
2244	LEBANON SUBSTATION	6,013		
2245	LENEVE RADIO STATION	73,119		
2246	LEWISTON MAINTENANCE HEADQUARTERS	24,455		
2247	LEXINGTON SUBSTATION	698,797		
2248	LIBBY POWERHOUSE	438,990		
2249	LIBBY SUBSTATION(BPA)	1,644,594		
2250	LIBBY SUBSTATION(BPA/FLATHEADELEC)	434,298	BPA/FEC	
2251	LINES CREEK RADIO STATION	707,598		
2252	LITTLE GOOSE PH-LITTLE GOOSE NO 1	(1,777)		
2253	LITTLE GOOSE POWERHOUSE	600,318		
2254	LITTLE GOOSE SUBSTATION	4,733,575		
2255	LODHOLM SUBSTATION	132,402		
2256	LONGVIEW ANNEX I	2,885		
2257	LONGVIEW MAINTENANCE HEADQUARTERS	267,444		
2258	LONGVIEW SUBSTATION	2,195,910		
2259	LOOKOUT MOUNTAIN RADIO STATION	214,429		
2260	LOOKOUT POINT SUBSTATION	17,902		
2261	LOPEZ ISLAND SUBSTATION(BPA)	496,029		
2262	LOST RIVER SUBSTATION	173,126		
2263	LOWELL BUTTE RADIO STATION	1,855,300		
2264	LOWER GRANITE POWERHOUSE	329,857		
2265	LOWER GRANITE SUBSTATION	4,143,823		
2266	LOWER MONUMENTAL POWERHOUSE	258,795		
2267	LOWER MONUMENTAL SUBSTATION	1,648,585		
2268	LOWER MONUMENTAL-HANFORD NO 1	53,475		
2269	LOWER MONUMENTAL-MCNARY NO 1	7,729		
2270	LYN PUMPS PUMPING PLANT	4,267		
2271	LYNCH CREEK SUBSTATION	121,887		
2272	MACKS INN SUBSTATION	13,198		
2273	MALAGA RADIO STATION	253,068		

Appendix A
BP-16 Rate Case Final Proposal Segmentation Details

A	B	C	D	E
2274	MALIN MAINTENANCE HEADQUARTERS	5,215,428		
2275	MALIN PASSIVE REPEATER S SITE	13,184		
2276	MALIN SUBSTATION	3,125,493		
2277	MALONEY RIDGE RADIO STATION	1,571		
2278	MAPLE VALLEY SUBSTATION	2,378,541		
2279	MAPLE VALLEY-SNOHOMISH FIBER SYSTEM	732,999		
2280	MAPLETON SUBSTATION	60,489		
2281	MARION SUBSTATION	2,231,581		
2282	MARION-SANTIAM FIBER SYSTEM	1,039,832		
2283	MARTIN CREEK SUBSTATION	57,943		
2284	MARYS PEAK RADIO STATION	209,970		
2285	MAUPIN SUBSTATION	229,841		
2286	MAYFIELD POWERHOUSE	12,509		
2287	MCCULLOUGH SUBSTATION	59,703		
2288	MCLOUGHLIN SUBSTATION	1,454,927		
2289	MCMINNVILLE SUBSTATION	235,988		
2290	MCNARY MAINTENANCE HEADQUARTERS	64,656		
2291	MCNARY POWERHOUSE	505,020		
2292	MCNARY SUBSTATION	5,101,497		
2293	MCNARY-COYOTE SPRINGS NO 1	1,519,037		
2294	MCNARY-HORSE HEAVEN NO 1	70,204		
2295	MCNARY-JOHN DAY NO 2	5,493,113		
2296	MEAD SUBSTATION	4,712		
2297	MEGLER RADIO STATION	212,216		
2298	MERIDIAN SUBSTATION(PACIFICORP)	215,029	PAC	
2299	MERRITT RADIO STATION	1,277,506		
2300	METALINE RADIO STATION	1,209,287		
2301	MICA PEAK RADIO STATION	765,517		
2302	MIDWAY SUBSTATION(BPA)	2,527,719		
2303	MIDWAY-MOXEE NO 1	33,830		
2304	MILES CITY SUBSTATION	78,146		
2305	MILLER PEAK RADIO STATION	825,116		
2306	MILLER SUBSTATION(LAKEVIEW LIGHT & PWR)	65,777	LLP	
2307	MINIDOKA POWERHOUSE	67,168		
2308	MINIDOKA POWERHOUSE-MINIDOKA RADIO STATION FIBER SYSTEM	171,931		
2309	MINIDOKA RADIO STATION	104,319		
2310	MINT FARM SWITCHING STATION	26,482		
2311	MINTER SUBSTATION (PENINSULA)	100,179	PLC	
2312	MOBILE COMMUNICATIONS	409,133		
2313	MONROE SUBSTATION	1,456,906		
2314	MOXEE SUBSTATION	91,052		
2315	MT SI-TANNER NO 1	2,223,299		
2316	MT. EMILY RADIO STATION	65,833		
2317	MT. HEBO RADIO STATION	261,985		
2318	MT. SPOKANE RADIO STATION(AVISTA)	328,618	AVA	
2319	MT. SPOKANE RADIO STATION(BPA)	201,662		
2320	MUNRO BPA SYSTEM CONTROL CENTER	14,401,922		
2321	MURRAY SUBSTATION	31,793		
2322	NAPAVINE SUBSTATION	863,363		
2323	NARROWS SUBSTATION	75,170		
2324	NASELLE RIDGE RADIO STATION	770,631		
2325	NASELLE SUBSTATION	188,012		
2326	NASELLE-TARLETT NO 1	37,122		
2327	NEWPORT SUBSTATION(INLAND POWER)	431	IPL	
2328	NINE CANYON SUBSTATION (BENTON PUD)	781,138	BPUD	
2329	NORTH BEND MAINTENANCE HEADQUARTERS	2,487,737		
2330	NORTH BEND RADIO STATION	596,263		
2331	NORTH BONNEVILLE SUBSTATION	480,816		
2332	NORTH BONNEVILLE-MIDWAY NO 1	3,745		
2333	NORTH BONNEVILLE-TROUTDALE NO2	281,830		
2334	NOTI RADIO STATION	271,116		
2335	NOXON CONSTRUCTION SUBSTATION	344,199		
2336	NOXON RADIO STATION	1,787,309		
2337	NOXON-KALISPELL FIBER SYSTEM	11,514,282		
2338	NOXON-LIBBY NO 1	354,839		
2339	NOXON-TAFT FIBER SYSTEM	5,718,682		
2340	ODELL BUTTE RADIO STATION	970,199		
2341	OHOP SUBSTATION	126,215		

Appendix A
BP-16 Rate Case Final Proposal Segmentation Details

A	B	C	D	E
2342	OLYMPIA MAINTENANCE HEADQUARTERS	6,562,207		
2343	OLYMPIA SUBSTATION	1,874,940		
2344	OLYMPIA-ABERDEEN FIBER SYSTEM	989,884		
2345	OLYMPIA-GRAND COULEE NO 1	898,339		
2346	OLYMPIA-KITSAP NO 3 (SEE NOTES)	66,850		
2347	OLYMPIA-PORT ANGELES FIBER SYSTEM	6,850,457		
2348	OLYMPIA-ST CLAIR NO 1	1,318,835		
2349	OREGON CITY SUBSTATION	78,174		
2350	OSTRANDER SUBSTATION	6,563,733		
2351	PACIFIC GAS AND ELECTRIC OPERATIONS CENTER	4,109		
2352	PALISADES POWERHOUSE	469,174		
2353	PASCO MAINTENANCE HEADQUARTERS	196,041		
2354	PATRICKS KNOB RADIO STATION	1,000,060		
2355	PAUL SUBSTATION	2,571,384		
2356	PBL ROSS EMERGENCY SCHEDULINGCENTER (ESC)	57,571		
2357	PEARL SUBSTATION	1,304,235		
2358	PEARL-TROUTDALE FIBER SYSTEM	4,093,153		
2359	PENDLETON SUBSTATION	17,757		
2360	PILOT BUTTE-LA PINE NO 1	124,765		
2361	PINE MOUNTAIN RADIO STATION	1,646,561		
2362	PLUM RADIO STATION	35,860		
2363	POMEROY RADIO STATION	2,650,010		
2364	POMEROY SUBSTATION(BPA)	5,395		
2365	PONDEROSA SUBSTATION(BPA)	1,269,345		
2366	PORT ANGELES SUBSTATION(BPA)	139,450		
2367	PORT TOWNSEND SUBSTATION	40,728		
2368	PORTLAND INTERNATIONAL AIRPORT HANGAR	1,160,192		
2369	POTHOLES SUBSTATION	33,878		
2370	PROSPECT HILL RADIO STATION	1,542,601		
2371	PURDY SUBSTATION	46,473		
2372	RAINIER RADIO STATION	869,241		
2373	RAINIER SUBSTATION	3,384		
2374	RATTLESNAKE SUBSTATION(MPC)	124,877		NWE
2375	RAVER SUBSTATION	4,827,544		
2376	RAVER-ECHO LAKE FIBER SYSTEM	7,294,724		
2377	RAYMOND HILL RADIO STATION	491,694		
2378	RAYMOND RADIO STATION	238,453		
2379	RAYMOND SUBSTATION	21,198		
2380	RED MOUNTAIN SUB (BENTON REA)- NEVER BUILT-OBS	391,394		BREA
2381	RED MOUNTAIN SUBSTATION	512,094		
2382	REDMOND BPA HANGAR SITE	1,348,223		
2383	REDMOND MAINTENANCE HEADQUARTERS	3,092,670		
2384	REDMOND SUBSTATION(BPA)	1,408,965		
2385	REEDSPORT SUBSTATION (BPA)	191,839		
2386	REEDSPORT-FAIRVIEW NO 1	314,896		
2387	REEDSPORT-TAHKENITCH FIBER SYSTEM	193,800		
2388	RESTON SUBSTATION	153,458		
2389	RICHLAND SUBSTATION	190,068		
2390	ROCK CREEK SUBSTATION	644,156		
2391	ROCK CREEK-JOHN DAY NO 1	1,994		
2392	ROCKY RADIO STATION [RET]	12,681		
2393	ROCKY REACH SUBSTATION	556		
2394	ROCKY REACH SWITCHYARD	85,702		
2395	ROCKY RIDGE RADIO STATION	941,683		
2396	ROGUE SUBSTATION	1,020,790		
2397	ROOSEVELT RADIO STATION	615,697		
2398	ROSS AMPERE BUILDING	7,037,499		
2399	ROSS COMPLEX	58,077,687		
2400	ROSS CONSTRUCTION AND SERVICES BUILDING	9,348,266		
2401	ROSS EHV LABORATORY	603,409		
2402	ROSS RADIO STATION	43,336		
2403	ROSS SUBSTATION	561,779		
2404	ROSS WAREHOUSE	5,737,739		
2405	ROSS-FRANKLIN FIBER SYSTEM	20,823,760		
2406	ROSS-MALIN FIBER SYSTEM	20,193,947		
2407	ROSS-RIVERGATE NO 1	98,087		
2408	ROUND VALLEY SUBSTATION	133,669		
2409	ROUNDUP SUBSTATION	86,577		
2410	SACAJAWEA SUBSTATION	716,517		
2411	SACHEEN SUBSTATION	26,811		
2412	SALEM PASSIVE REPEATER SITE	10,266		
2413	SALEM SUBSTATION (SALEM ELEC)	558,458		
2414	SAND DUNES SUBSTATION	58,891		
2415	SAND SPRING COMPENSATION STATION	1,261,016		

Appendix A
BP-16 Rate Case Final Proposal Segmentation Details

A	B	C	D	E
2416	SANDPOINT SUBSTATION(BPA)			22,550
2417	SANTIAM SUBSTATION			1,867,192
2418	SANTIAM-BETHEL NO 1			206,955
2419	SATSOP SUBSTATION(BPA)			1,280,244
2420	SAWTELL RADIO STATION			210,883
2421	SCHULTZ MAINTENANCE HEADQUARTERS			2,704,238
2422	SCHULTZ SUBSTATION			2,343,966
2423	SCHULTZ-ECHO LAKE NO 1			1,237,435
2424	SCHULTZ-WAUTOMA NO 1			18,029,963
2425	SCOTT MOUNTAIN RADIO STATION			288,852
2426	SEATTLE RADIO STATION			3,908
2427	SHANIKO RADIO STATION			598,027
2428	SHANO SUBSTATION			13,189
2429	SHELTON SUBSTATION			1,710,488
2430	SHELTON-KITSAP NO 2			399,843
2431	SHELTON-SOUTH BREMERTON NO 1			399,843
2432	SICKLER MAINTENANCE HEADQUARTERS			1,069,891
2433	SICKLER SUBSTATION			2,764,323
2434	SICKLER-SCHULTZ NO 1			311,816
2435	SIFTON SUBSTATION			1,309,745
2436	SILVER CREEK SUBSTATION			637,994
2437	SILVERADO SUBSTATION (CLALLAM CO. PUD)	CMPUD		875
2438	SKYROCKET RADIO STATION			849,895
2439	SLATT SUBSTATION			4,673,496
2440	SNOHOMISH CO. PUD DISPATCH CENTER			8,094
2441	SNOHOMISH MAINTENANCE HEADQUARTERS			1,648,879
2442	SNOHOMISH SUBSTATION			3,502,736
2443	SNO-KING SUBSTATION			1,243,315
2444	SNO-KING-MAPLE VALLEY NO. 2			45,639
2445	SNO-KING-SNOHOMISH FIBER SYSTEM (DO NOT USE, SEE NOTES)			2,949,281
2446	SOUTH MOUNTAIN RADIO STATION			297,568
2447	SOUTH TACOMA SUBSTATION			375,435
2448	SPAR CANYON SUBSTATION			136,951
2449	SPOKANE HANGAR			1,705,354
2450	SPRING CREEK SUBSTATION			161,800
2451	SPRING CREEK-WINE COUNTRY NO 1			50,782
2452	SQUAK MOUNTAIN RADIO STATION			63,709
2453	ST. JOHNS SUBSTATION			323,661
2454	STAMPEDE PASS RADIO STATION			145,800
2455	STEILACOOM SUBSTATION			97,941
2456	SUBSTATION X			26,723
2457	SUMMER LAKE HOUSING			143,243
2458	SUMMER LAKE SUBSTATION			1,055,893
2459	SUNNYSIDE RADIO STATION			756,612
2460	SURPRISE LAKE SUBSTATION			80,458
2461	SWAN LAKE POINT RADIO STATION			64,785
2462	SWAN VALLEY PASSIVE REPEATER SITE			152,951
2463	SWAN VALLEY RADIO STATION			433,850
2464	SWAN VALLEY SUBSTATION			648,082
2465	SWAN VALLEY-TETON NO 1			94,591
2466	SWAN VALLEY-TETON NO 2			94,531
2467	SYCAN COMPENSATION STATION			546,586
2468	SYSTEM WIDE			34,224,276
2469	TACOMA RADIO STATION			1,896,388
2470	TACOMA SUBSTATION			1,233,112
2471	TAFT SUBSTATION			2,229,481
2472	TAHKENITCH SUBSTATION			207,582
2473	TARGHEE SUBSTATION			138,873
2474	TARKIO SUBSTATION (SOLD)	MEC		2,772
2475	TEAKEAN BUTTE RADIO STATION			291,237
2476	TEANAWAY RADIO STATION			296,137
2477	TETON SUBSTATION			86,163
2478	THE DALLES FISHWAY HYDRO PLANT			16,496
2479	THE DALLES MAINTENANCE HEADQUARTERS			4,601,552
2480	THE DALLES OPERATING DISTRICTHEADQUARTERS			26,595
2481	THE DALLES POWERHOUSE			293,724
2482	THE DALLES SUBSTATION			250,582
2483	THOMPSON FALLS RADIO STATION			466,622
2484	TILLAMOOK SUBSTATION			410,438
2485	TOLEDO SUBSTATION			106,157
2486	TRENTWOOD SUBSTATION			87,179
2487	TROUTDALE SUBSTATION(BPA)			3,557,436
2488	TROUTDALE SUBSTATION(PACIFICORP)	PAC		151,373
2489	TROY SUBSTATION			17

Appendix A
BP-16 Rate Case Final Proposal Segmentation Details

A	B	C	D	E
2490 TUCANNON RIVER SUBSTATION		1,094,669		
2491 TUNK MOUNTAIN RADIO STATION		1,381,589		
2492 TWO PARK PLACE		25,339		
2493 TYEE SUBSTATION		88,101		
2494 UNITY SUBSTATION(BPA)		266,885		
2495 USK SUBSTATION(BPA)		54,607		
2496 VALHALLA SUBSTATION		358,527		
2497 VANTAGE SUBSTATION		964,603		
2498 VAUGHN SUBSTATION		113,732		
2499 WALKER MOUNTAIN RADIO STATION		1,874,997		
2500 WALLA WALLA SUBSTATION(BPA)		764,283		
2501 WALLA WALLA SUBSTATION(PACIFICORP)	PAC	16,384		
2502 WALLA WALLA-WALLA WALLA (PACW) NO 1	PAC	163,462		
2503 WARDEN POLE METERING POINT		6,664		
2504 WARNER SUBSTATION		298,328		
2505 WASCO RADIO STATION		685,695		
2506 WATERVILLE RADIO STATION		105,061		
2507 WAUNA PAPER MILL		9,063		
2508 WAUTOMA SUBSTATION		2,858,240		
2509 WAUTOMA-COLUMBIA FIBER SYSTEM		5,084,288		
2510 WAUTOMA-OSTRANDER NO 1		19,979		
2511 WEISER SUBSTATION		7,809		
2512 WENDSON SUBSTATION		565,011		
2513 WENDSON-TAHKENITCH NO 2		514,470		
2514 WEST PORTLAND RADIO STATION		147,878		
2515 WESTSIDE SUBSTATION(BPA)		21,113		
2516 WHISKEY RIDGE RADIO STATION		18,065		
2517 WHITE BLUFFS SUBSTATION		930,858		
2518 WHITE CREEK SUBSTATION (KPUD)	KPUD	29,645		
2519 WILSON RIVER SUBSTATION		5,855		
2520 WINCHESTER SUBSTATION		11,849		
2521 WINDY DEVIL RADIO STATION		82,197		
2522 WINE COUNTRY SUBSTATION	BPA/PAC	732,852		
2523 WOLF MOUNTAIN RADIO STATION		1,472,604		
2524 Total General Plant		855,388,455		

This page intentionally left blank.

Appendix B
BP-16 Rate Case Final Proposal
Multi-Segmented Facilities Summary

This page intentionally left blank.

Appendix B
BP-16 Rate Case Final Proposal Multi-Segmented Facilities Summary

A	B	C	D	E
Transmission Lines	Investment (\$)	O&M (\$)	Multi %	Segment
1 BUCKLEY-GRIZZLY NO 1	7,514,539	9,827	43%	Network
2 BUCKLEY-GRIZZLY NO 1	9,961,133	13,027	57%	Southern Intertie
3 BUCKLEY-GRIZZLY NO 1	17,475,672	22,854	100%	Total
4 BUCKLEY-MARION NO 1	20,369,871	18,997	50%	Network
5 BUCKLEY-MARION NO 1	20,369,871	18,997	50%	Southern Intertie
6 BUCKLEY-MARION NO 1	40,739,743	37,993	100%	Total
7 COUGAR-THURSTON NO 1	123,688	1,632	5%	Generation Integration
8 COUGAR-THURSTON NO 1	2,159,286	28,493	95%	Network
9 COUGAR-THURSTON NO 1	2,282,974	30,125	100%	Total
10 COYOTE SPRINGS-SLATT NO 1	2,352,112	3,326	88%	Network
11 COYOTE SPRINGS-SLATT NO 1	328,931	465	12%	Southern Intertie
12 COYOTE SPRINGS-SLATT NO 1	2,681,042	3,792	100%	Total
13 GREEN PETER-LEBANON NO 1	357,224	4,418	35%	Generation Integration
14 GREEN PETER-LEBANON NO 1	666,893	8,248	65%	Network
15 GREEN PETER-LEBANON NO 1	1,024,116	12,666	100%	Total
16 GRIZZLY-SUMMER LAKE NO 1	14,696,081	20,795	43%	Network
17 GRIZZLY-SUMMER LAKE NO 1	19,480,851	27,565	57%	Southern Intertie
18 GRIZZLY-SUMMER LAKE NO 1	34,176,932	48,360	100%	Total
19 Grouse Creek-Tecoma Transmission Lines & Substation	1,919,106	0	94%	Network
20 Grouse Creek-Tecoma Transmission Lines & Substation	121,332	0	6%	Utility Delivery
21 Grouse Creek-Tecoma Transmission Lines & Substation	2,040,437	0	100%	Total
22 HILLS CREEK-LOOKOUT POINT NO 1	299,791	5,768	19%	Generation Integration
23 HILLS CREEK-LOOKOUT POINT NO 1	1,252,363	24,095	81%	Network
24 HILLS CREEK-LOOKOUT POINT NO 1	1,552,154	29,863	100%	Total
25 ICE HARBOR-FRANKLIN NO 2	15,726	36	3%	Generation Integration
26 ICE HARBOR-FRANKLIN NO 2	554,825	1,277	97%	Network
27 ICE HARBOR-FRANKLIN NO 2	570,551	1,313	100%	Total
28 ICE HARBOR-FRANKLIN NO 3	133,963	111	9%	Generation Integration
29 ICE HARBOR-FRANKLIN NO 3	1,331,565	1,099	91%	Network
30 ICE HARBOR-FRANKLIN NO 3	1,465,528	1,209	100%	Total
31 MARION-ALVEY NO 1	4,456,110	16,581	50%	Network
32 MARION-ALVEY NO 1	4,456,110	16,581	50%	Southern Intertie
33 MARION-ALVEY NO 1	8,912,221	33,161	100%	Total
34 SLATT-JOHN DAY NO 1	4,797,158	18,914	93%	Network
35 SLATT-JOHN DAY NO 1	361,130	1,424	7%	Southern Intertie
36 SLATT-JOHN DAY NO 1	5,158,288	20,338	100%	Total

Appendix B
BP-16 Rate Case Final Proposal Multi-Segmented Facilities Summary

	A	B	C	D	E
	Transmission Lines	Investment (\$)	O&M (\$)	Multi %	Segment
36	ACTON SUBSTATION	136,198	9,352	73%	Network
37	ACTON SUBSTATION	50,261	3,451	27%	Utility Delivery
38	ACTON SUBSTATION	186,459	12,803	100%	Total
37	ADDY SUBSTATION	10,446,952	77,622	90%	Network
39	ADDY SUBSTATION	1,217,569	9,047	10%	Unsegmented
40	ADDY SUBSTATION	11,664,520	86,668	100%	Total
41	ALBANY SUBSTATION	12,173,126	107,981	93%	Network
42	ALBANY SUBSTATION	885,735	7,857	7%	Utility Delivery
43	ALBANY SUBSTATION	13,058,861	115,838	100%	Total
44	ALBENI FALLS SUBSTATION	365,644	6,389	25%	Generation Integration
45	ALBENI FALLS SUBSTATION	1,096,932	19,167	75%	Network
46	ALBENI FALLS SUBSTATION	1,462,575	25,555	100%	Total
47	ALCOA SUBSTATION	8,350,470	161,148	95%	Network
48	ALCOA SUBSTATION	479,123	9,246	5%	Unsegmented
49	ALCOA SUBSTATION	8,829,594	170,394	100%	Total
50	ALDERWOOD SUBSTATION	323,277	4,547	48%	Network
51	ALDERWOOD SUBSTATION	354,390	4,985	52%	Unsegmented
52	ALDERWOOD SUBSTATION	677,667	9,533	100%	Total
50	ALVEY SUBSTATION	27,439,677	226,843	78%	Network
53	ALVEY SUBSTATION	7,675,452	63,453	22%	Southern Intertie
54	ALVEY SUBSTATION	35,115,129	290,296	100%	Total
55	ASHE SUBSTATION	5,381,982	54,789	12%	Generation Integration
56	ASHE SUBSTATION	39,562,732	402,749	88%	Network
57	ASHE SUBSTATION	44,944,713	457,538	100%	Total
58	BANDON SUBSTATION	4,654,717	66,579	95%	Network
59	BANDON SUBSTATION	227,939	3,260	5%	Utility Delivery
60	BANDON SUBSTATION	4,882,656	69,839	100%	Total
61	BIG EDDY SUBSTATION	3,496,755	28,957	5%	Generation Integration
62	BIG EDDY SUBSTATION	11,067,525	91,651	14%	Network
63	BIG EDDY SUBSTATION	61,786,958	511,662	81%	Southern Intertie
64	BIG EDDY SUBSTATION	76,351,238	632,270	100%	Total
65	BONNERS FERRY SUBSTATION	1,974,212	40,595	86%	Network
66	BONNERS FERRY SUBSTATION	332,623	6,840	14%	Utility Delivery
67	BONNERS FERRY SUBSTATION	2,306,835	47,435	100%	Total
68	BUCKLEY SUBSTATION	3,489,220	36,642	36%	Network
69	BUCKLEY SUBSTATION	6,248,137	65,615	64%	Southern Intertie
70	BUCKLEY SUBSTATION	9,737,357	102,257	100%	Total
70	BURBANK SUBSTATION	426,473	8,672	69%	Network
71	BURBANK SUBSTATION	114,552	2,329	18%	Utility Delivery
72	BURBANK SUBSTATION	78,480	1,596	13%	Unsegmented
73	BURBANK SUBSTATION	619,504	12,597	100%	Total
74	BURNT WOODS SUBSTATION	178,451	9,614	56%	Network
75	BURNT WOODS SUBSTATION	141,126	7,603	44%	Utility Delivery
76	BURNT WOODS SUBSTATION	319,577	17,216	100%	Total

Appendix B
BP-16 Rate Case Final Proposal Multi-Segmented Facilities Summary

A	B	C	D	E
Transmission Lines	Investment (\$)	O&M (\$)	Multi %	Segment
77 CASCADE LOCKS SUBSTATION	377,377	9,848	62%	Network
78 CASCADE LOCKS SUBSTATION	235,592	6,148	38%	Utility Delivery
79 CASCADE LOCKS SUBSTATION	612,969	15,995	100%	Total
74 CHIEF JOSEPH SUBSTATION	8,648,620	178,889	25%	Generation Integration
80 CHIEF JOSEPH SUBSTATION	25,227,509	521,808	72%	Network
81 CHIEF JOSEPH SUBSTATION	1,158,977	23,972	3%	Southern Intertie
82 CHIEF JOSEPH SUBSTATION	35,035,106	724,669	100%	Total
83 CONKELLEY SUBSTATION	9,125,433	163,911	80%	Network
84 CONKELLEY SUBSTATION	2,269,682	40,768	20%	DSI Delivery
85 CONKELLEY SUBSTATION	11,395,115	204,680	100%	Total
86 DAVIS CREEK SUBSTATION	73,632	1,764	14%	Network
87 DAVIS CREEK SUBSTATION	471,589	11,298	86%	Utility Delivery
88 DAVIS CREEK SUBSTATION	545,221	13,062	100%	Total
89 DIXIE SUBSTATION	405,202	9,299	55%	Network
90 DIXIE SUBSTATION	337,515	7,746	45%	Utility Delivery
91 DIXIE SUBSTATION	742,717	17,044	100%	Total
92 DRAIN SUBSTATION	2,658,929	35,117	90%	Network
93 DRAIN SUBSTATION	283,499	3,744	10%	Utility Delivery
94 DRAIN SUBSTATION	2,942,428	38,861	100%	Total
89 DWORSHAK SUBSTATION	4,502,639	27,935	18%	Generation Integration
95 DWORSHAK SUBSTATION	20,299,284	125,938	82%	Network
96 DWORSHAK SUBSTATION	24,801,923	153,873	100%	Total
97 EAGLE LAKE SUBSTATION	197,482	6,971	44%	Network
98 EAGLE LAKE SUBSTATION	242,431	8,557	54%	Utility Delivery
98 EAGLE LAKE SUBSTATION	9,048	319	2%	Unsegmented
99 EAGLE LAKE SUBSTATION	448,961	15,848	100%	Total
100 FRANKLIN SUBSTATION	1,857,163	40,076	12%	Generation Integration
101 FRANKLIN SUBSTATION	14,092,919	304,116	88%	Network
102 FRANKLIN SUBSTATION	15,950,082	344,193	100%	Total
103 GARDINER SUBSTATION	544,752	21,997	63%	Network
104 GARDINER SUBSTATION	313,901	12,675	37%	Utility Delivery
105 GARDINER SUBSTATION	858,653	34,672	100%	Total
106 GARRISON SUBSTATION	51,261,183	387,447	70%	Network
107 GARRISON SUBSTATION	22,317,681	168,684	30%	Eastern Intertie
108 GARRISON SUBSTATION	73,578,864	556,131	100%	Total
106 GLADE SUBSTATION	154,871	3,334	31%	Network
107 GLADE SUBSTATION	289,994	6,242	58%	Utility Delivery
109 GLADE SUBSTATION	52,906	1,139	11%	Unsegmented
110 GLADE SUBSTATION	497,771	10,715	100%	Total
109 HARRISBURG SUBSTATION	4,893,940	17,483	96%	Network
111 HARRISBURG SUBSTATION	190,947	682	4%	Utility Delivery
112 HARRISBURG SUBSTATION	5,084,887	18,165	100%	Total

Appendix B
BP-16 Rate Case Final Proposal Multi-Segmented Facilities Summary

A	B	C	D	E
Transmission Lines	Investment (\$)	O&M (\$)	Multi %	Segment
111 HOOD RIVER SUBSTATION	950,633	33,343	79%	Network
113 HOOD RIVER SUBSTATION	254,433	8,924	21%	Utility Delivery
114 HOOD RIVER SUBSTATION	1,205,067	42,267	100%	Total
115 INTALCO SUBSTATION	11,435,969	179,152	64%	Network
116 INTALCO SUBSTATION	6,354,775	99,552	36%	DSI Delivery
117 INTALCO SUBSTATION	17,790,744	278,704	100%	Total
118 IONE SUBSTATION	661,669	22,951	83%	Network
119 IONE SUBSTATION	131,198	4,551	17%	Utility Delivery
120 IONE SUBSTATION	792,867	27,502	100%	Total
121 JOHN DAY SUBSTATION	12,650,391	89,382	28%	Generation Integration
122 JOHN DAY SUBSTATION	20,419,607	144,276	45%	Network
123 JOHN DAY SUBSTATION	12,791,870	90,382	28%	Southern Intertie
124 JOHN DAY SUBSTATION	45,861,868	324,039	100%	Total
125 LANGLOIS SUBSTATION	897,249	13,274	81%	Network
126 LANGLOIS SUBSTATION	203,884	3,016	19%	Utility Delivery
127 LANGLOIS SUBSTATION	1,101,133	16,290	100%	Total
125 LIBBY SUBSTATION(BPA)	2,274,185	48,717	25%	Generation Integration
128 LIBBY SUBSTATION(BPA)	6,645,661	142,363	75%	Network
129 LIBBY SUBSTATION(BPA)	8,919,846	191,080	100%	Total
130 LITTLE GOOSE SUBSTATION	16,633,416	25,767	20%	Generation Integration
131 LITTLE GOOSE SUBSTATION	66,533,666	103,068	80%	Network
132 LITTLE GOOSE SUBSTATION	83,167,082	128,835	100%	Total
133 LOOKOUT POINT SUBSTATION	609,012	6,336	25%	Generation Integration
134 LOOKOUT POINT SUBSTATION	1,827,035	19,008	75%	Network
135 LOOKOUT POINT SUBSTATION	2,436,046	25,344	100%	Total
136 LOWER GRANITE SUBSTATION	2,095,395	27,991	25%	Generation Integration
137 LOWER GRANITE SUBSTATION	6,286,185	83,972	75%	Network
138 LOWER GRANITE SUBSTATION	8,381,580	111,963	100%	Total
139 LOWER MONUMENTAL SUBSTATION	2,721,084	17,299	12%	Generation Integration
140 LOWER MONUMENTAL SUBSTATION	19,829,601	126,062	88%	Network
141 LOWER MONUMENTAL SUBSTATION	22,550,685	143,360	100%	Total
139 LYNCH CREEK SUBSTATION	726,128	13,314	57%	Network
142 LYNCH CREEK SUBSTATION	545,682	10,005	43%	Utility Delivery
143 LYNCH CREEK SUBSTATION	1,271,810	23,319	100%	Total
142 MAPLETON SUBSTATION	716,261	28,125	93%	Network
144 MAPLETON SUBSTATION	54,533	2,141	7%	Utility Delivery
145 MAPLETON SUBSTATION	770,794	30,266	100%	Total
146 MARION SUBSTATION	36,726,615	370,809	91%	Network
147 MARION SUBSTATION	3,425,338	34,584	9%	Southern Intertie
148 MARION SUBSTATION	40,151,953	405,393	100%	Total
149 MCNARY SUBSTATION	3,967,280	39,049	7%	Generation Integration
150 MCNARY SUBSTATION	51,561,532	507,507	93%	Network
151 MCNARY SUBSTATION	55,528,811	546,556	100%	Total

Appendix B
BP-16 Rate Case Final Proposal Multi-Segmented Facilities Summary

A	B	C	D	E
Transmission Lines	Investment (\$)	O&M (\$)	Multi %	Segment
146 MINIDOKA SUBSTATION	139,342	3,716	36%	Network
152 MINIDOKA SUBSTATION	246,447	6,573	64%	Utility Delivery
153 MINIDOKA SUBSTATION	385,789	10,289	100%	Total
149 MONMOUTH SUBSTATION	667,937	14,345	54%	Network
154 MONMOUTH SUBSTATION	576,749	12,387	46%	Utility Delivery
155 MONMOUTH SUBSTATION	1,244,686	26,732	100%	Total
152 MOUNTAIN AVENUE SUBSTATION	1,641,497	14,511	78%	Network
156 MOUNTAIN AVENUE SUBSTATION	457,106	4,041	22%	Utility Delivery
157 MOUNTAIN AVENUE SUBSTATION	2,098,603	18,552	100%	Total
158 NECANICUM SUBSTATION	86,662	5,302	68%	Network
159 NECANICUM SUBSTATION	40,602	2,484	32%	Utility Delivery
160 NECANICUM SUBSTATION	127,264	7,786	100%	Total
161 NORTH BENCH SUBSTATION	512,217	5,633	97%	Network
162 NORTH BENCH SUBSTATION	15,179	167	3%	Utility Delivery
163 NORTH BENCH SUBSTATION	527,396	5,800	100%	Total
152 NORTH BONNEVILLE SUBSTATION	4,180,700	66,350	37%	Generation Integration
164 NORTH BONNEVILLE SUBSTATION	7,199,807	114,264	63%	Network
165 NORTH BONNEVILLE SUBSTATION	11,380,507	180,614	100%	Total
164 NORTH BUTTE SUBSTATION	121,781	3,228	65%	Network
166 NORTH BUTTE SUBSTATION	65,029	1,724	35%	Utility Delivery
167 NORTH BUTTE SUBSTATION	186,810	4,951	100%	Total
166 PARKDALE SUBSTATION	1,071,795	18,997	87%	Network
168 PARKDALE SUBSTATION	161,852	2,869	13%	Utility Delivery
169 PARKDALE SUBSTATION	1,233,647	21,866	100%	Total
170 PORT ORFORD SUBSTATION	296,514	15,208	63%	Network
171 PORT ORFORD SUBSTATION	174,549	8,953	37%	Utility Delivery
172 PORT ORFORD SUBSTATION	471,063	24,161	100%	Total
173 POTLATCH SUBSTATION(BPA)	1,003,683	21,641	89%	Network
174 POTLATCH SUBSTATION(BPA)	117,768	2,539	11%	Utility Delivery
175 POTLATCH SUBSTATION(BPA)	1,121,451	24,180	100%	Total
176 REEDSPORT SUBSTATION (BPA)	3,351,046	44,599	94%	Network
177 REEDSPORT SUBSTATION (BPA)	199,231	2,652	6%	Utility Delivery
178 REEDSPORT SUBSTATION (BPA)	3,550,277	47,251	100%	Total
179 RINGOLD SUBSTATION	309,844	8,967	59%	Network
180 RINGOLD SUBSTATION	116,044	3,358	22%	Utility Delivery
180 RINGOLD SUBSTATION	96,391	2,789	18%	Unsegmented
181 RINGOLD SUBSTATION	522,279	15,114	100%	Total
182 SACAJAWEA SUBSTATION	200,906	501	1%	Generation Integration
183 SACAJAWEA SUBSTATION	23,172,838	57,775	99%	Network
184 SACAJAWEA SUBSTATION	23,373,744	58,276	100%	Total
185 SANDPOINT SUBSTATION(BPA)	1,106,305	25,704	85%	Network
186 SANDPOINT SUBSTATION(BPA)	198,146	4,604	15%	Utility Delivery
187 SANDPOINT SUBSTATION(BPA)	1,304,451	30,308	100%	Total

Appendix B
BP-16 Rate Case Final Proposal Multi-Segmented Facilities Summary

A	B	C	D	E
Transmission Lines	Investment (\$)	O&M (\$)	Multi %	Segment
188 SANTIAM SUBSTATION	843,226	17,692	5%	Generation Integration
189 SANTIAM SUBSTATION	16,477,370	345,715	95%	Network
190 SANTIAM SUBSTATION	17,320,596	363,407	100%	Total
191 SCOOTENEY SUBSTATION	1,346,338	23,564	91%	Network
192 SCOOTENEY SUBSTATION	136,876	2,396	9%	Utility Delivery
193 SCOOTENEY SUBSTATION	1,483,214	25,959	100%	Total
194 SELLE SUBSTATION	233,060	4,082	41%	Network
195 SELLE SUBSTATION	332,559	5,824	59%	Utility Delivery
196 SELLE SUBSTATION	565,619	9,906	100%	Total
194 SLATT SUBSTATION	68,192,266	194,671	94%	Network
197 SLATT SUBSTATION	4,025,421	11,492	6%	Southern Intertie
198 SLATT SUBSTATION	72,217,687	206,163	100%	Total
197 STATELINE SUBSTATION	35,972	5,489	25%	Network
199 STATELINE SUBSTATION	105,755	16,139	75%	Utility Delivery
200 STATELINE SUBSTATION	141,727	21,628	100%	Total
199 STEILACOOM SUBSTATION	754,305	9,119	69%	Network
201 STEILACOOM SUBSTATION	346,790	4,192	31%	Utility Delivery
202 STEILACOOM SUBSTATION	1,101,095	13,311	100%	Total
199 SUMMER LAKE SUBSTATION	2,478,528	38,120	43%	Network
203 SUMMER LAKE SUBSTATION	3,285,491	50,531	57%	Southern Intertie
204 SUMMER LAKE SUBSTATION	5,764,019	88,651	100%	Total
203 SURPRISE LAKE SUBSTATION	604,747	12,221	80%	Network
205 SURPRISE LAKE SUBSTATION	155,330	3,139	20%	Utility Delivery
206 SURPRISE LAKE SUBSTATION	760,077	15,360	100%	Total
205 SWAN VALLEY SUBSTATION	6,687,453	62,620	98%	Network
207 SWAN VALLEY SUBSTATION	165,343	1,548	2%	Utility Delivery
208 SWAN VALLEY SUBSTATION	6,852,796	64,168	100%	Total
209 TACOMA SUBSTATION	18,511,243	446,772	96%	Network
210 TACOMA SUBSTATION	759,932	18,341	4%	Unsegmented
211 TACOMA SUBSTATION	19,271,175	465,113	100%	Total
212 TRENTWOOD SUBSTATION	5,615,681	65,045	81%	Network
213 TRENTWOOD SUBSTATION	1,295,002	15,000	19%	DSI Delivery
214 TRENTWOOD SUBSTATION	14,931	173	0%	Unsegmented
214 TRENTWOOD SUBSTATION	6,910,683	80,044	100%	Total
209 TROY SUBSTATION	526,491	15,153	55%	Network
215 TROY SUBSTATION	431,599	12,422	45%	Utility Delivery
216 TROY SUBSTATION	958,090	27,576	100%	Total
212 TUMBLE CREEK SUBSTATION	809,064	12,480	83%	Network
217 TUMBLE CREEK SUBSTATION	170,214	2,626	17%	Utility Delivery
218 TUMBLE CREEK SUBSTATION	979,279	15,105	100%	Total
215 TWO MILE ROAD SUBSTATION	1,074,631	11,173	71%	Network
219 TWO MILE ROAD SUBSTATION	443,047	4,606	29%	Utility Delivery
220 TWO MILE ROAD SUBSTATION	1,517,678	15,779	100%	Total

Appendix B
BP-16 Rate Case Final Proposal Multi-Segmented Facilities Summary

A	B	C	D	E
Transmission Lines	Investment (\$)	O&M (\$)	Multi %	Segment
221 VALHALLA SUBSTATION	3,643,840	119,825	92%	Network
222 VALHALLA SUBSTATION	317,754	10,449	8%	Unsegmented
223 VALHALLA SUBSTATION	3,961,595	130,274	100%	Total
224 WALTON SUBSTATION	225,051	12,447	64%	Network
225 WALTON SUBSTATION	125,401	6,936	36%	Utility Delivery
226 WALTON SUBSTATION	350,452	19,383	100%	Total
224 WINTHROP SUBSTATION	1,349,024	32,774	88%	Network
227 WINTHROP SUBSTATION	180,015	4,373	12%	Utility Delivery
228 WINTHROP SUBSTATION	1,529,039	37,148	100%	Total
227 YAAK SUBSTATION	177,617	7,890	47%	Network
229 YAAK SUBSTATION	197,944	8,793	53%	Utility Delivery
230 YAAK SUBSTATION	375,561	16,682	100%	Total

This page intentionally left blank.

BONNEVILLE POWER ADMINISTRATION

July 2015