



2012 Integrated Program Review

Initial Publication

June 2012



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Committed to Northwest Values

TO BPA CUSTOMERS, TRIBES, CONSTITUENTS AND INTERESTED PARTIES:

The Bonneville Power Administration (BPA) has kicked off its 2012 Integrated Program Review (IPR) to provide the region an opportunity to engage in a rigorous review of BPA’s programs, their value, goals and costs.

BPA encourages participants to review and comment on the proposed spending levels as they support the Agency’s mission. BPA is not proposing programs because they have always existed; however, BPA is proposing programs because they are required or necessary or address regional values.

The obstacles, ahead, are well known:

As in FY 2011, the region is experiencing abnormally high water yet market prices for *natural gas and electricity* remain low, which increases the level of uncertainty the agency can stay in the black in FY 2012. Depending on the outcome of FY 2012, there could be more discussion next year on rate levels and the tradeoffs that may be necessary.

The *economic environment remains difficult*; the region continues to experience high unemployment, slow economic growth and cautious capital investment. Regional power loads dropped 9 percent from 2008 to 2010 and new load growth is expected to be slight or remain flat until 2015.

By the end of 2011, the BPA balancing authority area (BAA) had 3,788 megawatts of installed wind plant capacity and forecasts indicate installed capacity could rise to 5,000 MW by the end of 2013. This concentration of *renewable energy growth* in BPA’s BAA produces large unexpected swings in generation output that require significant balancing reserves from BPA to preserve reliability. Managing the system to address *shifting resource conditions*, including seasonal oversupply, is putting strain on the current infrastructure, creating risk to fish species from high levels of nitrogen gas and producing additional costs.

There is a great deal of uncertainty pertaining to future court actions supporting *endangered species responsibilities*, which makes it difficult for BPA and the region to manage and plan future power production and cost. Similarly, North American Electric Reliability Corporation *reliability standards* continue to evolve and expand year over year, resulting in rising capital and expense requirements. Furthermore, the Columbia Generating Station will likely see additional regulatory requirements resulting from the Fukushima Daiichi nuclear event in Japan.

Taking all these uncertainties into consideration, BPA has developed programs needed to deliver on the agency’s critical mission and provide expected and required services. To that end, BPA has developed cost targets believed to be minimally sufficient to meet those needs.

Proposed spending levels have been thoroughly reviewed internally, but have not been set as final – thus,

participants have the opportunity to provide input. This input can come through challenges to specifics in the scope and design of programs or through discussions of the spending itself. It is difficult, however, to argue for reduced costs without commensurate reductions in the delivery of the programs.

BPA believes the proposed spending levels demonstrate the hard work to contain costs in the areas in which the agency has a significant amount of control – internal costs, for example. However, increases are projected to occur where the agency is required or mandated to invest, maintain or sustain services.

BPA looks forward to a thorough, challenging and informed discussion. The understandings BPA and the region come to in the process will pave the way for a productive and collegial rates process beginning this fall.

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1 INTRODUCTION

1.1 AGENCY STRATEGY

BPA’s **mission** as a public service organization is to create and deliver the best value for our customers, stakeholders and constituents as we act in concert with others to assure the Pacific Northwest:

- An adequate, efficient, economical and reliable power supply;
- A transmission system adequate to the task of integrating and transmitting power from federal and non-federal generating units, providing service to BPA’s customers, providing interregional interconnections and maintaining electrical reliability and stability; and
- Mitigation of the Federal Columbia River Power System’s (FCRPS) impacts on fish and wildlife.

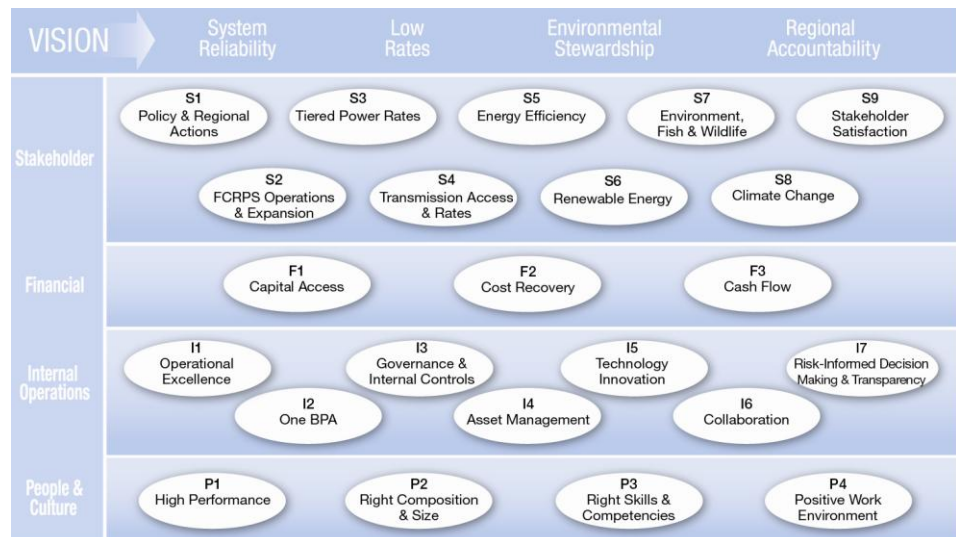
BPA is committed to cost-based rates and public and regional preference in its power marketing. BPA will set its rates as low as possible consistent with sound business principles and the full recovery of all its costs, including timely repayment of the federal investment in the system.

BPA’s **vision** is to be an engine of the Northwest’s economic prosperity and environmental sustainability. BPA’s actions advance a Northwest power and transmission system that is a national leader in providing:

- High reliability;
- Low rates consistent with sound business principles;
- Responsible environmental stewardship; and
- Accountability to the region.

BPA delivers on these public responsibilities through a commercially successful business.

BPA’s mission and “four pillars” of its vision are supported by the agency’s strategic objectives. These are ongoing, long-term outcomes BPA pursues across all dimensions of its business. For details, see BPA’s [Strategic Objectives](#).



BPA elevated six strategic priorities for special focus in FY 2012-17. These priorities support strategic objectives and are especially critical to fulfilling the vision given the drivers of change faced in the operating environment. Major drivers and strategic priorities are outlined in the [Strategic Direction 2012-2017 Report](#).

BPA’s **core values** include:

Trustworthy Stewardship

As stewards of the FCRPS, BPA is entrusted with the responsibility to manage resources of great value for the benefit of others. BPA is trusted when others believe in and are willing to rely upon our integrity and ability. To be worthy of trust the Agency must:

- Consistently adhere to the highest ethical and professional standards

- Obtain the greatest value from the FCRPS for the people of the region
- Collaborate with those we serve as we make our decisions
- Communicate clearly, forthrightly and fully
- Hold ourselves accountable for performance on our commitments by aligning our words and actions.

Collaborative Relationships

Trustworthiness grows out of a collaborative approach to relationships. Internally BPA must collaborate across organizational lines to maximize the value brought to the region. Externally the Agency must work with many stakeholders who have conflicting needs and interests. Through collaboration, BPA can discover and implement the best possible long-term solutions. This approach of creating together requires:

- Taking time to listen and understand each other's viewpoints, issues, and concerns
- Searching respectfully for mutually beneficial solutions
- Sharing and explaining decisions in a timely fashion

Operational Excellence

Operational excellence is a cornerstone of delivering on the four pillars of BPA's strategic objectives (system reliability, low rates, environmental stewardship and regional accountability) and will place the Agency among the best electric utilities in the nation. Operational excellence requires:

- Continual review and improvement of standardized systems, processes and controls
- Measurement of our accomplishments against clearly-defined and benchmarked performance standards
- Investment in our people
- Focus on ease of doing business with customers and with each other

1.2 ACCOMPLISHMENTS

2011 Successes

- 2011 produced positive net revenues of \$82 million due in large part to cost management.
- Regional Dialogue contracts went into effect on Oct. 1, 2011, with new tiered power rates.
- Service was extended to direct-service industries, securing hundreds of jobs for the region.
- A Residential Exchange program settlement was reached.
- Integrated wind exceeded 3,500 MW.
- More than \$1 billion was invested in infrastructure.
- The McNary-John Day 500 KV line was completed ahead of schedule and under budget; additional information is available in a related article [online](#).
- The alternating current intertie to California received critical upgrades.
- Acquired more than 100 aMW of energy efficiency savings.
- Salmon returned in record numbers to places they had not been seen in decades.



Recognition of Excellence

- Finalist in the Platts 2011 Global Energy Award – Commercial Technology of the Year for the Advanced Tower Analysis and Design System
- Environmental Awards
 - Leadership for Energy Smart Federal Partnership
 - Grand Coulee Dam Lighting Project Award from the Environmental Protection Agency

- Secretary of Energy’s Achievement Award for Fugitive Emissions Working Group
- Silver Award for Federal Electronics Challenge
- BRAVO Award from Hispanic Chamber of Commerce
- Navy’s Energy and Water Management Award recognizing BPA’s Energy Efficiency Program
- Ethics Awards
 - Innovation 2010 Web-based Training
 - Innovative Products
 - Innovative Campaign to Build Organizational Integrity
- GreenGov Presidential Award for Sustainability – EPA Regional 10 Federal Green Challenge Team
- 2010 DOE Aviation Program Award

2 HOW BPA PREPARES BUDGETS

2.1 BUDGET DEVELOPMENT PROCESS

BPA began its process to develop proposed FY 2014-15 spending levels for discussion in the 2012 IPR last winter. The process began by laying out the basic approach and assumptions for developing proposed spending levels. The general approach was:

- Capital program levels were capped at base levels shared in the 2012 Capital Investment Review (CIR).
- Expense cost targets were developed by Finance.
 - The cost targets were intended to hold cost increases to levels of inflation where possible. Each organization/ program is expected to operate within cost targets or provide strong justification for needs beyond those levels.
 - Cost targets reflect salaries based on approved staffing levels and current wages, and assumed raises built into Federal employee compensation (estimated cost of living adjustments, and step and grade increases based on historical data).
 - Federal benefits are increasing due to higher healthcare costs and the offsetting impact of COLA freezes.
 - Cost targets include efficiencies assumed in the 2010 IPR.
 - In some instances, cost targets for FY 2014-15 are lower than forecasts presented during the 2010 IPR for the same time period.
 - The agency recognizes operating at cost targets may not be prudent in all cases.

Internal Review Process: In February, Transmission, Power and Agency Services organizations worked to develop expense forecasts and determine if requests beyond the cost target level were necessary. From March through May, executives reviewed program areas requesting spending levels higher than cost targets. Each proposed increase included justification that addressed the strategic objectives, new initiatives, risks or impacts of delaying or not increasing costs.

Expense Cost Target Assumptions

IPR expense targets for FY 2014-15 are based on FY 2012 Start-of-Year (SOY) budgets with the following assumptions:

Personnel Costs

Cost of Living Adjustments (COLA) -
Year-to-Year Increase

FY 2012 to 2013	0%
FY 2013 to 2014	1.34%
FY 2014 to 2015	1.34%

Step and Grade Increase (per year)

FY 23013-15	1.00%
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Benefits (as a percent of salaries)

FY 2013	1.00%
FY 2014-15	0.50%

Awards

Assume restoring full awards from the FY 2012-13 50% levels

Other Operating Costs

Most other costs assume 2012 SOY levels as a base inflated by 1.88% per year. Exceptions made when better information was available.

2.2 GENERAL ALLOCATION OF AGENCY SERVICES COSTS

Costs resulting from Agency Services organizations must be included in the Power and Transmission revenue requirements. Some costs are direct charged to Power and Transmission O&M programs, and some are allocated. The allocation process is accomplished through General and Administrative (G&A) and Support Services cost pools.

BPA has 15 G&A cost pools and nine Business Support pools. The G&A and Business Support pools are collections of costs from the centralized Agency Services organizations. Each Agency Services organization may charge into one or more cost pool, as well as, charging directly into Power and Transmission O&M programs. The description of products and services provided by these organizations can be found in the individual organizations summaries in the Agency Services section of this report.

2.3 INTEGRATED PROGRAM REVIEW

The following items are outside the scope of the IPR process and will be addressed in the upcoming joint Power and Transmission Rate Case.

- Loads and resources
- Cash reserve levels
- Rate design
- Revenue credits including net secondary sales/power purchases
- Billing determinants
- Reimbursables
- Rate levels

Program estimates are provided for the following but are not described in detail during the IPR process.

- Long-Term Contract Generating Projects
- Operating Generation Settlement (Colville Settlement)
- Non-Operating Generation (Trojan Decommissioning and WNP-1 and 4 O&M)
- Power Services Transmission Acquisition and Ancillary Services
- Residential Exchange Program

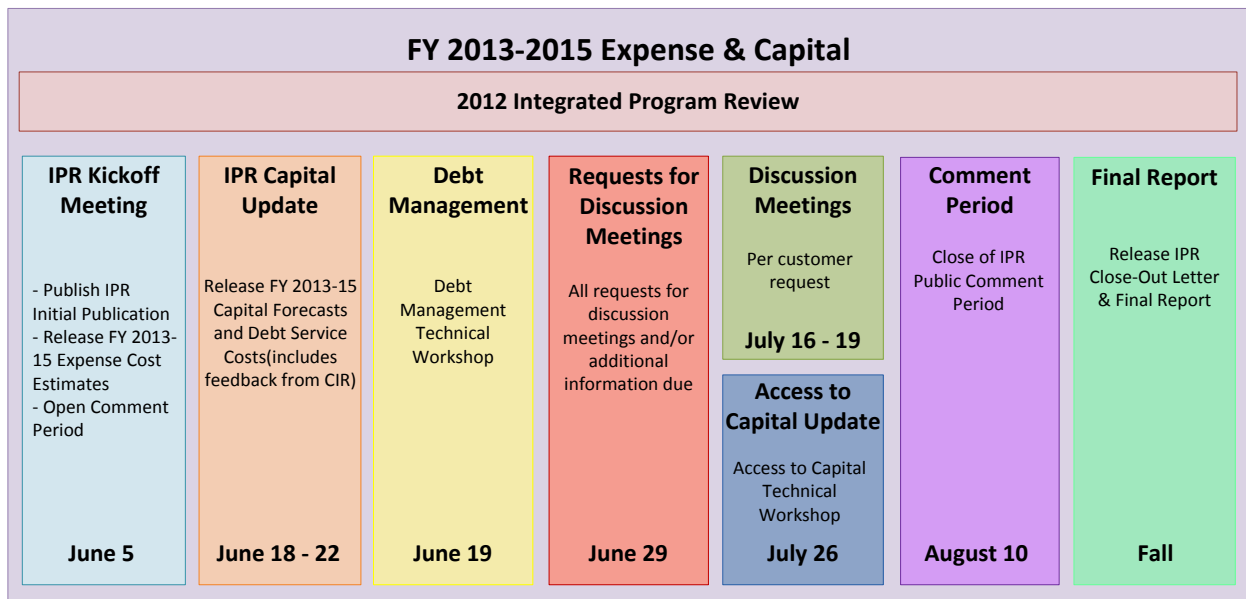
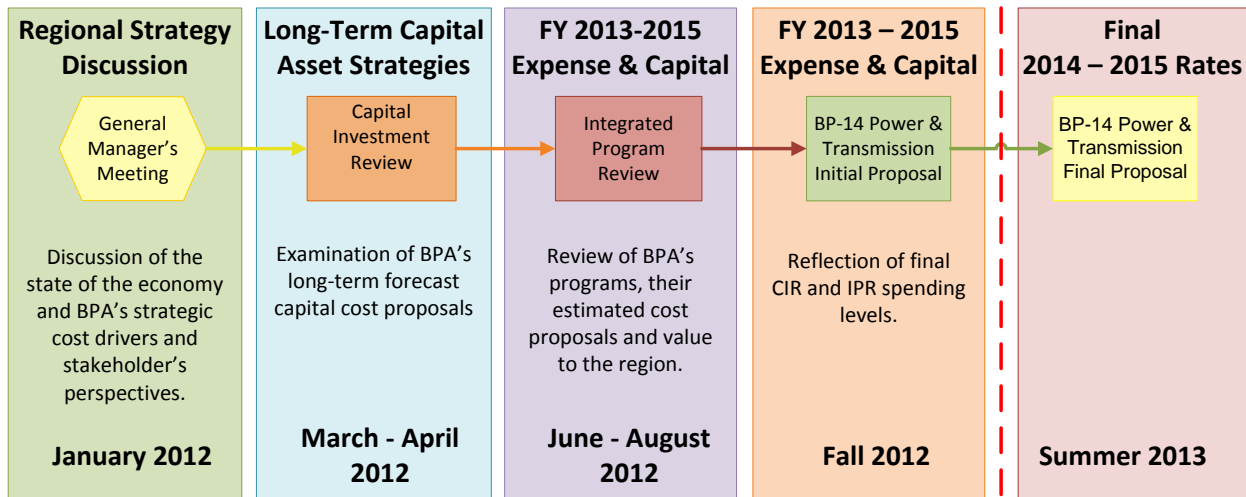
BPA held a general manager meeting Jan. 31, 2012, in order to receive input from regional stakeholders prior to the upcoming 2012 IPR. Discussion centered on the state of the national, regional, and the Pacific Northwest economics, and a panel of seven utility general managers provided their perspective on the state of the economy in their local areas. BPA executives described strategic drivers of costs and rates, and stakeholders provided their perspectives. The input provided in this meeting informed internal guidance on spending level development and formulation of proposed IPR levels.

Customers and other stakeholders requested BPA separate strategic capital discussions focusing on asset strategies and 10-year capital forecasts from the IPR process. In response, BPA hosted the Capital Investment Review (CIR) process from March through April of this year. Input received from the CIR will inform the asset strategies.

Based on feedback from the 2010 IPR lessons learned, the 2012 IPR will reflect the following process changes to enhance the effectiveness of the information presented while minimizing required BPA and participant resources.

- Proposed spending levels reflect the agency's current estimate of the costs needed to deliver on its mission. The estimates have been scrubbed but have not been finalized; participants can influence proposed spending levels that will be included in the rate case, by providing input during the 10-week comment period.

- To enhance accessibility and understanding all information is centralized in this document with a consistent format.
- Between June 5 and June 29, participants may request additional information or technical discussions targeting specific programs, which will allow participants to engage on areas of specific interest.
- Technical discussions, if requested, will be held July 16-19. Discussions will be based on specific questions and requests received from IPR participants. This option encourages collaborative discussions on specific areas of interest to the IPR participants. See [Next Steps](#) for details on how to submit requests.
- A ten-week public comment period will provide interested participants an opportunity to comment on programs and proposed spending levels.



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POWER SERVICES



3.1 POWER OVERVIEW

FY 2011 ended a four-year dry spell where the region experienced below-average precipitation and runoff. Moreover, FY 2012 runoff is forecast to be above average. Despite higher streamflows, Power Services' current financial position has not strengthened due to low market prices for natural gas and consequently low market prices for secondary sales.

In FY 2011, Power Services exceeded expectations with net revenues coming in \$59 million above the start-of-year (SOY) forecast. This increase in net revenue was mainly due to pro-active cost management efforts. While the region experienced higher than expected stream flows, revenues less power purchases only came in \$17 million higher than SOY expectations due to a lower market price environment, unexpected outages at CGS and Grand Coulee Third Power Plant, and lower preference and DSI loads. However, Power Services was able to keep spending \$42 million below the SOY forecast. While costs were managed across all of Power Services, significant under-runs were seen in the following programs: CGS, Bureau of Reclamation and Corps of Engineers combined - \$13 million, Power Non-Generation Operations - \$12 million, Conservation - \$11 million, and Fish and Wildlife - \$5 million.

For FY 2012, Power Services is forecasting expenses to come in under its SOY forecast. Furthermore, Power Services is proposing to increase internal operating costs based on [expense cost target assumptions](#) described previously. Some of the programs with proposed increases compared to spending levels in the FY 2012-13 Rate Case are: Columbia Generating Station, Corps of Engineers, Bureau of Reclamation, and Fish and Wildlife.

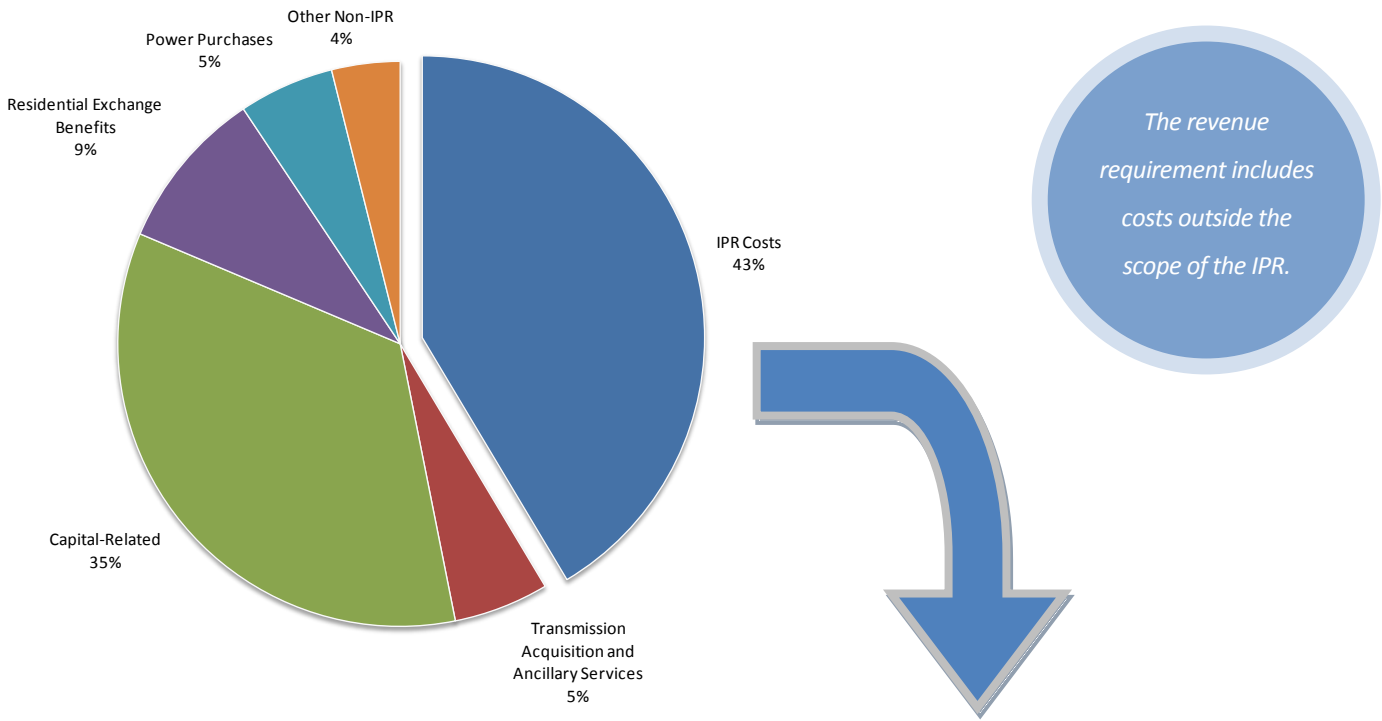
More information about all of Power Services' programs is contained in the following sections of this document.

Comparison of Forecast Growth Rate in 2010 IPR to 2012 IPR

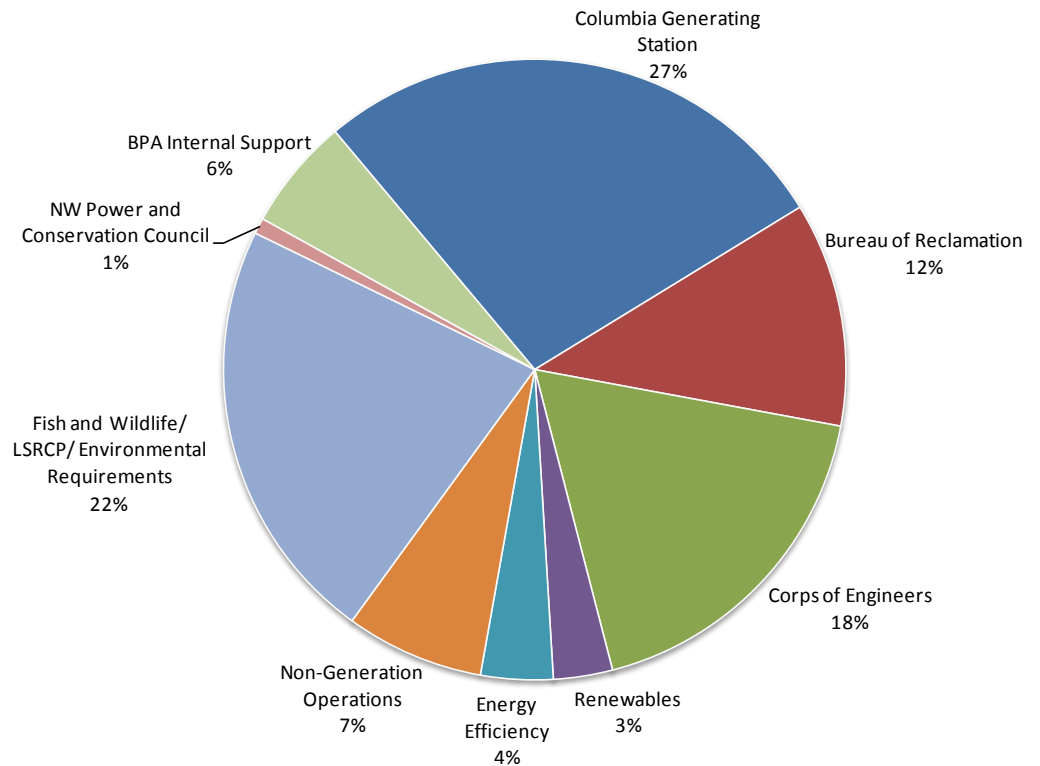
Power	2010 IPR	2012 IPR
	FY 2009 Actuals to FY 2013 Final IPR	FY 2011 Actuals to FY 2015 Proposed
Overall 5-year change	20.8% ¹	22.5%
Compound Annual Growth Rate	4.8%	5.2%

¹The 2010 IPR Close-out Document displayed this as 20.5%. This has been recalculated without including Transmission Acquisition/ Ancillary Services costs to be consistent with the calculation for the current forecasts. These costs are not within the scope of the IPR.

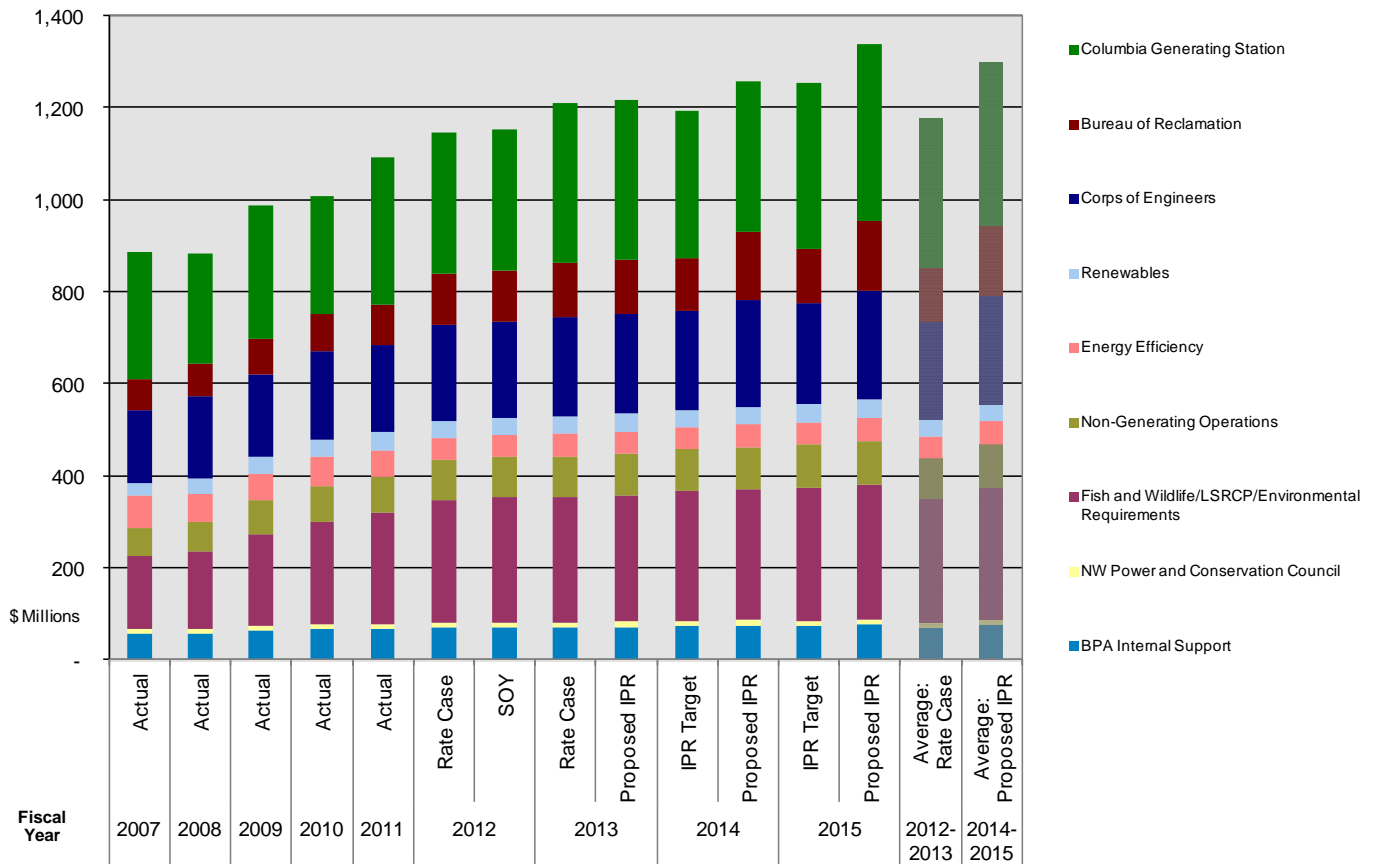
Potential Power Revenue Requirement
Proposed Power Services Expenses FY 2014-15



Power Services IPR Costs
FY 2014-2015 Average: Proposed IPR



Power Services Expense Summary



Power Services Summary Statement of Program Expenses

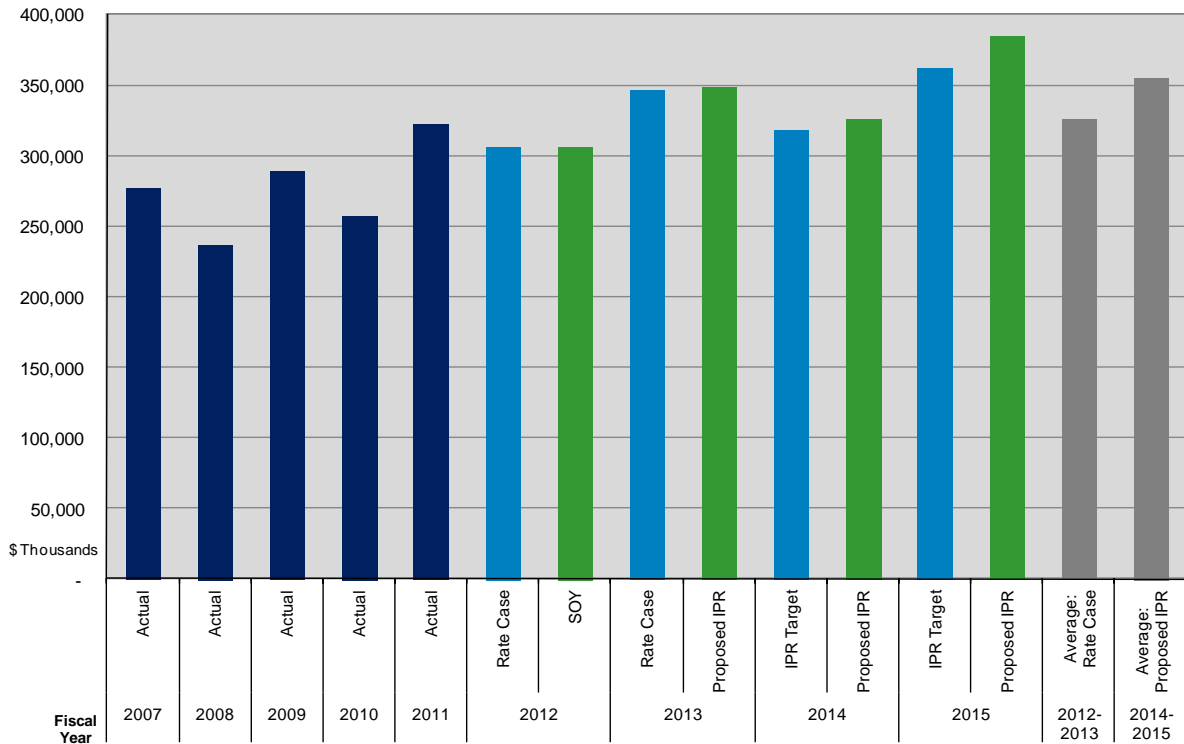
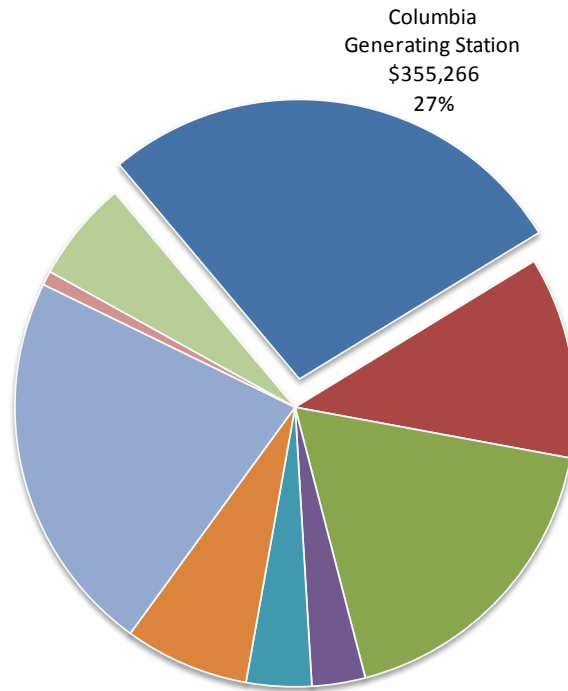
(\$\$)	2011			2012		
	Start of Year	Actuals	Delta	Rate Case	Start of Year	Delta
COSTS DESCRIBED IN IPR						
Columbia Generating Station	323,082	322,212	(870)	306,366	306,366	-
Bureau of Reclamation	96,110	85,488	(10,622)	111,972	111,972	-
Corps of Engineers	192,433	190,835	(1,598)	208,700	208,700	-
Renewable Resources	39,758	38,527	(1,232)	37,670	37,669	(1)
Energy Efficiency	76,200	59,476	(16,724)	46,950	46,950	-
Non-Generation Operations	86,901	75,137	(11,764)	88,460	86,656	(1,805)
Fish & Wildlife, LSRCP, Environmental Requirements	249,780	245,610	(4,170)	266,525	275,052	8,528
NW Power & Conservation Council	9,934	8,930	(1,004)	10,114	10,114	-
BPA Internal Support	63,464	66,440	2,976	68,978	68,819	(159)
Subtotal	1,137,662	1,092,654	(45,008)	1,145,735	1,152,298	6,563
OTHER COSTS¹						
Long-Term Contract Generating Projects	31,266	29,427	(1,839)	25,079	25,079	-
Operating Generation Settlement	21,754	17,570	(4,185)	21,928	21,928	-
Non-Operating Generation	2,128	2,672	544	1,938	1,938	-
Power Services Transmission Acquisition	168,065	179,684	11,619	160,516	162,116	1,600
Residential Exchange & IOU Settlements	188,987	184,764	(4,223)	201,561	202,961	1,400
Subtotal	412,201	414,118	1,917	411,022	414,022	3,000
Total	1,549,863	1,506,771	(43,091)	1,556,757	1,566,320	9,563

(\$\$)	2013			2014			2015		
	Rate Case	Proposed IPR	Delta	IPR Target	Proposed IPR	Delta	IPR Target	Proposed IPR	Delta
COSTS DESCRIBED IN IPR									
Columbia Generating Station	345,945	347,829	1,884	317,860	326,136	8,276	361,904	384,396	22,492
Bureau of Reclamation	119,891	119,891	-	115,443	150,101	34,658	117,615	152,533	34,918
Corps of Engineers	215,700	215,700	-	215,170	231,187	16,017	219,218	237,378	18,160
Renewable Resources	38,142	38,140	(2)	38,836	39,799	962	39,567	40,147	580
Energy Efficiency	47,850	47,850	-	48,408	48,408	-	49,320	49,320	-
Non-Generation Operations	89,950	90,110	161	90,388	92,052	1,663	92,960	94,908	1,948
Fish & Wildlife, LSRCP, Environmental Requirements	271,589	276,130	4,541	284,005	284,970	965	290,569	291,970	1,401
NW Power & Conservation Council	10,355	10,355	-	10,428	10,568	140	10,624	10,799	175
BPA Internal Support	70,483	71,478	995	71,705	74,447	2,742	73,087	77,025	3,938
Subtotal	1,209,905	1,217,483	7,578	1,192,243	1,257,667	65,424	1,254,866	1,338,475	83,610
OTHER COSTS¹									
Long-Term Contract Generating Projects	25,831	26,008	177	25,999	25,999	-	26,619	26,619	-
Operating Generation Settlement	22,148	20,785	(1,363)	21,138	21,138	-	21,497	21,497	-
Non-Operating Generation	1,948	2,316	368	2,206	2,206	-	2,228	2,228	-
Power Services Transmission Acquisition	157,185	157,455	270	160,896	160,896	-	159,963	159,963	-
Residential Exchange & IOU Settlements	201,838	201,838	-	209,253	209,253	-	213,190	213,190	-
Subtotal	408,950	408,402	(548)	419,492	419,492	-	423,497	423,497	-
Total	1,618,854	1,625,884	7,030	1,611,735	1,677,159	65,424	1,678,363	1,761,973	83,610

¹Other Costs are presented but not described in detail during the IPR process.

3.2 COLUMBIA GENERATING STATION

FY 2014-2015 Average: Proposed IPR



Program Details

	2011			2012		
	Start of Year	Actuals	Delta	Rate Case	Start of Year	Delta
(\$\$\$) Columbia Generating Station	323,082	322,212	(870)	306,366	306,366	-

	2013			2014			2015		
	Rate Case	Proposed IPR	Delta	IPR Target	Proposed IPR	Delta	IPR Target	Proposed IPR	Delta
(\$\$\$) Columbia Generating Station	345,945	347,829	1,884	317,860	326,136	8,276	361,904	384,396	22,492

Description, Purpose and Responsibilities

The Columbia Generating Station (CGS) is a 1,107 net megawatt boiling water nuclear reactor located on the Department of Energy Hanford Site in Richland, Washington. It is owned and operated by Energy Northwest. CGS began operating in 1984 and is on a two-year refueling and maintenance outage cycle.



CGS operating costs are included in the revenue requirement of the Power Services’ rate structure and are tied to operations and maintenance of the nuclear plant. BPA acquires 100 percent of CGS generation and funds 100 percent of its costs plus directly funds the Decommissioning Trust Fund and Nuclear Electric Insurance Limited (NEIL) insurance premiums.

Goals

CGS strives to operate in a safe, reliable, and cost effective manner such that its performance is in the top quartile of the industry in technical performance and top half of the industry in cost performance relative to its peers on a sustained basis.

Proposed IPR levels for FY 2013-15 will support continued operation and maintenance of CGS and are consistent with the spending forecast provided by the Energy Northwest Long Range Plan (LRP) for CGS in the 2010 IPR. In FY 2013 and FY 2015, CGS will have refueling and maintenance outages.

Changes from 2010 IPR

The most significant item since the 2010 IPR is the earthquake and tidal wave that occurred in Japan in 2011. The Nuclear Regulatory Commission (NRC) has been taking a closer look at U.S. nuclear plants and the impacts that natural disasters may have on operations and safety. CGS has included approximately \$55 million in its LRP over the next five years to respond to the NRC mandates that have been and will be issued as a result of the events and damage that occurred at Fukushima.

In March 2012, the NRC issued its annual assessment letter for CGS stating CGS operated in a manner that preserved public health and safety and met all safety cornerstone objectives. The NRC cited four findings in which work practices failed to implement human error prevention techniques. CGS has developed corrective actions and initiatives to correct the deficiencies and provided funding for these actions.

CGS is currently operating under its original forty-year Nuclear Regulatory Commission (NRC) license, which expires in 2023. On May 23, 2012, the NRC signed the documents approving the extension of CGS' operating license to 2043. This extension of operating life may allow BPA to reduce contributions to the CGS Decommissioning Trust Fund as the contributions will be made over a longer period of time.

In May 2012, the Department of Energy (DOE), Tennessee Valley Authority, the U.S. Enrichment Corporation and Energy Northwest signed agreements to pursue another depleted uranium program to provide nuclear fuel for CGS, a program similar to the one conducted in 2005. The program involves DOE providing depleted uranium hexafluoride (DUF₆) that can be cost effectively enriched to provide enough enriched uranium for CGS operations through at least 2028. This agreement generates savings of \$20 million per year for the FY 2014-17 period. As a result, Energy Northwest will be updating the CGS LRP, budgets, nuclear fuel plan and, subsequently, BPA's proposed IPR levels for O&M and debt service to reflect the DUF₆ Program.

New Projects/Programs

Each year CGS identifies, funds and completes projects. Examples of expense and capital projects for FY 2013-15 include:

Expense

- In-service inspection and non-destructive examination as required by NRC to inspect the reactor during the outage on a periodic basis
- Inspection, repair and refurbishment of valves in the plant
- Vessel services during the outage
- Transformer yard maintenance
- Cooling tower preventative maintenance
- Service water valve replacement

Capital

- Fukushima impacts due to the natural disaster that occurred in Japan in 2011
- Plant fire detection system replacement
- Control rod blade procurement and replacement
- Radio system replacement to comply with Federal Communications Commission rules
- Radioactive dose reduction
- Upgrade transformer yard oil collection
- Control rod drive repair and refurbishment

The cost estimates for FY 2014 and FY 2015 include funding for Fukushima-related modifications that need to be made in response to the NRC's mandates. These modifications are forecast to be implemented from FY 2014 through FY 2017. If these modifications are not completed, CGS will be out of compliance with regulatory requirements and could be shut down.

Risk and Impact of Operating at Cost Target

The cost targets for CGS O&M were calculated using the 2010 IPR forecasts escalated by 1.88 percent with an adjustment to account for the refueling outage cycle. For FY 2014, the non-outage year (FY 2012) was used as the basis, and for FY 2015, the outage year (FY 2013) was used. The cost targets for Decommissioning Trust Fund contributions were set based on the current contribution schedule submitted to the Nuclear Regulatory Commission (NRC) in 2011, and the cost targets for Nuclear Electric Insurance Limited (NEIL) premiums followed the standard inflation of 1.88 percent described earlier in this document.

The following may occur if the CGS forecasts are limited to the cost targets:

- Long-term reliability and performance may be affected as projects would be deferred and or canceled.
- Deferred projects may cause a future bow wave of projects that need to be done in a short period of time.
- Probability of plant shutdowns may increase due to the long time period in ordering spare parts.
- Short-term CGS performance and reliability may be affected if human performance improvement initiatives cannot be completed.
- BPA would be unable to make the full 2012 NEIL insurance premium payment amount, which is set by NEIL for the coverage requested by BPA.

Non-funded Items

- Forced outages if the plant needs to be taken offline for repairs.
- Undefined as well as unknown regulatory mandates from the NRC.
- Likely change mandates issued as result a of Fukushima.
- Condenser replacement litigation expenses as the result of the extended outage in FY 2011.

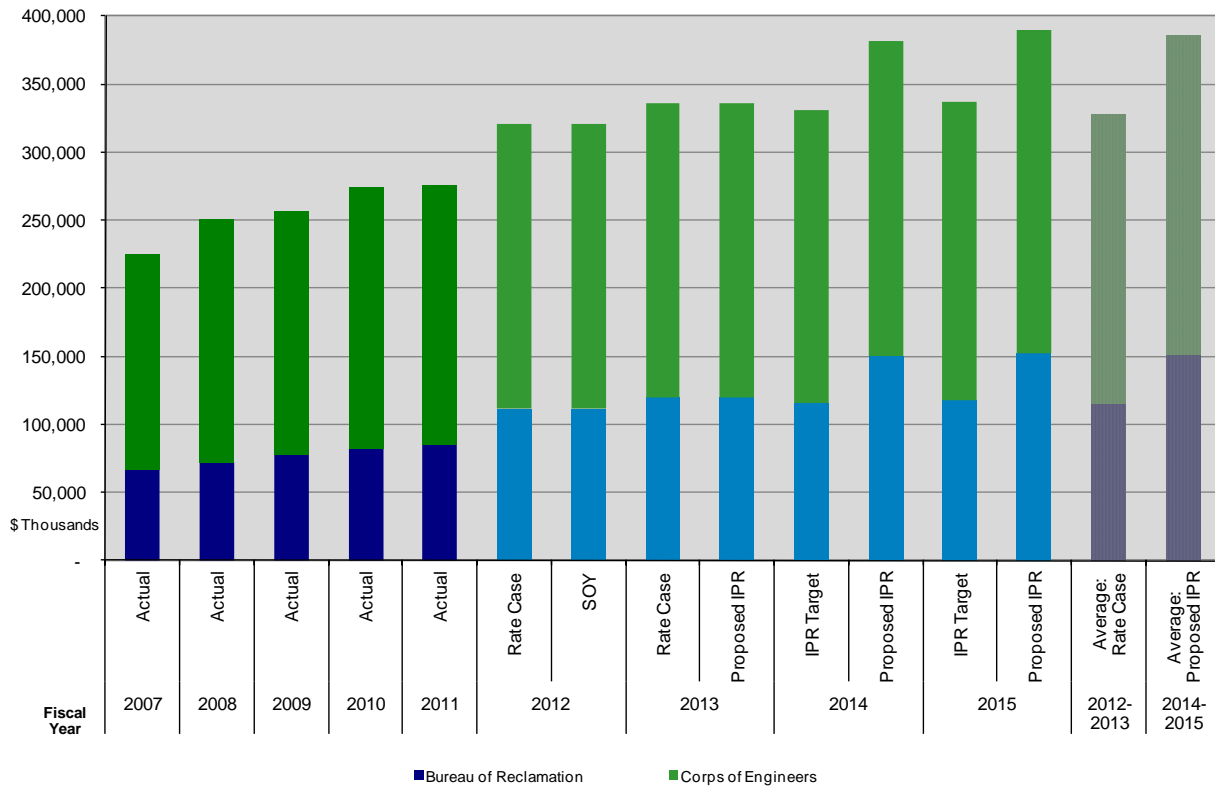
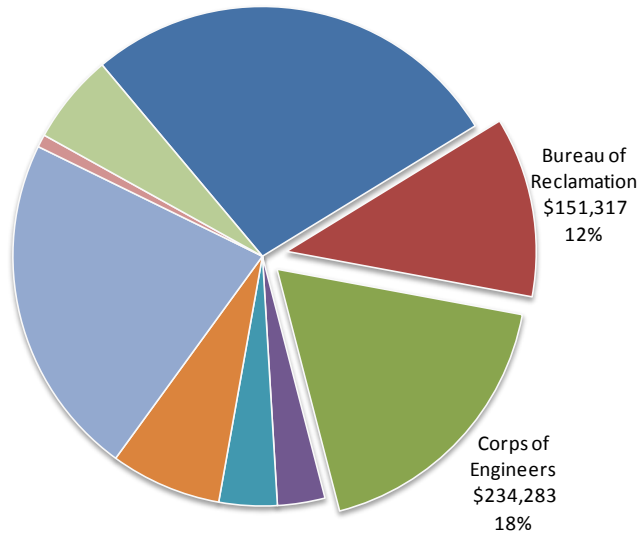
Challenges/Constraints

Some of the challenges and risks that exist for FY 2013-15 are as follows:

- Emergent equipment reliability issues
- Length of the refueling outages
- Regulatory fees
- NRC substantive cross-cutting issue resolution
- Potential NRC findings related to emergency preparedness (EP)
- Forced outages
- Increases in employee benefits
- Unknown regulatory mandates
- Fukushima impacts
- Plant aging and equipment obsolescence
- License extension implementation

3.3 BUREAU OF RECLAMATION AND CORPS OF ENGINEERS

FY 2014-2015 Average: Proposed IPR



Program Details

	2011			2012		
	Start of Year	Actuals	Delta	Rate Case	Start of Year	Delta
(\$\$\$)						
Bureau of Reclamation	96,110	85,488	(10,622)	111,972	111,972	-
Corps of Engineers	192,433	190,835	(1,598)	208,700	208,700	-
Total	288,543	276,323	(12,220)	320,672	320,672	-

	2013			2014			2015		
	Rate Case	Proposed IPR	Delta	IPR Target	Proposed IPR	Delta	IPR Target	Proposed IPR	Delta
(\$\$\$)									
Bureau of Reclamation	119,891	119,891	-	115,443	150,101	34,658	117,615	152,533	34,918
Corps of Engineers	215,700	215,700	-	215,170	231,187	16,017	219,218	237,378	18,160
Total	335,591	335,591	-	330,613	381,288	50,675	336,834	389,911	53,077

Description, Purpose and Responsibilities

The Federal Columbia River Power System (FCRPS) comprises 31 hydroelectric plants – 21 owned and operated by the U.S. Army Corps of Engineers (Corps) and 10 by the Bureau of Reclamation (Reclamation). The FCRPS has an overall capacity of 22,060 megawatts, delivering power worth nearly \$4 billion annually to the people of the Pacific Northwest. In addition, it provides flood protection and mitigation, as well as enhancement of fish and wildlife while mitigating hazards to native species.



BPA works with the Corps and Reclamation to fund operations and routine maintenance activities, non-routine extraordinary maintenance projects, security and WECC/NERC requirements, and fish and wildlife and cultural resources enhancement and mitigation activities.

The Corps proposed FY 2014–15 IPR levels are unchanged from the five-year O&M spending plan presented in the 2010 IPR.

Reclamation is asking for an increase over the FY 2014–15 spending plan presented in the 2010 IPR to address staffing shortfalls for O&M and non-routine extraordinary maintenance needs at Grand Coulee, particularly those associated with the overhaul of the Third Power Plant (TPP). Reclamation and BPA are still evaluating the amount of resources required in each area but currently estimate increases of about \$9.5 million per year for staffing, \$11.7 million per year in increased TPP overhaul costs, and \$9.4 million per year in newly identified non-routine extraordinary maintenance (mostly at Grand Coulee).

In addition to the routine O&M funded by the program, subcategories include non-routine extraordinary maintenance (approximately 15 percent of budget), fish and wildlife O&M (approximately 15 percent of budget), and cultural resources (approximately two percent of budget). In addition, the O&M Program manages about \$15 million per year in maintenance related small capital.

Goals

Provide low cost reliable power, trusted stewardship of the FCRPS.

Near-Term (FY 2013-15)

- Provide energy and capacity to meet our Regional Dialogue contract obligations (Tier 1) to our 130 plus publicly owned utility customers.
- Continue to ensure the FCRPS generators remain reliable and available to support the FCRPS during the Grand Coulee Third Power Plant (TPP) overhauls during which successive 805/690 MW units will be removed from service over a period of 10 to 12 years.
- Continue to address the Northwest's cultural resources and fish and wildlife mitigation responsibilities to enable its residents to realize the benefits of a low cost hydropower system.

Long-Term (FY 2013-17)

- Operation and expansion of FCRPS power facilities meet availability and reliability standards in the most regionally cost effective manner.
- Endangered Species Act, NW Power Act, National Environmental Policy Act, Fish Accords and other environmental responsibilities are met using a performance-based approach.
- BPA, the Corps, and Reclamation maximize the long-term value of FCRPS power and transmission assets through integrated asset management practices.

Changes from the 2010 IPR

Costs for the overhauls at the Grand Coulee TPP are higher than described in the 2010 IPR, and Reclamation has additional non-routine maintenance resource requirements. Also, Grand Coulee requires an increase in staffing of approximately 50 full-time equivalent (FTE) to manage increased operations and routine maintenance (particularly in the TPP) and to manage the project/work activities associated with the plant. BPA and Reclamation are still in the process of evaluating the resource requirements associated with these changes.

There have been multiple forced outages of John Day turbines due to blade linkage/pin failures. These failures have increased the forced outage rate for the plant. This is a design flaw that had been previously identified on this family of units, and a mitigation plan was developed and implemented. This advanced planning provided an interim repair plan (blocking the blades on the Kaplan turbines) until they can be rebuilt. This type of repair results in decreased efficiency and operating range but avoids extended forced outages. An inspection program is being deployed on the remaining units in this family. Non-routine maintenance funding is required to address this issue.

Bonneville Powerhouse 2 has had several long term forced outages associated with the generators that may indicate a systemic problem associated with those units. These failures have increased the forced outage rate and are a significant risk, possibly requiring non-routine maintenance funding to address the problem.

WECC/NERC requirements continue to increase, and the projects are entering the first round of audits, which require a high level of resources dedicated to each audit.

New Programs/Projects

Reclamation is proposing to fill approximately 50 new positions at Grand Coulee, but is still in the process of evaluating and finalizing the exact number. A consultant's review of all work activities indicates the plant is significantly understaffed to address all of its work requirements (routine and non-routine maintenance while

managing multiple capital activities). In addition to needing to complete all the routine maintenance in the Left, Right, Third and Keys facilities, plant workers are required for significant non-routine maintenance activities associated with the overhaul of the TPP. Additional workers are also required to provide management and engineering support across all program areas.

For the Corps, WECC/NERC audits are estimated to have a financial impact of \$500 thousand in FY 2014 and require an extensive labor pool available for the audit (potential impact for up to four months).

WECC/NERC audits are cyclical as determined by NERC but do not necessarily occur annually. Therefore, it is difficult to plan for and have resources available for this type of work.

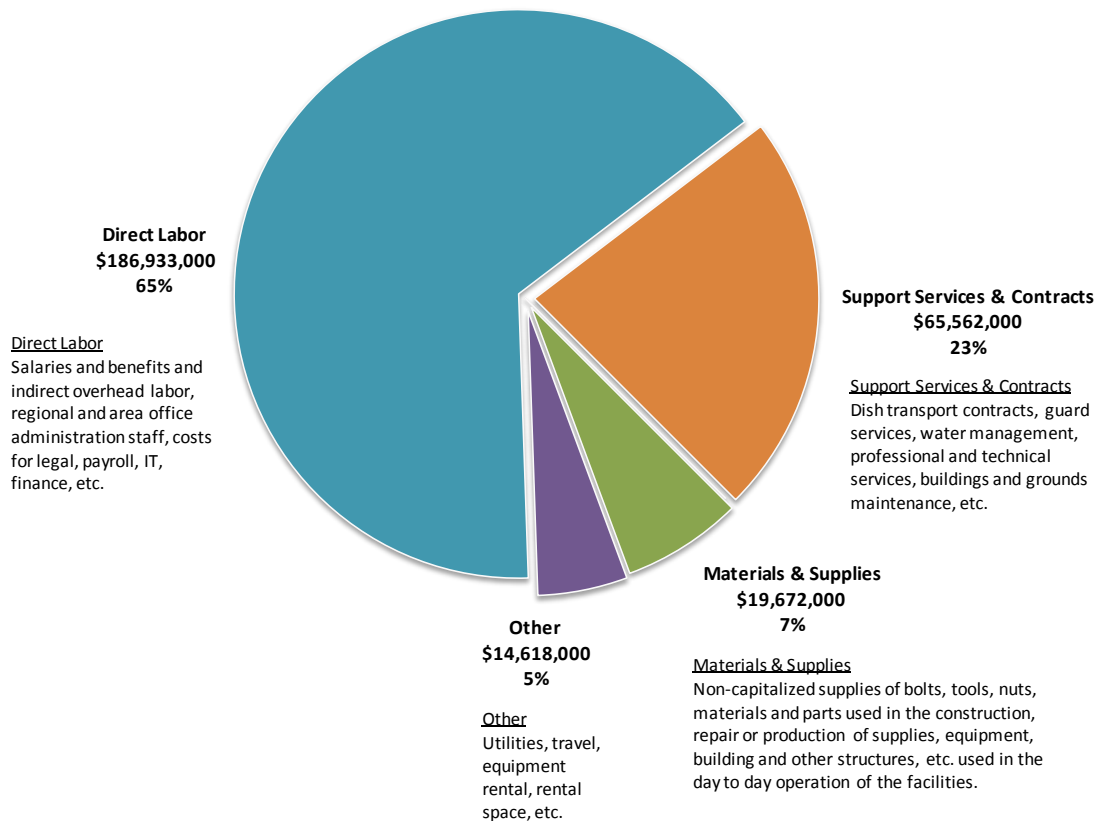
Risk and Impact of Operating at Cost Target

The proposed funding levels for the Corps and Reclamation represent the budgets believed to be necessary for maintaining the hydro system’s safe and reliable performance during the upcoming TPP overhauls at Grand Coulee. In order to keep the rest of the FCRPS generating units available to support the loss of 805 MWs, the Corps and Reclamation need to be appropriately staffed and have sufficient resources to address the operations, routine maintenance, and non-routine extraordinary maintenance required across the system.

The Corps and Reclamation use a baseline budgeting process to develop program requirements for a routine O&M program. These baseline budgets have outlined a minimum effort to successfully and consistently maintain the facilities for acceptable performance. The routine items are required in order to perform minimal required maintenance while meeting regulatory mandates required for operation. Typical budgets consist of two-thirds labor and one-third devoted to contract support (security, fish and wildlife and cultural resources mitigation) and materials and supplies required for operations and maintenance.

To illustrate how funding is distributed, the pie chart below shows routine O&M actual costs for FY 2011.

FY 2011 Routine O&M Expense Costs by Category



Risks of operating at the cost target include:

- Potential for non-completion of required maintenance and hence transitioning from a planned approach to accomplishing maintenance toward a reactionary approach.
- Potential for higher number of forced outages and lower system availability, resulting in additional costs and increased rates.
- High flows: additional labor required for debris removal, especially at fish screens, and additional non-routine funds required in dealing with scour on the aprons and boulder removal similar to what was experienced at Bonneville Dam as a result of last season's high flows.
- WECC/NERC audits: The audits are estimated to cost \$1 million in FY 2013 and \$500,000 in FY 2014. At current budgeting levels, that amounts to a 20 percent increase in that program for FY 2013 and a 10 percent increase in FY 2014. A risk of noncompliance is increased with reduced funding levels, especially if required maintenance is not completed and documented. Audit costs for Reclamation in FY 2011 were about \$500,000.
- Potential of not meeting mitigation responsibilities for cultural resources and fish O&M.
- Knowledge transfer/improvement training and travel. Programs would be reduced, as well as materials and supplies inventories and spare parts for maintenance.

Operating at the cost target for the Corps would require a \$17 million per year reduction from the proposed funding levels. This would significantly reduce funding available for non-routine maintenance as well as for staffing. About half of the reduction would come from the routine program, with the remaining reduction from non-routine maintenance.

Operating at the cost target for Reclamation would require a \$35 million per year reduction from proposed funding levels. This would significantly reduce funding available for routine and non-routine maintenance and staffing. Reclamation would reduce the non-routine budget and routine budget/staffing.

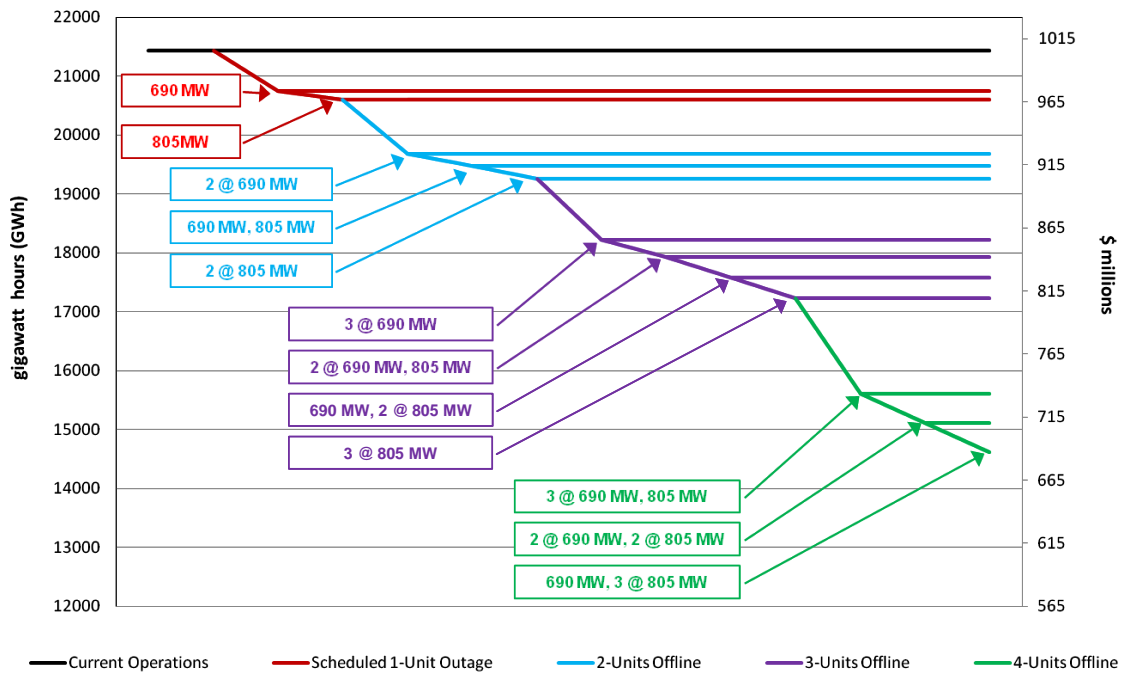
The Grand Coulee TPP overhaul is the most significant single critical action for maintaining the value of the hydro system. Because of its age and condition, the equipment in the facility requires a significant amount of non-routine maintenance funding to ensure its long-term reliable operational performance. These costs are significant, but not funding this work would have a much larger impact on Grand Coulee's ability to generate revenue and provide long-term value to the region. A significant forced outage due to a mechanical failure would take one of the large units down indefinitely, shifting additional load requirements to the remaining units. The lost revenue associated with losing one unit for a year is about \$55 million. Once the overhaul begins, if two additional units were lost for a year, the loss in revenue would be about \$135 million.

Across the FCRPS, similar age and equipment conditions and risks are present. For example at McNary (McNary is the hydraulic bottleneck of the FCRPS, making availability of these units of critical importance), turbine runners are in marginal condition and much of the plant is original equipment. Some investments have been made or are underway (main unit transformers and circuit breakers have been replaced and generator windings are currently underway), but significant risk still remains as more investment is needed.

The following graph illustrates the value of making investments and maintaining the reliable generating capability of the FCRPS. It shows the lost revenue as a result of potentially losing one, two, three or four units in the TPP at Grand Coulee. Also, the graph illustrates the increased value associated with the rest of the generating units across the FCRPS as a result of the lower system availability during the TPP overhauls.

Reduction in TPP Output

due to unit outages during the 12-year overhaul schedule



- Assumes a baseline 5-year average availability of 77.3% at Grand Coulee
- Assumes a 12-year (2013-2024) levelized energy value of \$46.93/MWh (based on the current forward price curve from BPA's Common Agency Assumptions as of July 2011)

The red line indicates the output and generation once the overhaul begins in the Grand Coulee TPP. The blue line indicates scenarios of losing one additional unit (either 805 or 690). The purple indicates combinations for losing two additional units in addition to the overhauled unit, and the green indicates losing three additional units after the overhaul begins.

In consideration of the Grand Coulee TPP overhauls scheduled to start in March of 2013, work began on a five-year plan to assess FCRPS availability. Lower system availability is currently being experienced primarily due to the pre-overhaul work at Grand Coulee and some longer term forced outages at several Corps plants. System availability is expected to increase over time particularly after the first overhaul is complete (sometime in FY 2014). During this period, the Corps and Reclamation are focusing on maintaining high reliability and availability across the rest of the plants in the FCRPS.

Reclamation and the Corps believe funding at requested levels is crucial to maintain momentum they have developed over the last few years in safety, achieving preventive maintenance goals, sustaining staff expertise, accomplishing major routine and non-routine projects, and WECC/NERC regulatory compliance. The desire to further improve reliability and availability of the FCRPS during the TPP overhauls over the next ten years and the high cost of forced unit outages during this time period, further highlight the critical need for sufficient levels of funding.

Non-funded Items

The Corps and Reclamation are generally funding all critical activities at the proposed FY 2014-15 program funding levels. However, there are some areas of concern.

- Reclamation's trades and crafts employee wages are continuing to increase at levels significantly higher than inflation. When the current wage freeze expires (this applies only to the Corps, as Reclamation's

trades and crafts employees are continuing to get raises), a significant amount of back pay will be required to catch up these employees. Note, about 60 percent of Corps and Reclamation employees are trades and crafts.

- Potential changes in security and cyber security requirements (re: Federal Information Security Management Act). WECC/NERC requirements for cyber security are increasing dramatically. Cyber vulnerabilities of power plants are an issue of great concern in the Department of Defense. The Corps is governed by Defense policy and must comply with Defense standards for cyber security. This is an issue for Reclamation as well, particularly with Grand Coulee having national icon status in the Department of Interior.
- Potential non-routine maintenance funding requirements are increasing, especially for John Day Kaplan runner linkage problems and Bonneville Powerhouse 2 generator problems. These two plants could experience multiple unit failures as a result of systemic or design flaws in the units. Additional spillway gate refurbishments, bulkhead gates rehabilitation, ring seal gate overhauls, discharge tube and draft tube rehabilitation, and turbine overhauls may be required in addition to the non-routine work already programmed.
- Corps and Reclamation joint-funded facilities need additional work. Fish passage facilities, hatcheries and joint feature items at the dams are the same age and condition as the power facilities and in need of maintenance and investment. Reclamation and the Corps must get matching appropriations for these items, which may prove difficult with flat or declining appropriations.

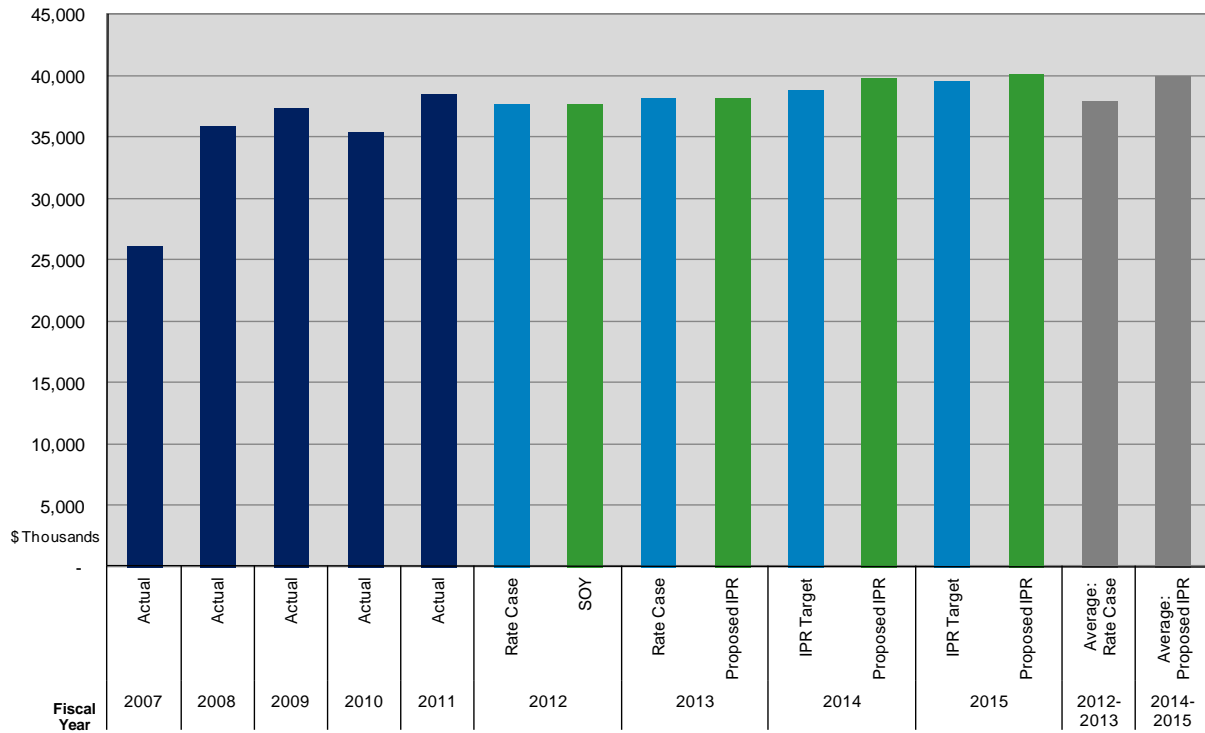
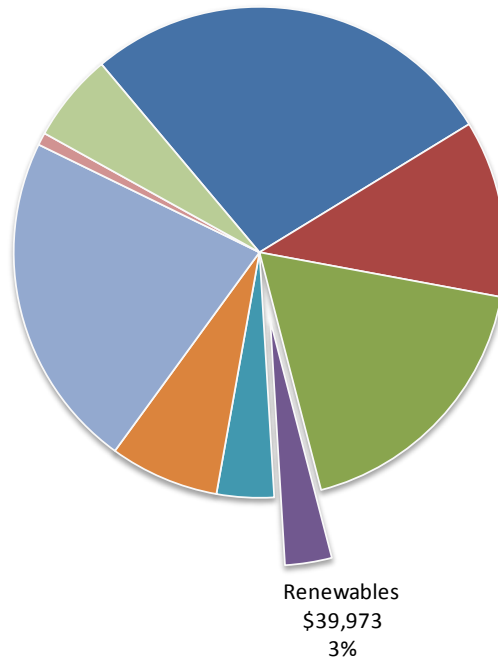
Challenges/Constraints

- Infrastructure is aging and routine and non-routine maintenance requirements are increasing. Significant investments have been made in the hydro system in the last few years, but the majority of the hydro system's equipment age is still well beyond its design life and requires increased maintenance to keep it performing (the Grand Coulee TPP is a good example of this).
- The risk of significant forced outages and loss of generating capacity continues.
- Regulatory requirements, especially WECC/NERC, are increasing.
- Staffing at some facilities continues to be a challenge. The Chief Joseph operations group recently was down six operators, and filling vacancies at Grand Coulee and some of the Snake River plants is challenging.
- Aging workforce/ knowledge transfer is becoming an issue (approximately 50 percent of Grand Coulee staff is eligible to retire).

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3.4 RENEWABLES

FY 2014-2015 Average: Proposed IPR



Program Details

	2011			2012		
	Start of Year	Actuals	Delta	Rate Case	Start of Year	Delta
Renewable Conservation Rate Credit	2,500	2,588	88	-	-	-
Renewables	37,258	35,939	(1,319)	37,670	37,669	(1)
Total	39,758	38,527	(1,232)	37,670	37,669	(1)

	2013			2014			2015		
	Rate Case	Proposed IPR	Delta	IPR Target	Proposed IPR	Delta	IPR Target	Proposed IPR	Delta
Renewable Conservation Rate Credit	-	-	-	-	-	-	-	-	-
Renewables	38,142	38,140	(2)	38,836	39,799	962	39,567	40,147	580
Total	38,142	38,140	(2)	38,836	39,799	962	39,567	40,147	580

Description, Purpose and Responsibilities

BPA’s policy goal for renewable resources is to ensure the development of its share of all cost-effective regional renewable resources forecast in the Northwest Power and Conservation Council’s Sixth Power Plan at the least possible cost to BPA ratepayers.

BPA’s share is based on the public power customers’ share of regional load growth (about 40 percent). Any renewables acquired by BPA or publics with or without assistance from BPA, count toward this goal. Based on public customer reports, BPA has concluded that the publics have or will purchase sufficient renewables to meet BPA’s policy goal through 2015.



Goals

Meet existing contract obligations while seeking opportunities to reduce costs. Maintain existing program functions.

Short-Term Strategy: Continue to purchase the output of seven wind projects. Maintain the solar and wind monitoring networks (used in forecasting). Cover fees/costs associated with Western Renewable Energy Generation Information System (WREGIS).

Changes from the 2010 IPR

Renewable power purchase expenses have been updated. Wind power purchase expenses are higher than those appearing in the 2010 IPR because generation estimates have increased from 65.4 aMW to 67.2 aMW and contract rates have been updated to reflect contractual obligations.

Wind data management contract with Oregon State University was terminated in FY 2011. Anemometer data

are now available internally and validation is automated.

Remaining Green Energy Premiums (earned prior to FY 2012) are expected to be entirely reinvested during FY 2012 and FY 2013. Green Energy Premiums earned from the sale of attributes generated during FY 2011, but sold in FY 2012, will be included as a revenue credit to the Composite Cost Pool.

New Programs/Projects

Payment for WREGIS software enhancements enable the creation and certification of Renewable Energy Certificates associated with FCRPS efficiency improvements (costs yet to be determined).

Risk and Impact of Operating at Cost Target

The output forecast used in the BP-12 Final Study of the seven wind power purchase agreements was increased to 67.2 aMW from 65.4 aMW (used in 2010 IPR). The increased forecast was based on actual generation data from the wind plants over the last five years. The forecast increase in energy (1.8 aMW) is assumed to be sold at market prices (\$32.10/MWh in FY 2014 and \$33.65/MWh in FY 2015) resulting in a revenue offset of \$506 thousand in FY 2014 and \$531 thousand in FY 2015.

\$4 million per year is proposed for resource development which funds the pre-energization costs associated with acquisition of non-federal capacity resources (permitting, etc.). If this budget was reduced, there may not be enough funding available to acquire these resources. No inflation was applied to the \$4 million budgeted for Resource Development.

Non-Funded Items:

Payment for engineering services necessary to enable the creation and certification of RECs associated with FCRPS efficiency improvements (costs yet to be determined).

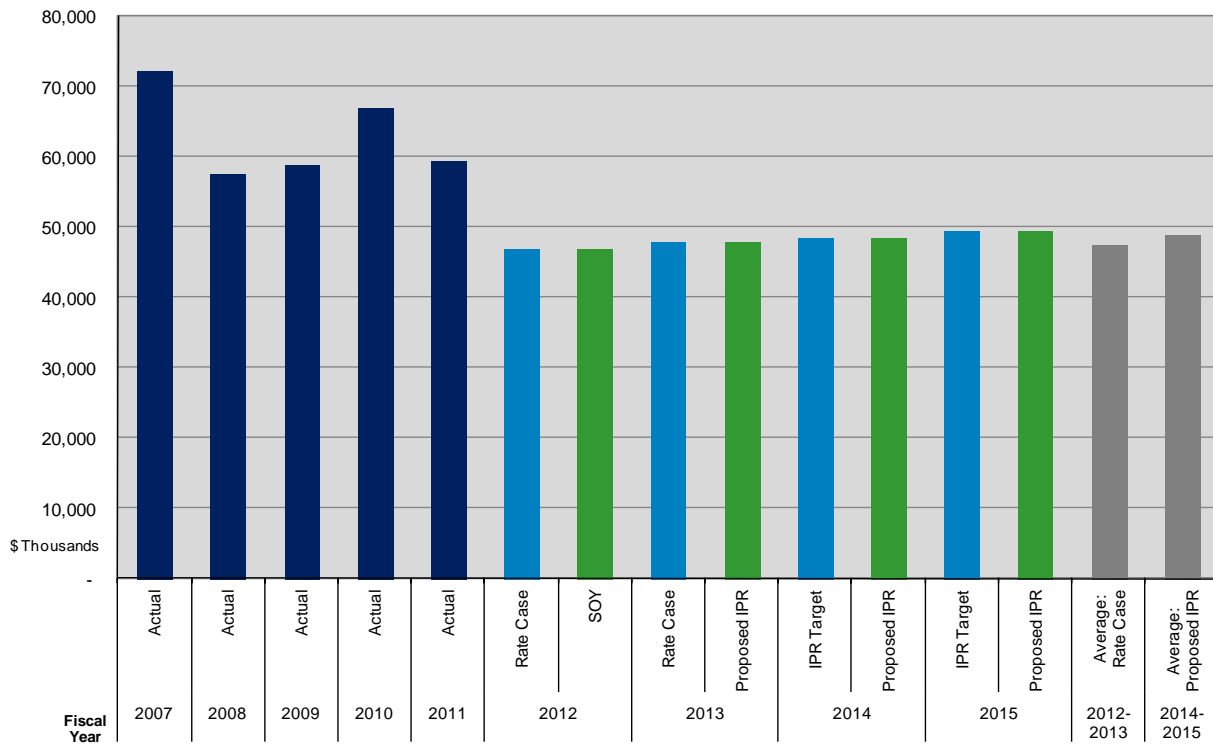
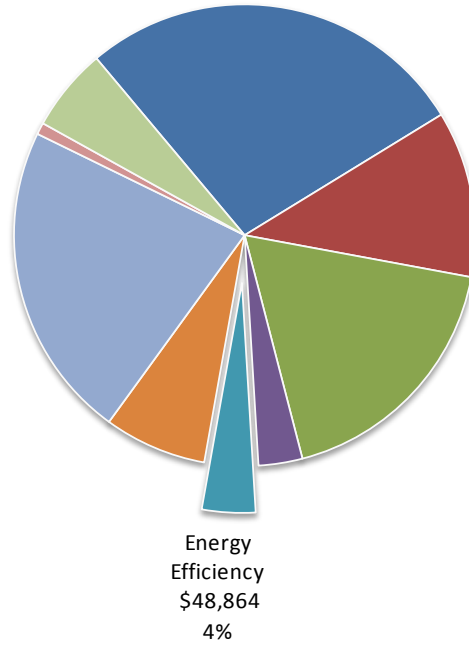
Challenges/Constraints

The bulk of spending is associated with existing wind power purchase contract obligations.

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3.5 ENERGY EFFICIENCY

FY 2014-2015 Average: Proposed IPR



The Conservation Rate Credit expired at the end of FY 2011, resulting in the drop in the Energy Efficiency spending levels shown in the table above.

Program Details

(\$\$\$)	2011			2012		
	Start of Year	Actuals	Delta	Rate Case	Start of Year	Delta
DSM Technologies	-	(9)	(9)	-	-	-
Conservation Acquisition	16,200	12,042	(4,158)	15,950	15,950	-
Low-Income Weatherization & Tribal	5,000	3,046	(1,954)	5,000	5,000	-
Energy Efficiency Development	11,500	5,330	(6,170)	11,500	11,500	-
Legacy Programs	1,000	624	(376)	1,000	1,000	-
Market Transformation	13,000	10,807	(2,193)	13,500	13,500	-
Conservation Rate Credit	29,500	27,636	(1,864)	-	-	-
Total	76,200	59,476	(16,724)	46,950	46,950	

(\$\$\$)	2013			2014			2015		
	Rate Case	Proposed IPR	Delta	IPR Target	Proposed IPR	Delta	IPR Target	Proposed IPR	Delta
DSM Technologies	-	-	-	-	-	-	-	-	-
Conservation Acquisition	15,950	15,950	-	16,444	16,444	-	16,754	16,754	-
Low-Income Weatherization & Tribal	5,000	5,000	-	5,155	5,155	-	5,252	5,252	-
Energy Efficiency Development	11,500	11,500	-	11,859	11,859	-	12,083	12,083	-
Legacy Programs	900	900	-	1,031	1,031	-	1,050	1,050	-
Market Transformation	14,500	14,500	-	13,919	13,919	-	14,180	14,180	-
Conservation Rate Credit	-	-	-	-	-	-	-	-	-
Total	47,850	47,850		48,408	48,408		49,320	49,320	

Description, Purpose and Responsibilities

When acquiring resources to meet planned future loads, the Northwest Power Act requires the administrator to first consider and acquire cost-effective conservation that is consistent with the Northwest Power and Conservation Council’s (Council) Power Plan. Expense funding is used towards this goal in three ways. First, the funding is used for program support such as technical service providers and research and evaluation, like that needed to quantify non-programmatic savings. Second, it is used to acquire a subset of the savings target set by the Power Plan, such as market transformation savings, low income weatherization savings, and reimbursable (energy efficiency development) savings. Including non-programmatic, these savings are forecast to make up nearly 25% of the total annual savings reported towards the Sixth Plan. Third, expense funding is used to pay for all labor that supports the conservation program (see Conservation Support in the Non-Generation Operations program for proposed spending levels for this labor).



Goals

Along with meeting public power’s share of conservation savings as defined in the Council’s Power Plan, BPA’s Long-Term Regional Dialogue Policy is to pursue conservation equivalent to all cost-effective conservation in the service territories of those public utilities served by BPA in partnership with public utilities at the lowest cost to BPA. The expense budget is used to support capital acquisition of savings and to achieve 25% of BPA’s share of the savings target.

Conservation Acquisition

- Program Infrastructure Support
 - Develop policies to encourage conservation, improving the region’s ability to achieve energy

efficiency through regional programs, engaging with customers and other project implementation stakeholders, conducting research and evaluations, and providing technical support for project implementation and innovation in new technologies. These expense funded initiatives support BPA's Energy Efficiency capital program that provides incentive dollars to achieve cost effective energy efficiency.

- Non-Programmatic Savings
 - Non-programmatic savings will target conservation occurring through codes and standards as well as outside of utility programs or market transformation efforts. For instance, thousands of compact fluorescent light bulbs are purchased and installed in the region without the use of utility incentives, making these efforts extremely cost effective to count toward public power's target. A portion of the Conservation Acquisition expense spending covers the necessary research, data collection and evaluation to capture these savings.
- Demand Response
 - Demand Response tools help utilities level out the spikes of energy consumption during times of peak use. BPA has several demand response pilots in the residential, commercial, and industrial sectors, as well as some in multiple sectors.

Low Income Conservation State and Tribal Grants

- BPA administers a grant program making funds available to the four Northwest states and recognized tribes within the region for the purpose of improving efficiency levels in qualified low-income residences. Grants to states are determined formulaically on a proportional basis using the most current census data of households with incomes below federal poverty guidelines. Grants to tribes for low income services are made on an application basis and take a variety of factors into consideration including geographic dispersion, prior participation and local needs.

Energy Efficiency Development (Reimbursable Activities)

- BPA provides assistance in a number of ways to other federal agencies in an effort to leverage energy saving achievement. The scope of activities is defined through inter-agency agreements and can include scoping audits, developing statements of work, facilitation of third party financing actions, construction procurement, project management, quality assurance, and reporting. Both direct and indirect costs for these services are fully paid for by the client agency, thus making these activities rate neutral to BPA.

Legacy Programs

- Funds still owed on prior conservation expenditures. The upfront capital to finance these measures was raised by others rather than BPA. The agency is now paying the equivalent of debt service.

Market Transformation Savings

- Market transformation savings leverage the regional market's power to accelerate innovation and adoption of energy-efficient products, services and practices. Examples include collaborating with manufacturers to integrate conservation into their product designs and with architects and builders to promote early adoption of energy efficient designs and practices. BPA partners with and is the major funder of the Northwest Energy Efficiency Alliance, which promotes market transformation.

Changes from the 2010 IPR

The Conservation Rate Credit was an expense funded credit on customers' power bills and was phased out at the end of FY 2011. The reduction in costs starting in FY 2012 as shown in the bar chart for Energy Efficiency earlier in this section is due to the Conservation Rate Credit expiring. The projects that were previously funded using this rate credit are now funded with capital.

New Programs/Projects

Program size and scale is always being evaluated and modified in response to customer and market needs. For example, compact fluorescent technology has been very popular for many years but, as codes, standards and markets have changed, so do programmatic acquisitions. Conservation is always adding new technologies to obtain savings. Examples include ductless heat pumps, heat pump water heaters and variable speed drives for HVAC systems. This new measure development will be accounted for in existing spending requests.

Risk and Impact of Operating at Cost Target

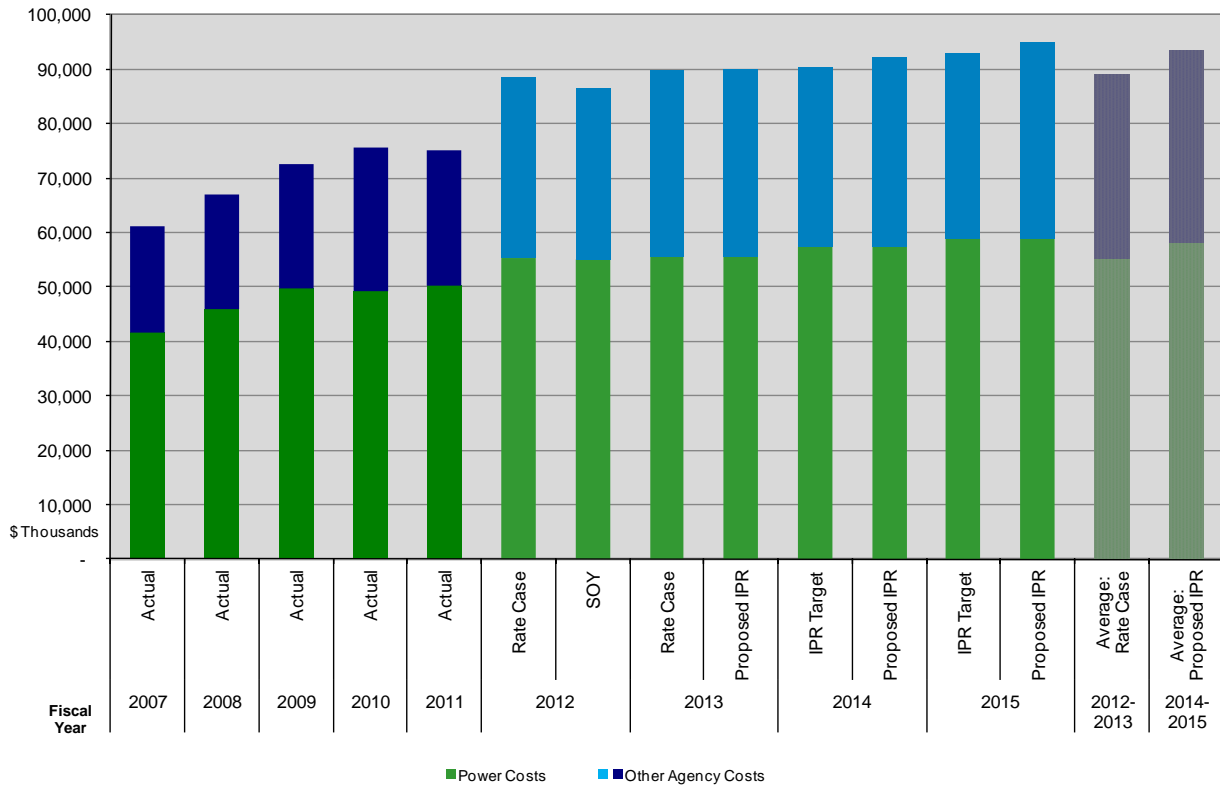
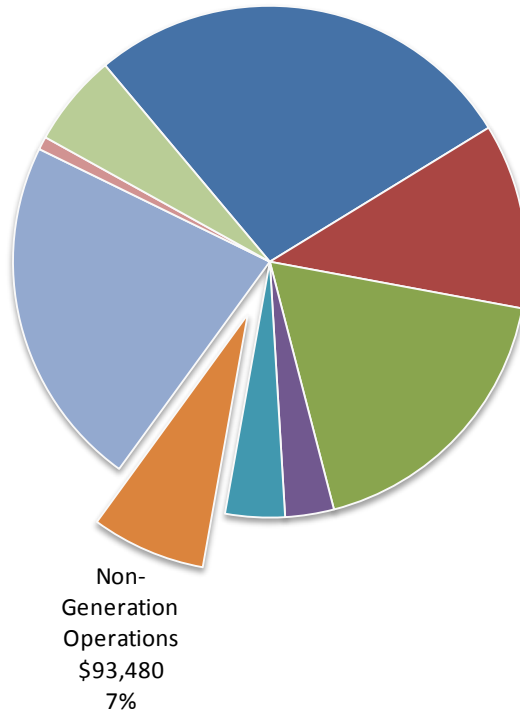
There is no additional risk for operating at the cost targets for Energy Efficiency because the Energy Efficiency program is not requesting an increase from the cost targets.

Challenges/Constraints

The costs for acquiring the expense portion of the Power Plan targets, currently estimated at nearly 25%, could end up being more than what is currently forecast and the agency has budgeted. Energy Efficiency estimates the cost of acquiring savings for each of the five years of the Sixth Power Plan. If actual costs are more than projected costs, there might not be enough funding to reach annual savings targets resulting in the possibility of missing the five year savings target.

3.6 NON-GENERATION OPERATIONS EXPENSE

FY 2014-2015 Average: Proposed IPR



Program Details

(\$\$\$)	2011			2012		
	Start of Year	Actuals	Delta	Rate Case	Start of Year	Delta
Information Technology	7,148	3,480	(3,668)	7,143	6,283	(859)
Generation Project Coordination	5,413	5,836	422	5,895	5,798	(97)
Slice Implementation	1,778	1,942	164	2,322	2,328	6
Operations - Scheduling	9,805	7,922	(1,883)	10,041	8,809	(1,232)
Operations - Planning	6,249	5,755	(494)	6,744	7,489	745
Power R&D Projects	5,030	4,934	(96)	5,622	5,631	9
Sales and Support	20,005	18,060	(1,946)	19,745	19,335	(410)
Strategy, Finance and Risk Management	18,373	14,134	(4,239)	17,907	18,504	597
Executive & Administrative Services	3,529	3,602	74	3,565	3,200	(365)
Conservation Support	9,569	9,472	(97)	9,478	9,279	(199)
Total	86,901	75,137	(11,764)	88,460	86,656	(1,805)

(\$\$\$)	2013			2014			2015		
	Rate Case	Proposed IPR	Delta	IPR Target	Proposed IPR	Delta	IPR Target	Proposed IPR	Delta
Information Technology	7,316	7,498	182	6,511	6,606	95	6,647	6,739	92
Generation Project Coordination	5,919	6,587	668	6,034	6,826	792	6,174	6,968	794
Slice Implementation	2,394	1,099	(1,295)	2,456	1,099	(1,357)	2,520	1,126	(1,395)
Operations - Scheduling	10,010	10,312	302	9,284	10,398	1,113	9,525	10,621	1,096
Operations - Planning	6,709	7,255	546	7,850	7,641	(209)	8,044	7,948	(96)
Power R&D Projects	5,939	5,939	-	5,820	5,820	-	5,939	5,939	-
Sales and Support	20,130	19,548	(582)	20,250	20,951	700	20,772	21,339	566
Strategy, Finance and Risk Management	18,289	18,470	180	19,353	19,263	(91)	20,198	20,359	161
Executive & Administrative Services	3,636	4,131	495	3,034	4,355	1,321	3,094	4,560	1,466
Conservation Support	9,608	9,272	(335)	9,795	9,094	(702)	10,045	9,309	(736)
Total	89,950	90,110	161	90,388	92,052	1,663	92,960	94,908	1,948

Description, Purpose and Responsibilities

This program includes the internal operating costs for Power Services along with costs charged to Power for Agency Services support. Power’s internal operating costs include personnel, salaries, benefits, awards, service contracts and supplemental labor necessary to perform the functions described below.

Power Services’ asset management function, in partnership with the Corps of Engineers and Bureau of Reclamation, coordinates hydro O&M, cultural mitigation, and capital investments at FCRPS hydropower dams under direct-funding agreements. In partnership with Energy Northwest, coordinate nuclear O&M and capital investments at the Columbia Generating Station.



The non-generation operations function in Power Services is responsible for operations planning and power scheduling for FCRPS. (See the Corps of Engineers and Bureau of Reclamation executive summary for more information on cultural mitigation activities.)

The requirements marketing function within Power Services creates and maintains the business interface with BPA’s utility customers, and is responsible for implementation of long-term power sales contracts with BPA’s public utility customers.

The bulk marketing function within Power Services is responsible for marketing, sales and account servicing in bulk power markets, including managing surpluses and deficits through bulk power sales and purchases for up

to two years.

Power Services' policy and rates function provides strategic and tactical direction to support the business planning, rates, policy development and analysis, decision support and systems of Power Services. This function assesses business performance in the context of Power Services' strategic vision, sales, and revenue targets, and provides analyses and managerial reports that explain differences between actual and target performance.

Power Services' energy efficiency function fosters and promotes the efficient use of energy in the Pacific Northwest by working with utility customers and other partners to administer BPA's conservation acquisition contracts, provide technical and administrative support for BPA's market transformation activities, and produce and deliver energy efficiency programs, products and services.

Support from Agency Services

General Counsel

- Provides direct support for power issues, including power marketing, renewables, fish and wildlife, generation project management and coordination, and associated finance and risk management issues.

Customer Support Services (CSS)

- Is the source of consolidated and aligned customer contract, metering, load forecasting and billing information, and interfaces with front office organizations of Power. CSS proactively reviews and administers contractual obligations as they impact bills, metering information and load forecasting.

Information Technology

- Implements and maintains automation solutions to meet Power business needs. These systems span a wide range of business needs from power scheduling systems to weather forecasting systems to Columbia River forecasting systems. IT also provides network connectivity, voice recording systems and personal computing devices, including desktops, laptops, tough books and handheld devices.

Technology Innovation

- Focuses the agency's technology initiatives in a coherent and disciplined approach and aligns them with BPA's strategic objectives. The chief technology innovation officer leads development and management of the agency strategy for how BPA researches, develops, demonstrates and deploys new technologies. (See Power R&D program in the tables above for the Technology Innovation program spending levels.)

Environmental Planning & Analysis

- Provides guidance and direction on the integration of environmental stewardship into BPA's business decision making. Provides strategic planning on environmental issues; environmental analysis, consultation, public involvement and documentation under federal environmental laws, including the National Environmental Policy Act (NEPA), the Endangered Species Act, the Clean Water Act and the National Historic Preservation Act; collaboration and coordination on environmental and cultural resource issues with federal, state, local, tribal and other partners and regulatory agencies; and other environmental client services.

Goals

Continue to provide reliable, low cost power to the Pacific Northwest in the context of sound business principles, while promoting efficient use of energy throughout the region. See individual Power Services sections for more details.

Changes from the 2010 IPR

For FY 2012, Power Services is managing to a staffing level that is nearly 5 percent below its FY 2011 allocated level and the level reflected in the 2010 IPR.

Risk and Impact of Operating at Cost Target

There is no additional risk associated with operating at the cost target for Power Services, because their proposed internal operating costs are equal to the cost targets. However, if additional unforeseen external requirements or regulations are placed on Power Services or workload for ongoing activities increase beyond expectations (for example, Columbia River Treaty, overgeneration management and wind integration), they would result in upward cost pressure on this program. In that case, either additional workload prioritization would be required to keep spending at the target level, which would result in some work not getting done, or additional funding would be required for Power Services to continue to meet its statutory obligations.

For more information on the risks and impacts of the Agency Services organizations operating at the cost target levels, see the Agency Services sections below.

Risk and Impact of Not Having Agency Support at the Necessary Level

General Counsel

- The risk attendant to not funding these activities is that there will not be enough devoted time (care and attention) to development of legally sustainable decisions in the areas of power marketing, renewables integration, fish and wildlife, and generation project management. The same risk attends to adequate defense of challenges to those decisions.

Customer Support Services (CSS)

- Not funding CSS at the target levels would affect BPA's ability to provide the necessary level of transparency of information that allows customers to participate in improving the quality and integrity of BPA and customer data.

Information Technology

- Automation provides the agency the means to meet evolving business needs and compliance requirements and to achieve operating efficiencies and cost savings. More IT systems are shifting from capital to expense funding. Lower expense funding reduces opportunities for operating efficiencies and customer programs. Additional risks are from unforeseen compliance requirements or new business requirements.

Technology Innovation (TI)

- Without the appropriate level of funding, Bonneville's Technology Confirmation/Innovation organization would not be able to continue to drive the research agenda and actively manage the technology portfolio to maximize the value of FCRPS assets. Technology Innovation is not proposing an increase from cost targets.

Environmental Planning & Analysis

- Is a service organization whose primary costs are the salaries of its staff, and the expenditures for supplemental labor and external consultants. Operating below the proposed IPR program level would affect the ability to cover the workload, and would result in decreased capacity to respond to Power Services' project and program needs, leading to longer timelines and delays in environmental analysis and compliance.

Increases in Needed Resources from Agency Services

General Counsel

- OGC is challenged to develop effective means to integrate renewable resources that may significantly affect Power Services and defend BPA rate and contracting activities. Also, development of the 2014 response to the court on the current biological opinion will continue to be a challenge. There has been a significant increase in legal work associated with the high water/high wind issue and with rate increases sought by regional IOUs for provision of transmission services to BPA and other customers.

Information Technology

- Some of the major drivers include implementing NERC CIP Version 5 regulations, creating an energy imbalance market and implementing a Security Operation Center.

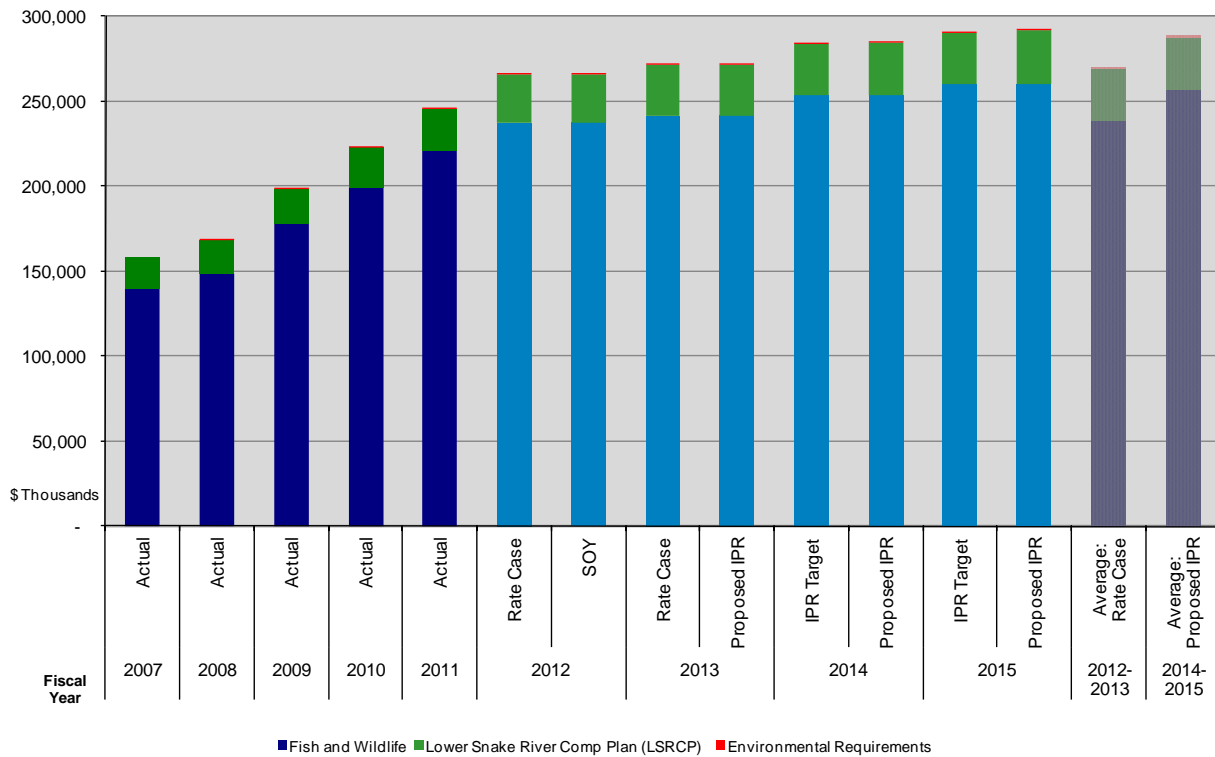
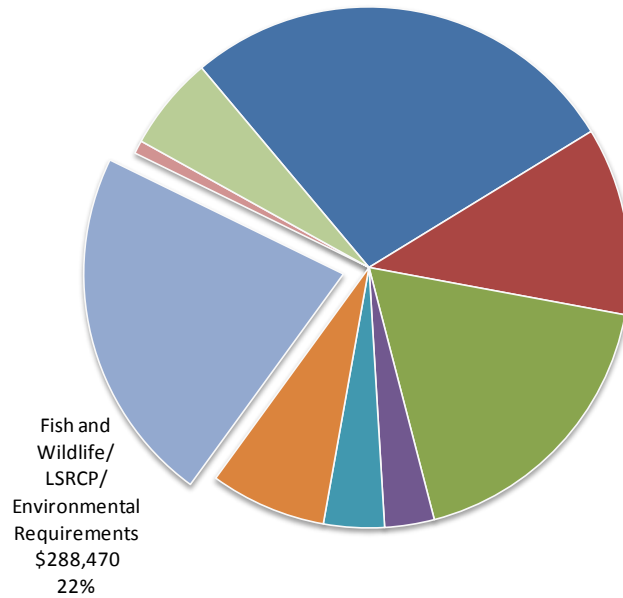
Challenges/Constraints

As with much of BPA, Power Services is faced with the potential for a large number of retirements from key positions in the next three to five years. The challenge is to develop current staff, hire additional staff and complete sufficient succession planning to allow Power's business to continue with minimal disruption. To aid in succession planning, Power Services has developed a robust student program as well as a rotational program for employees to cross train in other areas of Power Services.

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3.7 FISH AND WILDLIFE, LOWER SNAKE RIVER COMP PLAN (LSRCP) AND ENVIRONMENTAL REQUIREMENTS

FY 2014-2015 Average: Proposed IPR



Program Details

(\$\$\$)	2011			2012		
	Start of Year	Actuals	Delta	Rate Case	Start of Year ¹	Delta
Fish & Wildlife	225,000	221,048	(3,952)	237,422	245,950	8,528
Lower Snake River Comp Plan	24,480	24,466	(14)	28,800	28,800	-
Environmental Requirements	300	96	(204)	302	302	-
Total	249,780	245,609	(4,171)	266,525	275,052	8,528

¹To better ensure the ability to meet commitments, FY 2012 and 2013 spending estimates are being increased by a total of \$13 million, restoring in total half of the amount reduced in the 2010 IPR.

(\$\$\$)	2013			2014			2015		
	Case	IPR	Delta	IPR Target	IPR	Delta	IPR Target	IPR	Delta
Fish & Wildlife	241,384	245,950	4,566	254,000	254,000		260,000	260,000	-
Lower Snake River Comp Plan	29,900	29,880	(20)	29,693	30,670	977	30,252	31,670	1,418
Environmental Requirements	305	300	(5)	312	300	(12)	318	300	(18)
Total	271,589	276,130	4,541	284,005	284,970	965	290,569	291,970	1,401

Description, Purpose and Responsibilities

BPA’s Fish and Wildlife Program (the Program) implements hundreds of projects each year to mitigate for the impacts of the FCRPS dams. These actions are designed to satisfy obligations under the Northwest Power Act, the Endangered Species Act (ESA) and trust and treaty responsibilities to affected Indian tribes. They provide compliance with ESA biological opinions (BiOps), the Columbia Basin Fish Accords, wildlife settlements and other agreements.



The Program includes hydro actions to improve fish survival, tributary and estuary habitat protection and restoration actions, hatchery production to compensate for hydro fish losses and to aid conservation efforts, predator management, and research and monitoring. BPA implements these actions in coordination with the Northwest Power and Conservation Council (Council) and independent science review. The Program relies on a performance-based approach, for example, 96 percent dam survival for juvenile spring migrating fish.

The Lower Snake River Compensation Plan (LSRCP) operates and maintains a network of 11 hatcheries and 18 satellite facilities to mitigate for the losses of salmon and steelhead from the construction and operation of the four lower Snake River dams: Ice Harbor, Lower Monumental, Little Goose and Lower Granite. The program includes expenses for operations, evaluations and nonrecurring maintenance. Over 65 percent of the hatchery facilities constructed under this program are over 25 years old. BPA funds the LSRCP through a direct funding agreement with the U.S. Fish and Wildlife Service (a separate line item cost distinct from the Fish and Wildlife Program).

Support from Agency Services

Environment, Fish, and Wildlife

- Environmental Planning & Analysis provides environmental review, conducts consultations for proposed projects (for example, National Environmental Policy Act, permitting, ESA consultations and cultural

resource consultations with tribes and state historic preservation officers) and initiates public notification for land acquisitions. Pollution, Prevention and Abatement reviews potential land acquisitions for hazardous materials.

Supply Chain

- Procurement administers several hundred contracts each year to implement the fish and wildlife program. These contracts support achievement of BPA's mitigation responsibilities that are central to the Agency's primary responsibility under the Northwest Power Act and Endangered Species Act.

Information Technology

- Information Technology supports development and maintenance of systems integral to fish and wildlife operations (for example, Pisces and Taurus). Program development and management, contracting, invoicing, tracking of finances, and reporting on results are all supported by the IT systems.

Realty Services

- Realty Services provides a variety of support functions to Fish and Wildlife, including pre-acquisition activities (appraisal review, perfection of water rights and the like) for potential land acquisitions, closings on acquisitions and post-acquisition tracking.

General Counsel

- General Counsel supports Fish and Wildlife in the development and implementation of the Program, including biological opinions, Accords, MOUs, MOAs and long-term settlements, reviews pre-acquisition land documents and makes recommendations on Program development and interpretation.

Goals

BPA is committed to fulfilling its obligations and commitments under the FCRPS and other biological opinions, the Columbia Basin Fish Accords, wildlife settlements and other agreements, and the Council program.

As described further below, near term challenges include increased funding for BiOp estuary projects, unpredictable timing for large land acquisitions and hatchery projects that can skew spending, and the cost-shifting provisions of the Fish Accords that allow certain unspent funds from the early ramp up of the Accords to be spent in later years. Active budget oversight is being used to manage these challenges within budget to the fullest extent possible while fulfilling our commitments. As noted in the [2010 Final IPR Close-Out Report](#) these challenges and the reduction of \$13 million per year for FY 2012 and 2013 expenses in the 2010 IPR could result in spending temporarily exceeding spending estimates to meet binding legal obligations and other commitments. To better ensure the ability to meet commitments, FY 2012 and 2013 spending estimates are being increased by a total of \$13 million, restoring in total half of the amount reduced in the 2010 IPR. This increase is being split such that the total spending for each year is expected to be \$245.95 million, however the program will manage to a two-year total over the two-year period.

Short-term goals for the LSRCP are primarily focused on maintaining fish production at current levels, planning for future reforms to achieve best management practice, and addressing high priority deferred maintenance actions. In order to maximize flexibility in managing these programs, to the extent savings can be garnered in the LSRCP, they will be made available for the Fish and Wildlife Program.

Long-Term Objective

The Program's long-term goal through FY 2018 is the same as its short-term goal.

Other than inflation, increases are not anticipated in the projected capital and expense budgets for the Program. New potential commitments will be sequenced or reprogrammed from within existing Program

spending. For example, BPA may explore additional Accord agreements and wildlife settlements with interested agencies and tribes within long-term spending constraints. Following the expiration of the FCRPS BiOp and the Columbia Basin Fish Accords in FY 2018, there is the possibility of renewed Accord agreements for future priorities.

The LSRCP long-term strategy builds on its short-term goals with continuing improvements in rearing technology that allow for increased fish production using available water, expanding hatchery reforms to further advance best management practices, implementing cost-effective energy conservation initiatives for pumping and heating/cooling water and developing and implementing preventative maintenance as well as addressing deferred maintenance.

Changes from the 2010 IPR

- Ongoing BiOp litigation has resulted in a remand and need for an updated BiOp by January 2014. In the meantime, BPA is proceeding with full implementation.
- The Columbia River estuary is a priority area for restoration under the FCRPS BiOp. Estuary-related spending has increased by about \$10 million per year in order to meet the biological objectives.
- Initially, implementation of Fish Accords was slower than expected resulting in budgets being underutilized (partners needed time to implement projects effectively and spend at the levels agreed to in the agreements). They are now fully ramped up and unspent project budgets planned in the early years of the Accords (FY 2008-10) have subsequently been rescheduled to current and future fiscal years, as permitted in the agreements. This flexibility has resulted in additional funding needs for Accord partners (up to 120 percent of the original FY budget) in FY 2014-15 and beyond. As noted above, the FY 2012 and 2013 spending estimates are being increased by a total of \$13 million, restoring half of the amount reduced in the 2010 IPR.
- Hatchery Scientific Review Group (HSRG)/Hatchery Review Team (HRT) recommendations for hatchery reforms entail potential costs not previously planned for.

Risk and Impact of Operating at Cost Target

For the Program, the proposed IPR funding levels and the IPR targets are equal. Therefore, there are no additional risks associated with operating the Program at the cost targets.

For LSRCP, the two classes of activities that will not get funded at the target funding level are deferred maintenance (including energy conservation and preventative maintenance) and activities to meet best management practices as recommended by HSRG/HRT.

The consequences of reduced preventative maintenance or continued deferral of maintenance are typically higher future operating and capital costs. There is also increased risk of catastrophic failure of equipment that could result in emergency equipment replacements (typically at higher cost) or loss of fish. Reduced implementation of best management practices could result in increased risk of adverse impacts on ESA-listed stocks.

Challenges/Constraints

- Legal challenges to the FCRPS BiOp and the ongoing remand create future uncertainty for implementation of the Program, particularly for tributary and estuary habitat actions. The potential for additional requirements and ESA listings exists.
- Another challenge involves the implementation of the Fish Accords. In the early years of the Accords, partners were ramping up projects at a slower rate than expected and portions of the annual budgets

were underutilized. Accord partners have subsequently, per the flexibility in the Accords, moved unspent funding to current and future fiscal years. A significant challenge is to make these underutilized budgets available while continuing to support other commitments.

- Larger land acquisitions pose challenges to spending allocations. These large land acquisitions are difficult to plan as numerous uncertainties surround them (availability and permitting, for example); nevertheless, BPA must absorb these opportunities into available budgets.
- The costs associated with implementing the FCRPS BiOp have risen (for example, habitat restoration in the estuary). The fish and wildlife program has absorbed these increasing costs into existing budgets through aggressive project management and budget efficiencies.
- Congressional appropriations may be limited for capital hatchery improvements/reforms at LSRCF facilities.

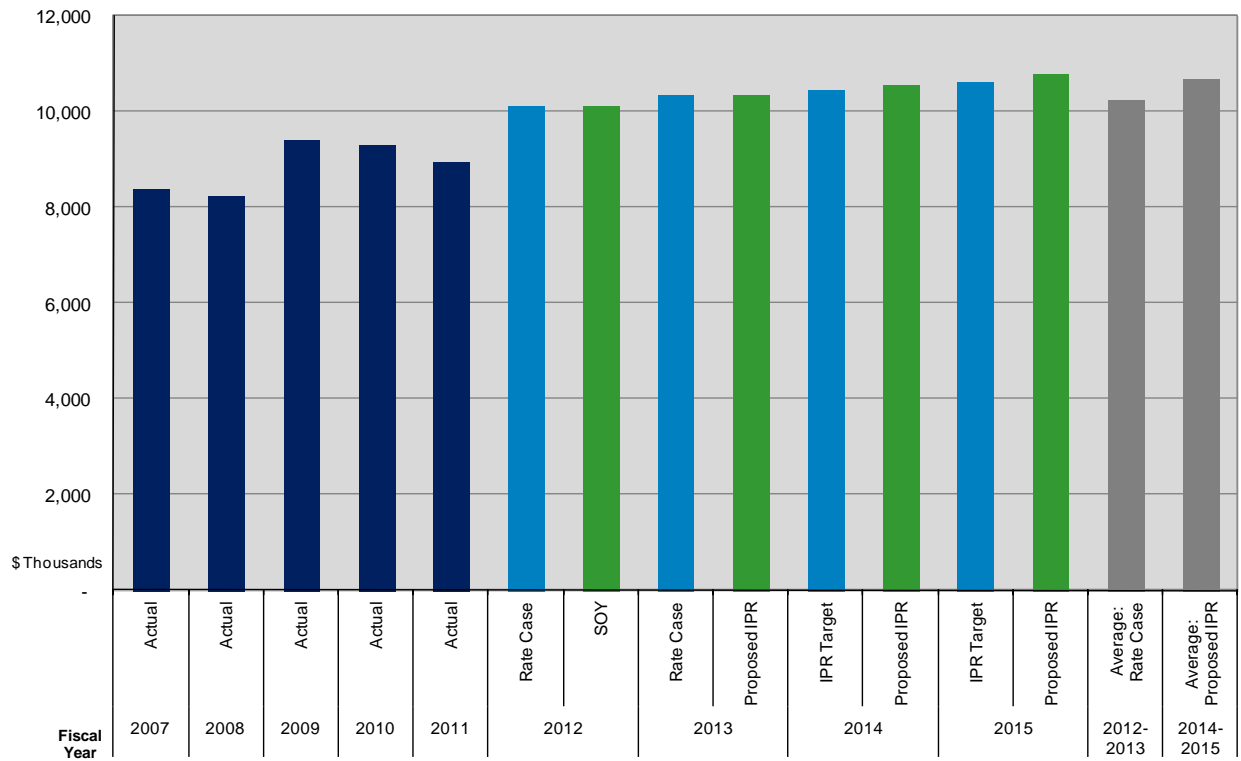
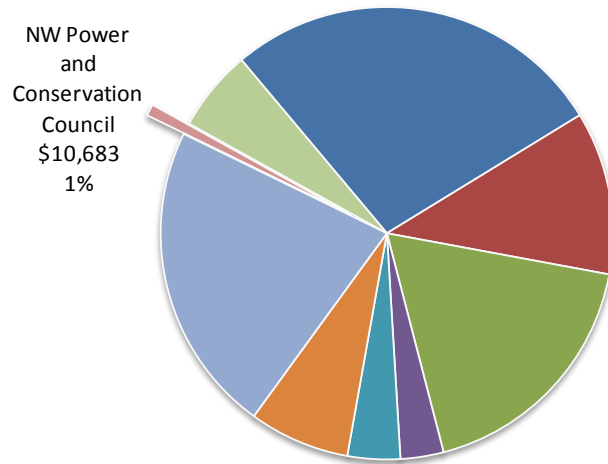
Risk of not having Agency Support at the Necessary Level

- Failure to fully support the Fish and Wildlife Program could affect BPA's ability to meet its commitments under the Columbia Basin Fish Accords, BiOps, wildlife settlements and the Council program. The Fish Accords, BiOp projects, wildlife settlements and BPA overhead account for approximately 80 percent of program spending, while approximately 20 percent is for other projects under the general program (that is, non-Accord and non-BiOp). Full implementation of the Program, in a cost effective manner, reduces the risk of litigation, including potential court action on FCRPS operations and off-site mitigation.

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3.8 NORTHWEST POWER AND CONSERVATION COUNCIL (NWPPCC)

FY 2014-2015 Average: Proposed IPR



Program Details

	2011			2012		
	Start of Year	Actuals	Delta	Rate Case	Start of Year	Delta
(\$\$\$) NW Power & Conservation Council	9,934	8,930	(1,004)	10,114	10,114	-

	2013			2014			2015		
	Rate Case	Proposed IPR	Delta	IPR Target	Proposed IPR	Delta	IPR Target	Proposed IPR	Delta
(\$\$\$) NW Power & Conservation Council	10,355	10,355	-	10,428	10,568	140	10,624	10,799	175

Description, Purpose and Responsibilities

The Northwest Power and Conservation Council was authorized by Congress and established by the states of Washington, Oregon, Idaho, and Montana as part of the Northwest Power Act of 1980. The principal duties of the Council are (1) develop a regional power plan, (2) develop a fish and wildlife program as part of the power plan, and (3) provide for broad public participation in these processes. BPA provides funding for the Council under a formula specified by the Power Act and is required by the Act to make decisions that are consistent with the Council’s plan and program.



Goals

The Act requires the Council review its power plan every five years, beginning with a review of the fish and wildlife program. During FY 2013-15, the Council will review and possibly revise the program, complete a mid-term review of its Sixth Power Plan (anticipated by the end of 2012), and potentially issue a Seventh Power Plan (2015). BPA will work closely with its utility customers, the Council, and Council staff to review the program and the supply, demand, and price forecasts in the power plan, and also to shape issues related to the plan’s resource portfolio strategy -- in particular conservation targets for the region, BPA, and public utilities.

BPA is also working with the Council, its independent science panel and independent economic advisory panel, and project sponsors in ongoing review of all the projects in the Council’s Fish and Wildlife Program to ensure they are consistent with the program, based on sound scientific principles, benefit fish and wildlife, have clearly defined objectives and outcomes with provisions for monitoring and evaluation, and employ cost-effective measures to achieve program objectives.

Long-Term Objective

Continue to work with utility customers to acquire public power’s share of the target for conservation in the Council Power Plan. Work with Council members and staff to meet BPA’s legal responsibilities under the Endangered Species Act, the Northwest Power Act, and other applicable statutes to achieve biological objectives for fish and wildlife and verify their accomplishment. Ensure continued financial stability and predictability, and fiscal responsibility.

Changes from the 2010 IPR

Changes in the wholesale power market caused by factors such as decreasing natural gas prices, lower-than-expected load-growth, and increased wind capacity in the Northwest may affect implementation of the

Council's Sixth Power Plan. The Council will address these impacts in the mid-term review of the plan.

Risk and Impact of Operating at Cost Target

Operating at the cost target level would be inconsistent with the terms of the three year funding agreement BPA has established with the Council. The purpose of this funding agreement was to provide certainty for future funding obligations and to avoid unexpected cost increases. The agreement has been successful in this purpose and should be retained. The program ramifications and the political impacts for not upholding our commitment to the Council would add unnecessary risk to future negotiations and agreements with the Council.

Challenges/Constraints

In power planning, continue to meet public power's share of the council's conservation goal and maintain the current trajectory of energy efficiency accomplishments for the benefit of customers despite declining market power prices and utility revenues. Scope and produce a power plan for the region in the face of rapidly-changing markets for gas, coal, wind, and hydroelectricity. Coordinate an appropriate mid-term review of the current power plan, and prepare for a new power plan.

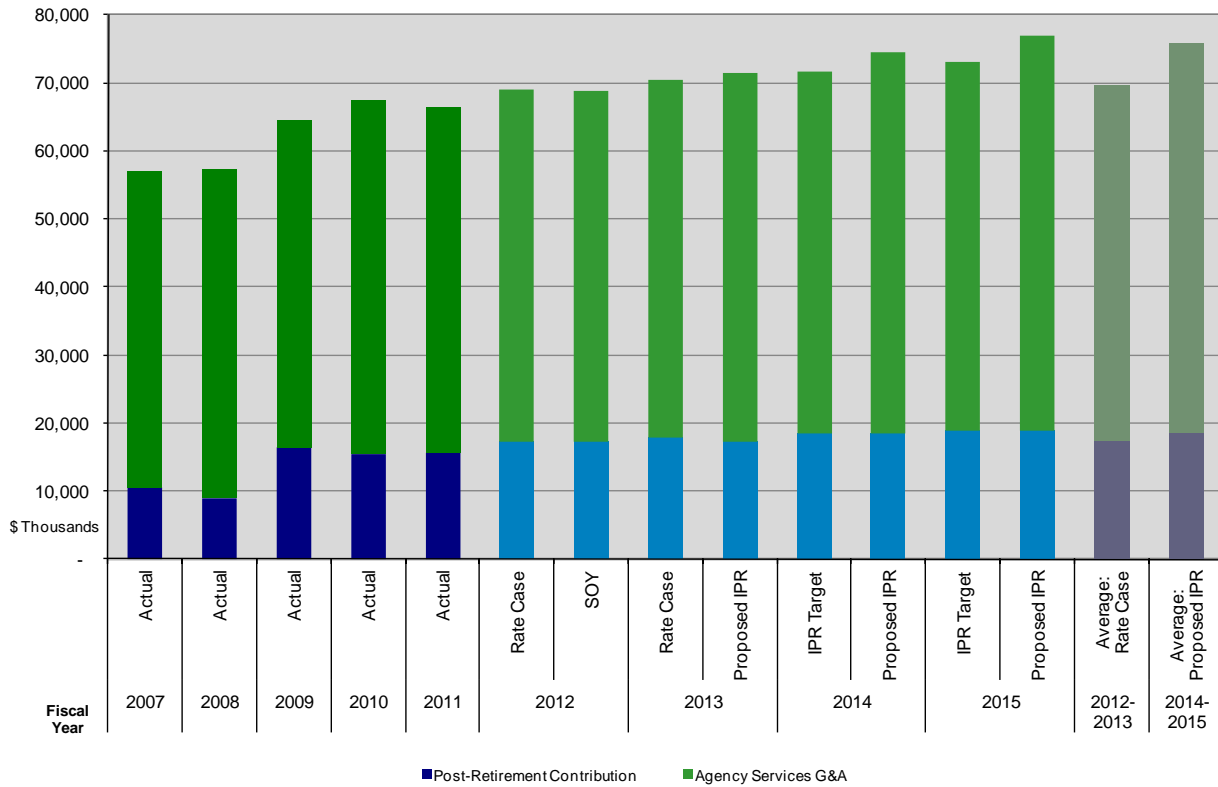
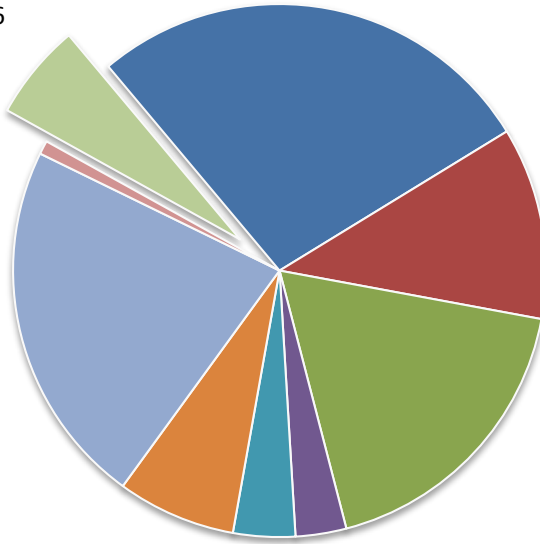
In fish and wildlife planning, review and possibly revise the program, continue the ongoing review of projects that implement the program, apply independent science review on each project, and address requests, as appropriate and feasible, for increased funding for existing projects (beyond fiscal year contracted levels) and growing demand for additional/new projects.

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3.9 POWER INTERNAL SUPPORT

FY 2014-2015 Average: Proposed IPR

BPA Internal Support
\$75,736
6%



Program Details

Corporate Programs Recovered Directly Through Power Services

	2011			2012		
	Start of Year	Actuals	Delta	Rate Case	Start of Year	Delta
Post-Retirement Benefits	15,579	15,579		17,243	17,243	-
Agency Services G&A Allocations	47,886	50,861	2,976	51,735	51,576	(159)
Total	63,464	66,440	2,976	68,978	68,819	(159)

	2013			2014			2015		
	Rate Case	Proposed IPR	Delta	IPR Target	Proposed IPR	Delta	IPR Target	Proposed IPR	Delta
Post-Retirement Benefits	17,821	17,243	(578)	18,501	18,501	-	18,819	18,819	-
Agency Services G&A Allocations	52,662	54,235	1,573	53,204	55,946	2,742	54,268	58,206	3,938
Total	70,483	71,478	995	71,705	74,447	2,742	73,087	77,025	3,938

Description, Purpose and Responsibilities

Internal support consists of two separate programs, Additional Post Retirement Benefits Contributions and Power Agency Services G&A. The internal support program is included in both the power and transmission revenue requirements. Since the program is the same for each business unit, the full narrative is captured here in the Power business unit section and only a brief summary and corresponding table are included in section [4.10](#) for the Transmission business unit.

Additional Post-Retirement Contribution (APRB):

Both federal employers and their employees contribute a percentage of eligible employee compensation toward funding the employees’ post retirement benefits. The Agency and employee contribution rates under the Civil Service Retirement System (CSRS) are 7 percent each. Under the Federal Employees Retirement System (FERS), the contribution rates are 11.7 percent and 0.8 percent, respectively. The Federal Government has determined these contributions are not sufficient to fully fund the future cost of post retirement benefits, leaving the plans under funded. Employees also usually participate in the Federal Employees Health Benefits Program (FEHB) and/or the Federal Employees’ Group Life Insurance Program (FEGLI); these plans are similarly underfunded. Beginning in 1998, the BPA Administrator elected to include an additional post-retirement contribution as an operational expense as part of power and transmission rates for the FCRPS. Therefore, BPA voluntarily remits to U.S. Treasury each year, in the year-end payment, a contribution as an effective offset to the under funded portion. The contribution includes component amounts that represent both BPA retirees and the retirees related to the power producing operations of the Corps and Reclamation.

Agency Services G&A:

BPA has 15 G&A cost pools: Executive; IT Applications System Support; Security; Legal Services; Human Resources; Finance and Accounting; Safety; IT Management and Administrative; IT Infrastructure; IT Cross Agency Projects; Workplace Services; Public Affairs; Supply Chain Purchasing; and Dedicated Workplace Services Power/Transmission.

These pools are used to spread shared corporate costs to the Power and Transmission business units. The G&A allocation rates are reviewed and, if appropriate, updated on an annual basis. Each pool is examined to determine the appropriate drivers of cost. The drivers are used to determine the allocation rates. The costs associated with these pools are assigned to the Agency Services G&A program for each business unit.

In addition, BPA has nine business support pools. These are: Industry Restructuring; Risk; IT Dedicated Projects Power/Transmission; Supply Chain Administrative; Technology Innovation; Aircraft Services; Billing and

Metering Services; and Contracting and Forecasting Services. These Business Support pools are assigned to the Power Services and Transmission Services programs that are directly benefitted by the services provided. The description of these services can be found in each benefitting program summary.

The G&A and Business Support pools are collections of costs from the centralized Agency Services organizations. The description of products and services provided by these organizations can be found in the individual organizations executive summaries.

Goals

The Agency Services organizations seek to provide governance and support to the business units at the lowest possible cost, with costs being allocated appropriately.

The near-term and long-term objectives for each of the organizations contributing to the Agency Services G&A pools can be found in the individual organizations executive summaries.

Changes from the 2010 IPR

Agency Services G&A:

Before each IPR process, BPA's Accounting and Reporting group conducts a review of the [Agency Services cost allocations pools](#) and the cost drivers used to assign Agency Services costs to power and transmission rates. As part of this review, they meet with key managers to verify that the makeup of the cost pools and the drivers are up-to-date and accurately reflect cost causation. Potential changes to allocations are presented to the Chief Accounting Officer and the Chief Financial Officer for review and approval. They are then implemented in the IPR, the upcoming year's budgets and actuals. The accounting review for the 2010 IPR resulted in minor changes to a number of pools. The most significant change came in the portion of overheads assigned to transmission capital, which increased due to the large transmission capital programs.

Summary of changes in allocation percentages:

- Security Services cost pool rate changed from 22 percent for Power, 77 percent for Transmission and one percent for F&W to 10 percent for Power, 88 percent for Transmission and 2 percent for F&W based on updated security strategic priorities and new organizational structure.
- Accounting and Finance cost pool rate changed from 50-50 percent to 45 percent for Power and 55 percent for Transmission due to discontinuing direct charging by certain finance personnel and using drivers for Disbursements and Payroll.
- Risk Management changed from 42 percent Power and 58 percent Transmission to 60 percent Power and 40 percent Transmission based on removal of COOP from the Risk Office offset by increased work performed for Transmission.
- Supply Chain Purchasing Services changed from 38 percent Power, 25 percent Transmission and 37 percent F&W to 41 percent Power, 33 percent Transmission and 26 percent F&W due to increased purchasing services for Transmission.
- Billing and Metering changed from 58 percent for Power and 42 percent for Transmission to 52 percent for Power and 48 percent for Transmission based on a direction of effort study.
- Contracts and Forecasting changed from 48 percent for Power and 52 percent for Transmission to 53 percent for Power and 47 percent for Transmission based on changes in workload for the two business lines.

The significant changes for each of the organizations contributing to the Agency Services G&A pools can be found in the individual organizations executive summaries.

Risk and Impact of Operating at Cost Target

The Agency Services G&A funding levels are determined by the level of service required to support the business units. If the Agency Services budgets are reduced from the proposed level to the cost target levels, there are some services that could no longer be provided. Those services are outlined in each of the individual organizations executive summaries.

Challenges/Constraints

Agency Services G&A:

The Agency Services organizations continue to seek efficiencies. The challenges and constraints for each of the organizations contributing to the Agency Services G&A pools can be found in the individual organizations executive summaries.

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4.1 TRANSMISSION OVERVIEW

FY 2014-15 is a time of great promise for the Federal Columbia River Transmission System (FCRTS). A new generation of technological improvements, such as the Western Interconnection Synchrophasor Program (WISP), promise unprecedented levels of precision in real-time Transmission system operations, and the potential to optimize both available Transmission capacity and system reliability.

At the same time, a series of challenges is driving the costs of planning, operating and maintaining one of the world’s largest and most sophisticated integrated Transmission networks upward:

- The swiftly-evolving mandatory reliability standards compliance landscape is significantly increasing BPA workload and costs
- Rapid growth in the volume of renewable energy connecting to the FCRTS has dramatically increased wind integration costs and demand for balancing services
- Compliance requirements include significant mandatory physical upgrades to an aging FCRTS, driving maintenance costs upward.

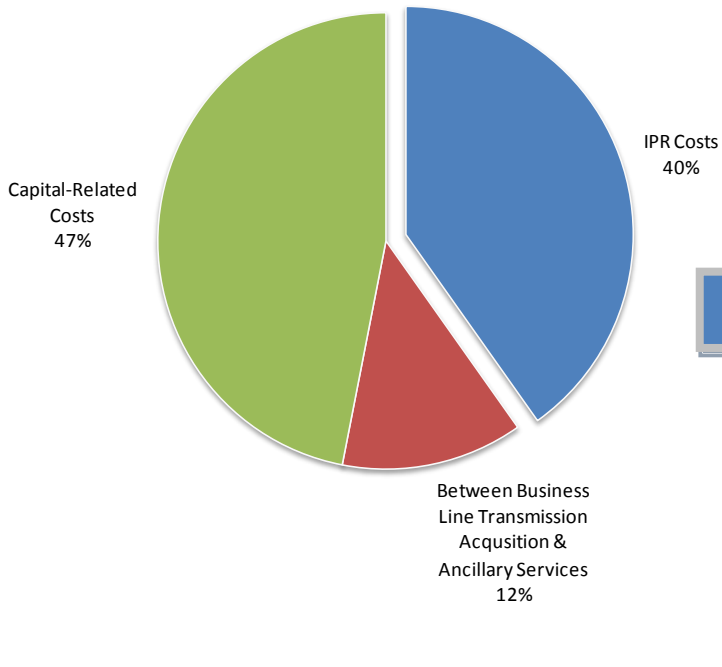
Despite these pressures, in FY 2011, Transmission Services’ actual IPR operating expenses came in \$26 million below start-of-year budget levels, thanks to dedicated cost management strategies. Transmission spending levels are forecast to increase at a compound annual growth rate of 3.1 percent from start-of-year 2012 to 2015.

Comparison of Forecast Growth Rate in 2010 IPR to 2012 IPR

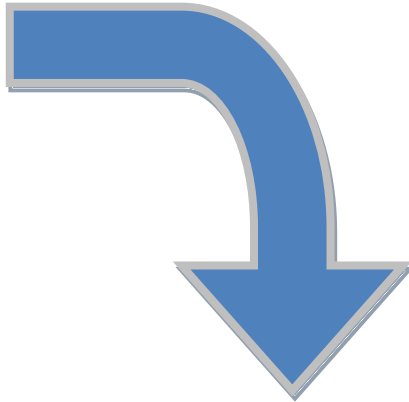
Transmission	2010 IPR	2012 IPR
	FY 2009 Actuals to FY 2013 Final IPR	FY 2011 Actuals to FY 2015 Proposed
Overall 5-year change	26.4%	21.5%
Compound Annual Growth Rate	6.0%	5.0%

The 2-year average proposed “IPR Operating Expense” levels for the FY 2014-2015 period reflect increases over the FY 2012-2013 rate case forecasts by 6.3 percent for Transmission.

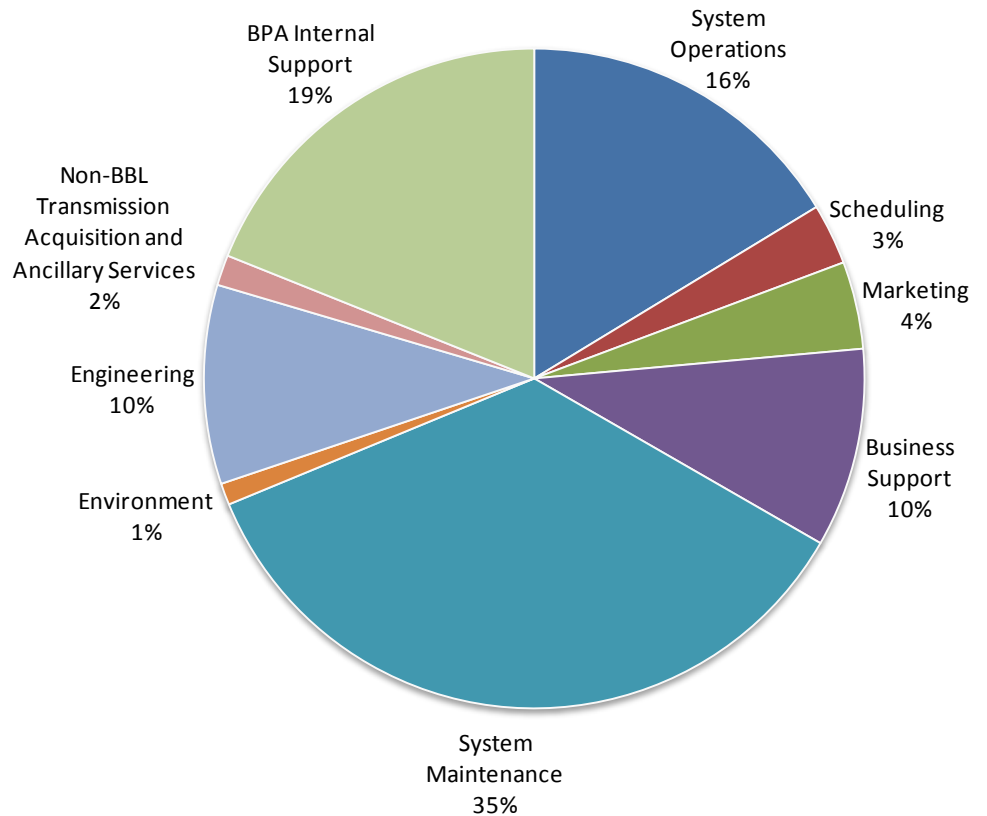
Potential Transmission Revenue Requirement
Proposed Transmission Services Expenses FY 2014-15



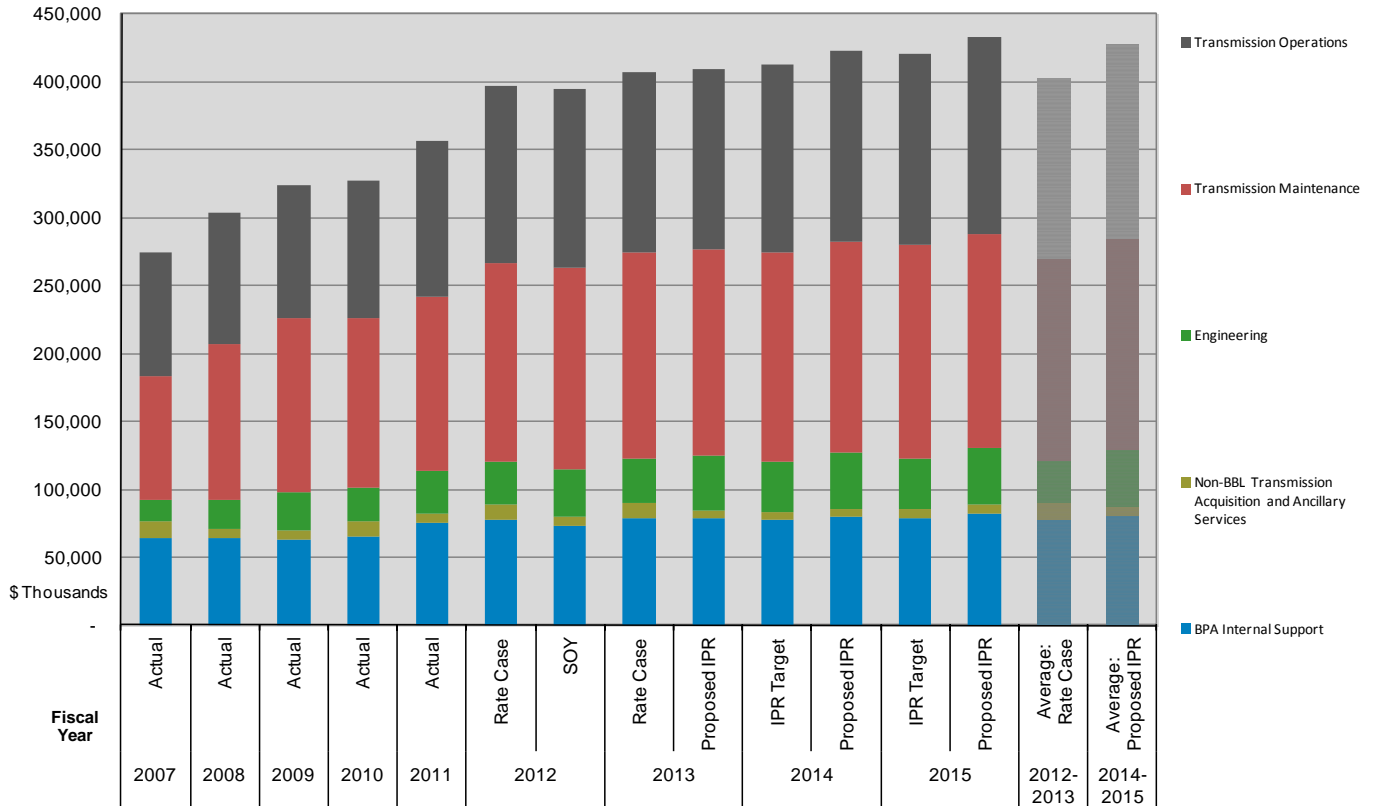
The revenue requirement includes costs outside the scope of the IPR.



Transmission Services IPR Costs
FY 2014-2015 Average: Proposed IPR



Transmission Services Expense Summary



Transmission Summary Statement of Program Expenses

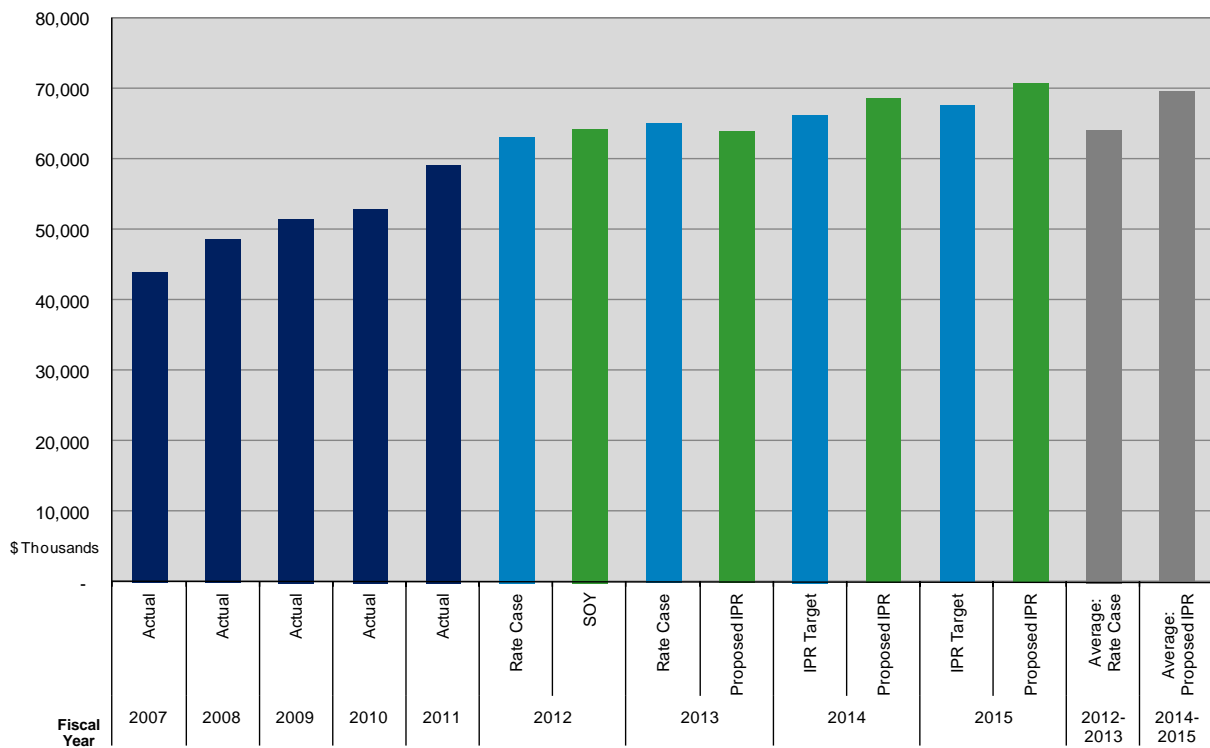
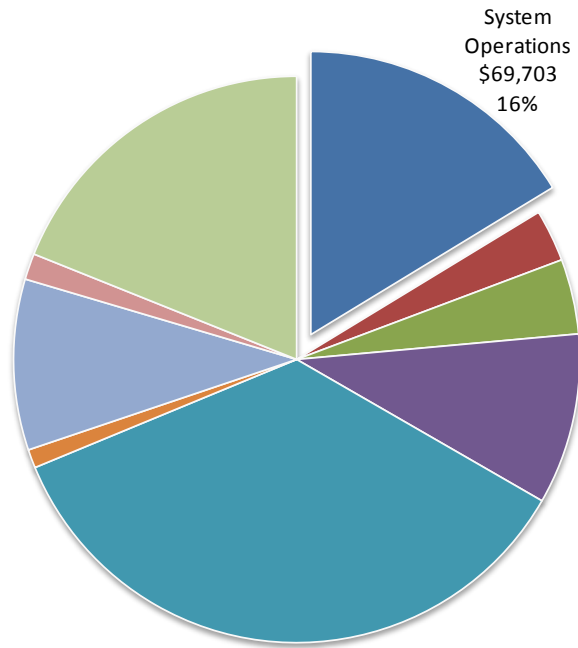
	2011			2012		
	Start of Year	Actuals	Delta	Rate Case	Start of Year	Delta
(\$\$)						
Costs Described in IPR						
Operations	128,088	114,010	(14,077)	130,050	131,650	1,600
Maintenance	142,151	128,937	(13,214)	146,713	148,546	1,833
Engineering	32,033	30,895	(1,138)	31,800	35,050	3,250
Non-Between Business line Acquisitions and Ancillary Services	7,531	6,750	(782)	11,420	5,827	(5,593)
Agency Services G&A	71,888	75,645	3,758	77,100	73,673	(3,427)
Subtotal	381,691	356,237	(25,454)	397,083	394,746	(2,337)
Other Costs*						
Between Business Line Acquisitions and Ancillary Services	99,356	109,352	9,996	126,953	126,960	7
Reimbursables	9,920	13,807	3,887	9,917	10,025	108
Subtotal	109,276	123,159	13,882	136,870	136,985	115
Total	490,968	479,396	(11,572)	533,953	531,731	(2,222)

	2013			2014			2015		
	Rate Case	Proposed IPR	Delta	IPR Target	Proposed IPR	Delta	IPR Target	Proposed IPR	Delta
(\$\$)									
Costs Described in IPR									
Operations	133,590	133,372	(218)	137,828	140,606	2,778	140,776	144,319	3,543
Maintenance	150,831	151,963	1,132	153,971	154,250	279	157,165	157,910	744
Engineering	32,803	40,192	7,389	36,893	41,642	4,748	37,648	41,773	4,125
Non-Between Business line Acquisitions and Ancillary Services	11,590	5,438	(6,152)	6,010	6,316	307	6,123	6,432	309
Agency Services G&A	78,781	78,816	35	77,677	79,642	1,966	79,233	82,218	2,985
Subtotal	407,595	409,781	2,186	412,379	422,457	10,078	420,946	432,652	11,705
Other Costs*									
Between Business Line Acquisitions and Ancillary Services	130,489	130,490	1	130,490	130,490	-	130,490	130,490	-
Reimbursables	9,914	10,064	151	10,530	10,530	-	10,745	10,745	-
Subtotal	140,403	140,555	152	141,020	141,020	-	141,236	141,236	-
Total	547,998	550,336	2,338	553,399	563,477	10,078	562,182	573,887	11,705

*Other Costs are presented but not described in detail during the IPR process.

4.2 SYSTEM OPERATIONS

FY 2014-2015 Average: Proposed IPR



Program Details

(\$\$\$)	2011			2012		
	Start of Year	Actuals	Delta	Rate Case	Start of Year	Delta
Information Technology	7,468	6,768	(699)	7,349	7,370	21
Power System Dispatching	12,285	11,649	(636)	12,336	12,979	643
Control Center Support	15,399	14,753	(646)	14,083	15,076	994
Technical Operations	7,092	4,725	(2,367)	8,385	7,401	(984)
Substation Operations	21,269	21,286	18	21,065	21,417	352
Total	63,513	59,182	(4,331)	63,218	64,244	1,026

(\$\$\$)	2013			2014			2015		
	Rate Case	Proposed IPR	Delta	IPR Target	Proposed IPR	Delta	IPR Target	Proposed IPR	Delta
Information Technology	7,529	7,298	(230)	7,635	7,419	(216)	7,793	7,573	(220)
Power System Dispatching	12,748	12,748	-	13,589	13,589		13,892	14,123	231
Control Center Support	14,498	14,998	500	15,687	18,562	2,875	16,015	19,298	3,283
Technical Operations	8,623	7,197	(1,427)	6,897	6,745	(152)	7,049	6,974	(75)
Substation Operations	21,735	21,634	(101)	22,407	22,307	(100)	22,900	22,815	(85)
Total	65,133	63,875	(1,258)	66,215	68,622	2,407	67,650	70,783	3,134

Description, Purpose and Responsibilities:

System Operations contains expenses for power system dispatching, control center support, technical operations, substation operations and Agency Services cost s for IT. Many of the programs provide key technical support for BPA’s implementation of North American Electric Reliability Corporation (NERC) mandatory reliability standards and federal cyber security standards.

Information Technology: Implements and maintains automation solutions to meet Transmission business needs, including transmission asset tracking systems, Fiber Management Systems (TCMS), geospatial solutions (eGIS).

Power System Dispatching: Provides dispatching, control, and monitoring of the electric operation of the Federal transmission system.

Control Center Support: Provides planning, engineering, design, construction and O&M support for infrastructure used by power system dispatchers to operate and control the Transmission grid, including 24/7 monitoring of Control Center automation and the system-wide communications network.

Technical Operations: Optimizes use of the transmission system while maintaining known safe operating limits by providing products and specialized technical and operational support for real-time dispatch of the transmission system. Coordinates with other internal groups, public utility customers and constituents, Western Interconnection utilities, and regional and national reliability entities, development and management of near-term operational transfer capabilities, outage coordination support, development of control center automation requirements, and providing primary technical oversight for crucial Transmission reliability and scheduling functions such as SCADA, RAS, and disturbance monitoring and reporting systems.

Substation Operations: Responsible for field operations, including station inspections, switch orders, switching, first response, emergency response, and outage planning. Develops policies, procedures and standards for substation operations, and is responsible for BPA’s switching and clearance procedures, management of access to energized facilities and development of the Operations Technical Manual.

Goals

Information Technology: Long-term objective is to maintain a reliable and secure infrastructure. Near-term goals include continued development of cloud-based Software as a Service (SaaS) solutions. Potential SaaS

candidates include Talent Acquisition, Ecommerce Phase II, Aircraft Services and Disaster Recovery.

Power System Dispatching: Maintain a safe and reliable power system; enhance BPA's ability to coordinate required outages by embracing new technology as it becomes available, training system dispatchers in best industry practices, continued response to real-time events on the power system, and continue to implement new tools to improve situational awareness of the power system.

Control Center Support: Upgrade critical control center systems that provide real-time monitoring of the power grid, provide improved tools for dispatchers, optimize management and maintenance of these systems, support the following initiatives, many of which are driven by statutory requirement:

- Western Interconnection Synchrophasor Program (WISP), which will support improved dispatcher real-time power system visibility and situational awareness, improved modeling validation, and improved post-disturbance analysis.
- NERC CIP 002-011 Version 5: A new and greatly expanded version of NERC's Critical Infrastructure Protection (CIP) standards is scheduled to move into full regulatory implementation in early 2015.
- Network Operations Center: System Operations is establishing a Network Operations Center at Dittmer Control Center (DCC) to support the centralized operation, maintenance, and administration of the new telecommunication and network systems that are being established through capital projects, including WISP, OMET, and mobile radio replacement.
- NERC EOP 008: The new NERC Emergency Operations Planning standard is intended to ensure continued reliable operation of the bulk electric system in the event that a control center becomes inoperable. Compliance with NERC EOP 008, which goes into effect on July 1, 2013, will impose greatly expanded reporting requirements, processes, and procedures.
- DC RAS Upgrade Project: This project will upgrade and replace BPA's current DC RAS systems, which have been in service since 1988. The project is scheduled to be completed in 2013.
- Other near-term Control Center Support initiatives include enhanced wind integration capabilities, enhanced within-hour and sub-hour dispatching, and continued improvement of BPA's cyber security capabilities

Technical Operations: Implement new flowgates to ensure compliance with NERC ATC standards, explore seven-day-per-week technical operations coverage (and possible 24/7 coverage) in response to new NERC standards, implement new tools to increase real-time and near-term visibility of system conditions, develop more accurate modeling tools to enhance system protection and reliability. Strategies include:

- Maintain compliance with NERC Available Transfer Capability (ATC) reliability standards.
- Plan for implementation of Sustain Transmission that is Available and Reliable (STAR Program), a long-term approach to optimizing transmission availability.
- Implement solutions that allow more renewable resources to operate reliably in the FCRPS, such as the development of Energy Imbalance Markets.
- Support previously-implemented solutions to optimize their operational and compliance benefits.

Substation Operations: maintain continuity of substation operations support at both the central technical and field levels.

Changes from 2010 IPR

Control Center Support: increased costs and workload demands associated with compliance with regulatory standards is the largest single change since the 2010 IPR.

Technical Operations: formed the STAR core team to maintain compliance with NERC ATC standards and optimize transmission availability. Began preparing for dynamic energy market changes (such as a possible

Energy Imbalance Market or changes to BPA's long-term balancing strategy).

New Programs/Projects

Control Center Support

- Network Operations Center will require 24/7 staffing, a significant increase in FTE. The Network Operations Center is critical to regulatory compliance for BPA's communications systems.
- Increased functionality of the Monroe Control Center under NERC EOP 008 will significantly enhance the bulk electric system's resiliency and reliability, but will also require additional staffing expenditures.
- WISP implementation in FY 2013 will allow the Control Centers to monitor the power system in ways that have never been possible before in terms of real-time system conditions and after-the-fact analysis. But will increase data traffic exponentially, requiring additional monitoring and support.

Technical Operations

- As the STAR program evolves from implementation to maintenance, permanent staffing will likely be required.

Risk and Impact of Operating at Cost Target

- Non-compliance with NERC mandatory reliability standards.
- Liability associated with outages.
- Risk of not receiving the full benefit of BPA's significant capital investment in new technology such as WISP.
- Software required for compliance has a significant annual licensing cost. Without these investments, BPA will be at-risk for non-compliance with multiple NERC standards.
- Reduced available system capacity due to inability to calculate the most accurate system reliability limits, resulting in over conservative ATC calculations.
- Potential loss of the STAR program, resulting in loss of Transmission availability optimization.

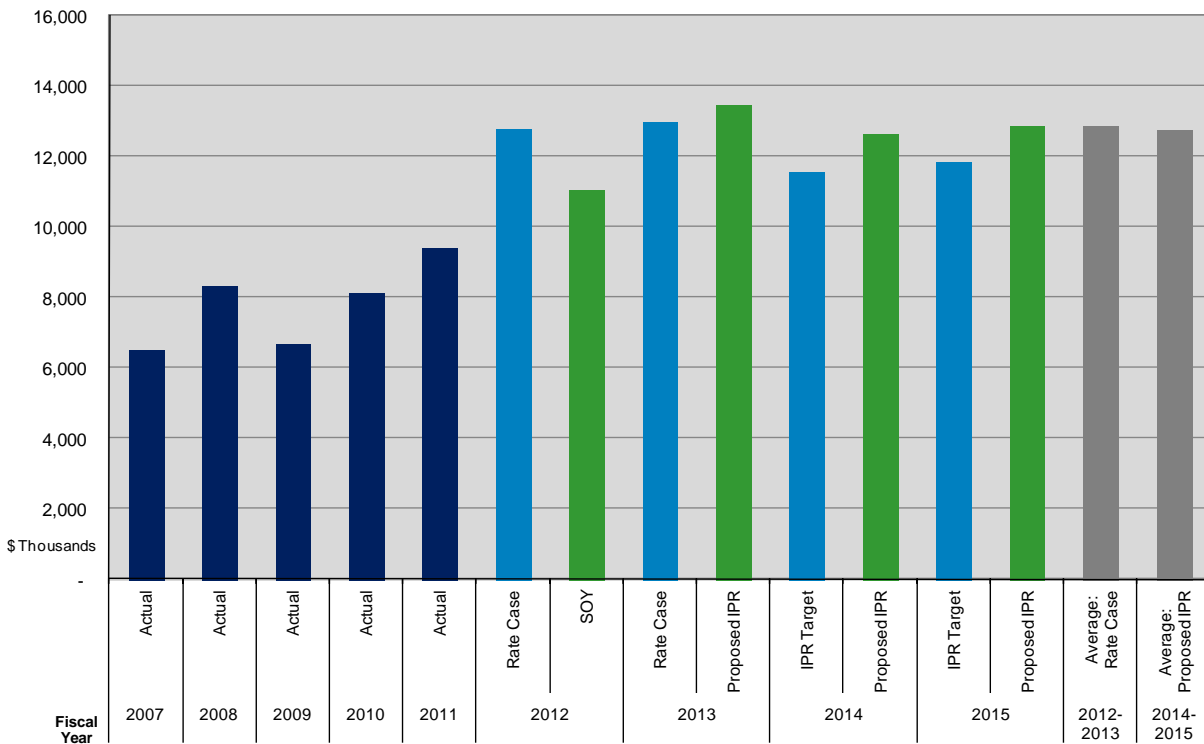
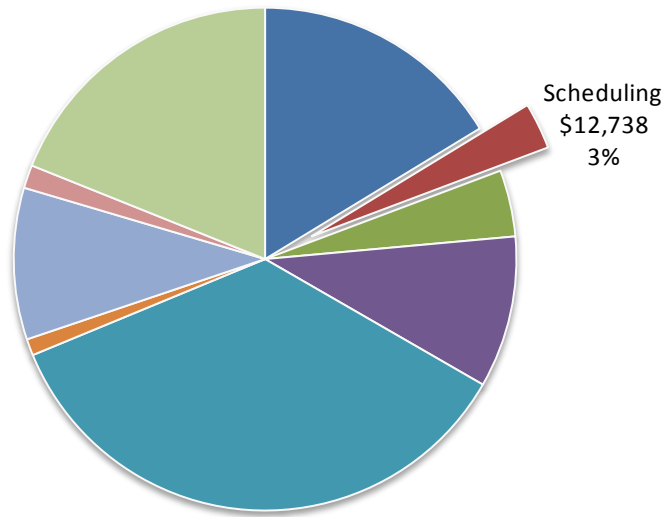
Challenges/Constraints

- Costs and workload responsibilities associated with regulatory compliance are increasing, due in part to the continual evolution of regulatory requirements (both in NERC reliability standards and in cyber security requirements).
- Rapid technological evolution – by the time a new system is fully implemented, it may already be obsolete. If BPA does not have the latest technology in place, it is not optimally protected.
- Adequate staffing including field substation operator craft positions, it continues to be extremely challenging to find trained/experienced replacement workers.
- The increasing complexity of the system.
- Increasing transmission system demand – optimizing available capacity while continuing to operate the system safely and reliably is a continual challenge.

Competing agency priorities such as long-term solutions to oversupply, restarting Network Open Season, and integrating renewables could create staffing constraints. This could limit BFTE available to staff the core team for the STAR program as well as limit time available from many subject matter experts who are needed to support the project.

4.3 SCHEDULING

FY 2014-2015 Average: Proposed IPR



Program Details

(\$\$\$)	2011			2012		
	Start of Year	Actuals	Delta	Rate Case	Start of Year	Delta
Managing Supervision and Admin.	-	(11)	(11)	-	-	-
Reservations	5,586	3,850	(1,736)	1,088	5,135	4,047
Pre-Scheduling	229	240	11	477	234	(243)
Real-Time Scheduling	4,208	3,950	(258)	5,090	4,214	(876)
Technical Support	2,531	1,226	(1,305)	5,665	1,263	(4,402)
After-the-Fact Scheduling	293	156	(137)	453	213	(240)
Total	12,847	9,412	(3,435)	12,772	11,058	(1,714)

(\$\$\$)	2013			2014			2015		
	Rate Case	Proposed IPR	Delta	IPR Target	Proposed IPR	Delta	IPR Target	Proposed IPR	Delta
Managing Supervision and Admin.	-	-	-	-	-	-	-	-	-
Reservations	1,109	1,134	25	5,372	5,697	325	5,491	5,816	325
Pre-Scheduling	486	486	-	246	246	-	252	252	-
Real-Time Scheduling	5,185	5,627	442	4,419	5,436	1,017	4,520	5,537	1,017
Technical Support	5,749	5,749	-	1,322	1,007	(315)	1,352	1,031	(321)
After-the-Fact Scheduling	462	462	-	224	224	-	229	229	-
Total	12,991	13,458	467	11,583	12,611	1,027	11,843	12,865	1,021

Description, Purpose and Responsibilities

BPA’s Scheduling Program contains expenses for reservations, pre-scheduling, real-time scheduling, scheduling after-the-fact, and technical support.

Reservations

- Conducts analysis to determine whether specific transmission requests can be granted, subject to requirements of the Open Access Transmission Tariff (tariff) and FERC orders, runs market competitions, assists customers with questions about their transmission requests and operation of OASIS.

Pre-Scheduling

- Conducts sales and scheduling of transmission for next day(s) operations per the WECC Pre-Schedule timeline.

Real-Time Scheduling

- Conducts sales and scheduling of transmission services for next hour delivery, curtails schedules in-hour as system conditions require.

Scheduling Technical Support

- Conducts technical analysis of scheduling operations to ensure compliance with external regulations and WECC business practices; and develops documentation to support the Real-Time, Pre-Schedule and After-The-Fact functions.

Scheduling After-The-Fact

- Verifies net scheduled and net actual interchange, and investigates and resolves discrepancies.

Support from Agency Services

Information Technology

- Ensures that scheduling teams have access to the systems required to perform their functions at an alternate scheduling facility within the compliance-mandated time period following a disruptive event, and that the systems will have the same or better communications and operational functionality as that provided at the primary scheduling facility.

Goals

- Activation and full functionality of the new Alternative Scheduling Capability facility at Munro Control Center (MCC) in Spokane, WA.
- Participation in national standards development with NAESB such as OASIS and various other required commercial business regulatory processes.
- Development of business requirements for implementation of Transmission Scheduling automation projects.
- Continuity in staffing and preservation of expertise to maintain forward momentum on pressing issues and key performance areas, including systems development, NERC ATC compliance and Network Integration Transmission Service on OASIS/NAESB standards development.
- Development of an effective staffing plan for operating real-time scheduling desks from two locations simultaneously.
- In FY 2013, begin testing real-time scheduling and pre-scheduling procedures at the interim back-up in the MCC conference room.
- Integrate six TERM positions as contractors beginning Oct. 1, 2013.
- Ensure all scheduling operation functions are NERC, WECC, NAESB, and FERC compliant.

Changes from 2010 IPR

- Annual add-ons to the initial wind initiative and implementation of new and revised services relating to generation inputs, such as Variable Energy Resource Balancing Service and Dispatchable Energy Resource Balancing Service.
- Permanent staffing at the Alternative Scheduling Capability (ASC) facility at MCC; Pre-Schedule After-the-Fact to ensure back-up capability at the ASC.
- Transferred most of the Scheduling – Technical Support Program spending to the Scheduling – Reservations Program effective 10/1/2012

New Programs/Projects

- Added up to seven BFTE TERM positions to work on Commercial Transmission scheduling systems in order to achieve compliance with NERC, NAESB, and FERC requirements.
- Implement automation projects associated with tariff provisions.
- Implement Network Integration Transmission Service on OASIS that meets NAESB and tariff requirements and customers' needs.
- Support the development and implementation of new tariff initiatives (such as FERC Order 1000).
- Implement new Network Open Season and Generation Interconnection processes, and work to integrate with other regional planning processes.
- The Alternate Scheduling Capability facility will provide full redundancy in an emergency situation impacting operability at the Dittmer location.
- The required Alternate Scheduling Capability facility will be able to support the required scheduling functions 24/7 and requires a state of readiness providing 24/7 availability of workspace and required systems with little or no warning.
- FY 2014-15 includes travel costs for testing real-time scheduling functions at the new facility in FY 2014 and training new schedulers at the Dittmer location prior to fully staffing at MCC.
- FY 2014 and 2015 relocation costs for two FTE. Estimate is for 1-3 new FTE for new duty station at MCC.

Risk and Impact of Operating at Cost Target

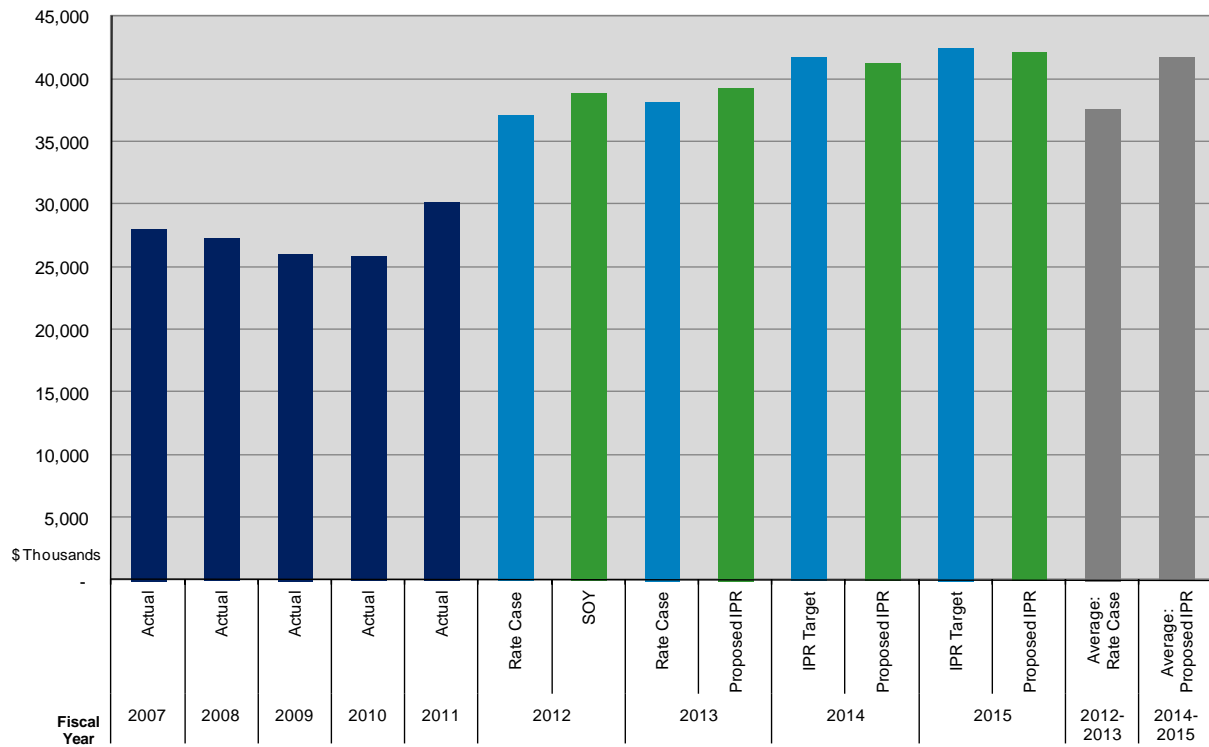
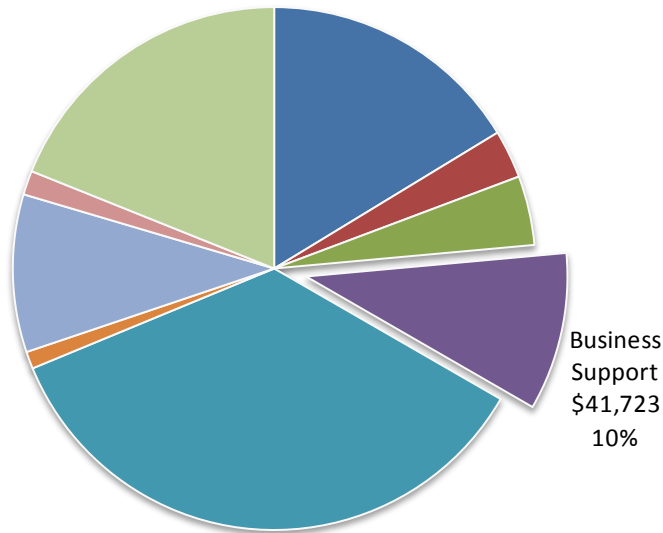
- NOS and GI reform, flow gates, curtailments, implementation of the tariff, wind initiatives, and rate case initiatives, and day-to-day activities are driven by either mandatory compliance or requests from BPA's customers. These efforts require additional resources. Beginning Oct. 1, 2013, anticipate the need for additional resources to perform the upgrades to Transmission Commercial systems.
- Without critical IT business system support, there is a greater probability of violating NERC, NAESB, and FERC standards due to heavy reliance on manual processes.
- Impaired ability to continue or rapidly recover scheduling operations in the event of a major, regional disruptive event in the Portland metro area.
- Staffing at the alternate site could be delayed and real-time scheduling could lack full redundancy in an emergency situation, impacting operability at the Dittmer location.

Challenges/Constraints

- Increasing complexity of mandatory NERC, NAESB, and FERC compliance standards.
- Lack of systems and reporting tools to monitor status of BPA's compliance with complex compliance standards.
- Continuing growth of resources is creating operational challenges.
- Retirement of staff with critical knowledge and expertise
- Increasing e-Tag volume is pushing BPA's current scheduling automation systems to their performance limits. BPA can no longer rely on manual processes to back up scheduling systems.
- Increasing complexity of Congestion Management tools.
- Increasing complexity of the implementation of the Failure to Comply process.

4.4 BUSINESS SUPPORT

FY 2014-2015 Average: Proposed IPR



Program Details

	2011			2012		
	Start of Year	Actuals	Delta	Rate Case	Start of Year	Delta
Executive and Administrative Services	13,983	12,179	(1,804)	13,401	13,721	321
Legal Support	3,269	2,609	(660)	2,984	2,822	(162)
General Administrative	10,213	10,191	(22)	11,714	14,390	2,676
Aircraft Services	2,147	1,121	(1,026)	2,372	2,037	(336)
Logistic Services	5,490	3,532	(1,957)	5,644	4,934	(710)
Security Enhancements	645	482	(163)	977	937	(40)
Total	35,747	30,116	(5,632)	37,092	38,841	1,750

	2013			2014			2015		
	Rate Case	Proposed IPR	Delta	IPR Target	Proposed IPR	Delta	IPR Target	Proposed IPR	Delta
Executive and Administrative Services	13,764	12,810	(954)	14,355	13,774	(581)	14,662	14,106	(556)
Legal Support	3,227	4,057	830	2,900	3,877	977	2,966	3,951	985
General Administrative	11,949	13,849	1,900	16,521	16,673	152	16,768	16,967	200
Aircraft Services	2,438	2,321	(117)	2,117	2,030	(87)	2,161	2,294	133
Logistic Services	5,792	5,214	(578)	4,794	4,549	(245)	4,944	4,471	(473)
Security Enhancements	1,001	1,001	-	966	373	(593)	984	380	(604)
Total	38,170	39,251	1,081	41,653	41,276	(377)	42,485	42,169	(315)

Description, Purpose and Responsibilities:

Business Support includes expenses for executive and administrative services, legal services, internal general and administrative services, aircraft services, security enhancements, and logistics services. The services included in these programs may be provided by the Transmission or Agency Services organizations.

Executive and Administrative Services

- Transmission Services Management including executive and manager labor, outplacement training, Western Interconnected Electric System (WIES) insurance, and student tuition assistance and travel. Expenses in this program are primarily from the Transmission organization. The WIES insurance is provided through the Risk organization which provides third party liability insurance that covers losses resulting from a cascading transmission system outage but does not include business interruption type losses. The insurance is purchased by the WIES membership that includes utilities in the Western Interconnect primarily located in the northwest.

General Counsel

- For the Transmission Business Unit, OGC provides legal advice and other legal representation regarding development and implementation of BPA Transmission policies and Transmission tariffs, contracts and rates; reliability standards; standards of conduct; market design (e.g., Energy Imbalance Markets); negotiation and alternative dispute resolution services; and represents the agency in all areas of administrative law, litigation and judicial appeals regarding BPA’s tariff, and statutory and contractual responsibilities with regard to the provision of reliable Transmission service. Legal services cover the entire gamut of services, from internal advice to defense in court.

Internal General and Administrative Services

- Provides support for Transmission Services, including training, Office Workers Compensation (OWCP), awards, efficiency projects, strategic performance management, A-123, business case support, benchmarking, and root cause analyses/lessons learned. The services captured in this program are provided primarily by the Transmission organization. OWCP is provided through the Human Capital Management office.

Aircraft Services

- Provides aviation support to ensure the reliability of the power system. BPA’s fleet consists of two fixed-wing aircraft, flight crew, mechanics and dispatchers. The fleet is used to transport employees to support the power system. Aircraft Services are provided by the Transmission organization to the entire agency.

Costs incurred for the benefit of the Power Services business unit are charged to Power through an allocation.

Logistics Services

- Provides procurement, materials management, fleet, supplemental labor and logistics services. Provides method for obtaining equipment, materials, and services to support work requirements, while ensuring ethical, risk-appropriate business practices that are compliant with internal controls. Monitors and manages the timely and efficient execution and conduct of all Supply Chain functions across the Agency. SCS is a corporate organization and logistics services are charged directly to Transmission.

Security Enhancements

- Protects critical transmission assets by conducting security system performance testing, security risk assessments, coordination and liaison with local, state, and federal law enforcement, and management and oversight of capitalized physical security projects at critical transmission sites. Services also include limited security officer deployments in response to security incidents at Transmission field sites. Security Services are provided jointly by the Transmission Field Services organization and by the Security Services office, a corporate organization.

Goals

Executive and Administrative Services

- Attract highly qualified students that will later fill the jobs of retiring BPA employees. This succession program allows Transmission Services to hire students before they graduate, rotate and train them in different functions that are critical to Transmission, and have them ready to assume the roles of the retiring work force. This program is a key component of BPA's succession planning and ability to build a new workforce with highly trained and diverse personnel.

General Counsel

- Defend and assist in implementation of BPA's Open Access Transmission Tariff. This includes internal services, customer negotiations and on-going FERC proceedings. Reliability is a constant priority, so OGC will continue to provide advice regarding standards interpretation and implementation, FERC and WECC audits, and dispute resolution. Network Open Season redesign, Energy Imbalance Market development, and efforts to integrate renewable power are also priorities.

Internal General and Administrative Services

- Ongoing training and support for Transmission Process Improvement Process (TPIP) applications as well as support for other Transmission applications currently in use. TPIP objectives are to provide business analyst support for the Asset Register Change Control Board so they may be more effective in addressing operation risks of the Asset Register and technical expertise. Support Transmission management in establishing effective process performance management in order to improve control environment. BPA's recognition system consists of a series of integrated policies, processes, and practices for rewarding its employees in accordance with their contribution, skill, competence, and value added to BPA operations. The specific purpose of this system is to communicate and support BPA's values, standards, and expectations, encourage workforce behavior that contributes to the achievement of BPA's mission and objectives. Application of Root Cause Analysis practices is to be an integral part of continuous improvement and operational excellence. These practices reinforce an organizational culture of learning and continuous improvement and increase the likelihood of successfully delivering on its goals and objectives. Once fully operational, Integrated Program & Process Improvement (IPPI) will reduce costs, effort, and rework, and improve overall effectiveness of all business improvement projects.

Aircraft Services

- Provide aerial support to meet emergency call-outs with a 90 percent aircraft operations scheduling effectiveness rate, within Aircraft Service's operational constraints and meet two scheduled annual routine patrols of the entire Transmission System, and complete special inspections as requested with an aircraft operations scheduling effectiveness rate of 98 percent.

Security Enhancements

- Increase field presence to reduce losses due to vandalism and metal theft. Implement the Critical Asset Security Plan (CASP) to improve protection of BPA's critical assets.

Logistic Services

- Supply Chain Services is focusing efforts on employee engagement/retention; Talent Management; Risk Management and continuous process improvement using LEAN principals to identify process improvements within the bounds of acceptable risk.

Changes from 2010 IPR

General Counsel

- There has been a significant increase in legal work associated with FERC jurisdiction over BPA's transmission activities. Due to increasing complaints that FERC should exercise its section 211A jurisdiction, OGC anticipates increased representation before FERC and the need to more frequently contract with outside counsel.

Logistics Services

- Logistics Services implemented the consolidated Fleet Management organization which will ultimately help offset future fleet costs at BPA. Moving maintenance costs from business lines into agency operations allows for a strategic BPA perspective on managing the fleet, but also exposes the agency to risk when planned spending levels do not adequately take into account projected workload.

New Programs/Projects

Aircraft Services:

- By 2015, based on projected flight hours, many of the aircraft in BPA's fleet will be due for mandatory life-limited parts replacement, an investment of \$435,000 above the cost target.

Risk and Impact of Operating at Cost Target

General Counsel

- FERC's assertion of authority over BPA operations in FERC's order on Environmental Redispatch has significant budgetary implications for Legal Services: 1) increased FERC complaints under Federal Power Act section 211A, resulting in additional hearings and evidential proceedings at FERC, and an increased reliance on outside counsel; and 2) increased costs for tariff change, implementation and review. Risks attendant to inadequate funding for these activities include lost opportunities to better position BPA with respect to FERC, and to prevail on contested issues.

Internal General and Administrative Services

- The Integrated Program and Process Improvement (IPPI) function will look to enable and support broader range business decisions by reducing the cost of IT Projects through better requirements definition and enhanced business involvement; enabling execution of Transmission's strategic objectives through efficient project management; and instilling business process management and continuous improvement

as disciplines within Transmission. The TAS – Inside-the-Fence project achieved its objectives and was successfully closed out. The project team has moved forward to the next phase which includes the outside-the-fence work. The Microsoft Project Integration project achieved its objectives and was successfully closed out. The first generation resource management functions of Strategic Capability Planning, Demand Planning and availability to Promise were established.

Security Enhancements

- Lower-than-requested funding for Security Services funding will result in delayed implementation of improvements to the aging security infrastructure at BPA’s Transmission substations. Operating at the cost target would also defer replacement for critical components during a scheduled system-wide maintenance initiative. Delayed maintenance means a greater risk of failing critical components which may impact security system reliability, as well as increased emergency maintenance costs.

Challenges/Constraints

Executive and Administrative Services

- The primary challenge facing the Transmission Student Program is competing with outside industry for highly-qualified students – especially, for highly-qualified female and minority students. Salaries in BPA’s internship program are generally lower than private industry; females and underrepresented minority candidates are sometimes recruited by private industry before BPA even has a chance to interview them.

Internal General and Administrative Services

- The IPPI program is needed to address management systems and bring about a responsible, integrated, coordinated approach to continuous improvement. Lack of an integrated approach to continuous improvement degrades both the effectiveness and efficiency of Transmission’s improvement efforts and creates collateral damage that results in additional corrective actions and rework.

Aircraft Services

- Primary challenge is the rising cost of aviation fuel vs. estimated cost per gallon. A sudden increase in fuel costs could substantially affect Aircraft Services’ operating budget. For example, at 1,400 flight hours per year, BPA’s fleet uses 189,700 gallons of fuel. A \$2-per-gallon fuel cost increase would result in an additional annual cost of \$379,000. For IPR budgeting purposes, management averages the per-gallon price of aviation fuel for the three previous years to calculate an expected fuel cost for the next budgetary period. Actual future fuel costs may be significantly higher than budgeted.

Logistics Services

- Supply Chain Services relies on technology to facilitate work product efficiencies. As technology has progressed, the agency has been slow to transition to newer, more user-friendly and sophisticated software in order to improve efficiency and effectiveness. SCS still relies heavily on labor-intensive manual processes that introduce greater margin for error and increased cost.

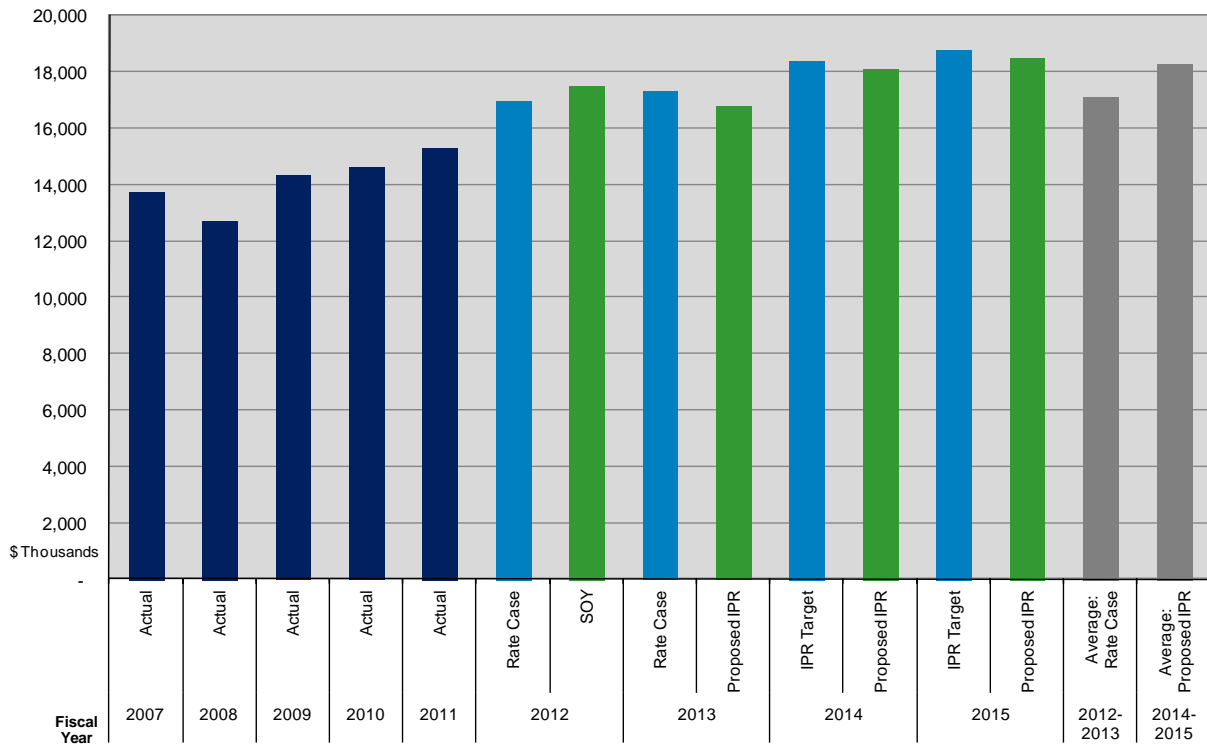
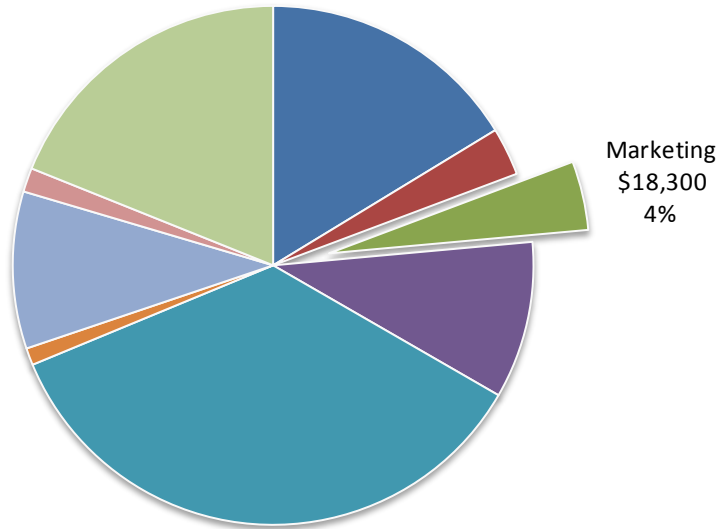
Security Enhancements

- Multiple capital enhancements are scheduled for the FY 2013-15 timeframe, which will increase both the quantity and complexity of the security systems in the field. The increased cost of managing these additional assets including performance testing, maintenance and renewal will impact the program three to five years after deployment. The near-term challenge is to gain efficiencies where possible to position Security Services to absorb these costs to the greatest extent possible.

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4.5 MARKETING

FY 2014-2015 Average: Proposed IPR



Program Details

	2011			2012		
	Start of Year	Actuals	Delta	Rate Case	Start of Year	Delta
Transmission Finance	296	270	(26)	303	303	
Contract Management	4,623	4,058	(565)	4,479	4,735	256
Customer Support Services (Trans. Billing)	2,424	2,226	(198)	2,333	2,400	67
Business Strategy and Assessment	6,170	6,426	256	6,553	7,214	661
Transmission Sales	2,467	2,319	(149)	3,301	2,855	(446)
Internal Operations	-	2	2	-	-	-
Total	15,980	15,301	(679)	16,969	17,507	538

	2013			2014			2015		
	Rate Case	Proposed IPR	Delta	IPR Target	Proposed IPR	Delta	IPR Target	Proposed IPR	Delta
Transmission Finance	310	-	(310)	318	-	(318)	326	-	(326)
Contract Management	4,572	4,484	(88)	4,951	5,291	340	5,071	5,405	334
Customer Support Services (Trans. Billing)	2,382	2,801	419	2,500	2,858	357	2,564	2,930	366
Business Strategy and Assessment	6,670	6,140	(529)	7,613	6,955	(658)	7,775	7,103	(671)
Transmission Sales	3,362	3,362	-	2,994	2,994	-	3,062	3,062	-
Internal Operations	-	-	-	-	-	-	-	-	-
Total	17,296	16,788	(508)	18,377	18,098	(279)	18,798	18,501	(297)

Description, Purpose and Responsibilities

The marketing program contains expenses related to sales, marketing contract management, transmission billing, and business strategy and assessment.

Transmission Sales

- Primarily responsible for customer relationships. Establishes updates and renews transmission contracts, and explains changes in business practices or procedures.

Marketing Contract Management

- Analysis and support for Transmission Sales' contracting responsibilities.

Customer Support Services (Trans. Billing)

- Core business services and leadership in support of BPA's customer relationships, marketing, and sales governance requirements.

Marketing Business Strategy and Assessment

- Transmission business policy and practices, OATT, business assessments, rate case support, and commercial infrastructure.

Support from Agency Services

- Information Technology –Critical business systems support
- BPA's Human Capital Management supports hiring
- Risk supports risk informed decision-making

Goals:

Transmission Sales: Achieve Customer Satisfaction ratings of ≥ 7.0 -7.5.

Marketing Contract Management

- Participate in national standards development with NAESB for OASIS and various other required commercial business regulatory processes.
- Support agency ABC Project initiative (thorough review of contracts to identify and correct errors and to identify potential improvements).

- Develop and maintain agency Contract System Automation requirements, including implementation of the Customer Information Service Delivery systems
- Policy development to reflect NERC, NAESB, and FERC requirements.
- Improve data quality management process for contract development.
- Review and revision of 450+ O&M contracts.

Customer Support Services (Trans. Billing)

- Partner with other BPA organizations to ensure that systems and processes cost effectively meet future BPA and customer needs. Continuously improve processes and controls to optimize data flow and accommodate evolving industry requirements.
- Proactively review and administer contractual obligations as they impact bills, metering information, and load forecasting.
- Staff development to facilitate expertise and responsible stewardship of processes and data.

Marketing Business Strategy and Assessment

- Provide policy assistance on issues ranging from ATC management and inventory to interconnections to NOS and GI reform to service delivery.
- Manage and maintain the OATT to be consistent with regulatory guidelines established by FERC and NAESB. File revisions to the tariff as necessary to reflect consensus generated deviations, BPA needs and/or ongoing orders. Oversee tariff compliance in policy development and tariff-related processes across the Transmission organization.
- Provide leadership in ancillary services specifications such as the provision of balancing reserves.
- Support rate cases.
- Address wind integration issues during interconnection policy development.
- Participate in national standards development with NAESB, including OASIS development.
- Lead customer outreach efforts, including quarterly customer forums and other meetings.

Near-Term Strategies:

Transmission Sales

- Ensure sufficient staffing from the Account Executive level downward to efficiently perform in key areas such as contract development, customer relations, and customer service on agency initiatives.

Marketing Contract Management

- Ensure continuity in staffing and expertise to maintain forward momentum on key issues, including contract development and customer service.

Customer Support Services (Trans. Billing)

- Implement a cross-functional data quality management program to foster continuous improvement in data accuracy and minimization of manual and duplicate data inputs.
- Implement the Customer Review program to continuously improve contractual relationships across business lines between BPA and individual customers.
- Raise awareness of Agency strategic initiatives and business and market trends to allow CSS staff to respond effectively to the changing energy marketplace.
- Implement benchmarking, metrics, and corrective action programs to propel operational excellence.
- Establish a quality assurance program for billing determinants.
- Complete enhancements in IT systems to maximize benefits to BPA and customers.
- Support regulatory and other compliance requirements for BPA and customers.
- Meet the demands of a changing energy industry by managing business operations efficiently and effectively through standardized, continuously-improved systems and processes.

Marketing Business Strategy and Assessment

- Compliance with NERC standards and coordination with customers.
- Tariff implementation.
- Policy development for and implementation of Network Integration Transmission Service on OASIS.
- Implementation of new Network Open Season and Generation Interconnection processes and integration of BPA's processes with other regional planning processes.
- Run two Rate Cases during the period with all associated workshops and processes.
- Lead the regional development for the Enhanced Bonneville Balancing Authority end state model that could include an EIM market and other characteristics.

Changes from 2010 IPR

Transmission Sales

- Additional requirements pursuant to NERC Reliability Standards, BPA tariff filing with FERC for reciprocity, BPA's interim policy on over-generation supply (high wind/high water events), Energy Imbalance Market and regional planning strategies.

Marketing Contract Management

- BPA Filing OATT with FERC, BPA's interim policy on over-generation supply.

Customer Support Services (Trans. Billing)

- Development of the Customer Information Service Delivery (CISD) integrating people, process, data and systems across the CSS CISD portfolio by coordinating and managing operations holistically and Accurate Billing of Customer Contracts (ABC) project, completion cross-organization coordinated customer review program, implementation of the industry-standard CCM, CDM, CBC Phase 2, CP and VBARS systems.

Marketing Business Strategy and Assessment

- Re-evaluation of BPA's Network Open Season and Generation Interconnection processes, filing of tariff with FERC for reciprocity purposes.

New Programs/Projects

Marketing Contract Management

- NERC standard compliance agreements, implementation of Network Integration Transmission Service on OASIS to meet tariff and customer needs, Tariff implementation, implementation of new Network Open Season and Generation Interconnection processes and integration of BPA's processes with other regional planning processes. Additional resources will be required in order to expand BPA's current ability to meet all the necessary coordination and outreach.

Customer Support Services (Trans. Billing)

- Implementation of new rates or products may impose a significant one-time expense if IT system changes are required.

Risk and Impact of Operating at Cost Target

Transmission Sales

- Potential customer dissatisfaction due to inability to implement initiatives that benefit customers.

Marketing Contract Management

- Potential monetary consequences due to noncompliance with NERC standards and FERC and NAESB

requirements, potential customer dissatisfaction due to inability to implement initiatives that benefit customers.

Non-Funded Items

Customer Support Services (Trans. Billing)

- Funding limitations will delay the implementation of some planned IT system upgrades and enhancements in FY 2014.

Challenges/Constraints

Transmission Sales

- Availability of transmission, compliance with NERC/WECC reliability standards, Network Open Season and Generation interconnection reform, Tariff implementation, contract templates development, BPA's interim policy on over-generation supply (high wind/high water events).

Marketing Contract Management

- Increasing non-base load work and implementation in the following areas: Contract System Automation system maintenance; implementation of new business requirements, ABC project work, increasing complexity in mandatory NERC, NAESB, and FERC compliance standards implementation of Network Integration Transmission Service on OASIS NAESB standards, staff retirements/workforce development.

Customer Support Services (Trans. Billing)

- Prioritization of competing requests from agency stakeholders to make the best use of finite resources, staff retirements/workforce development, IT funding to implement new systems, maintain and improve existing systems, rapid evolution of industry and Federal requirements.

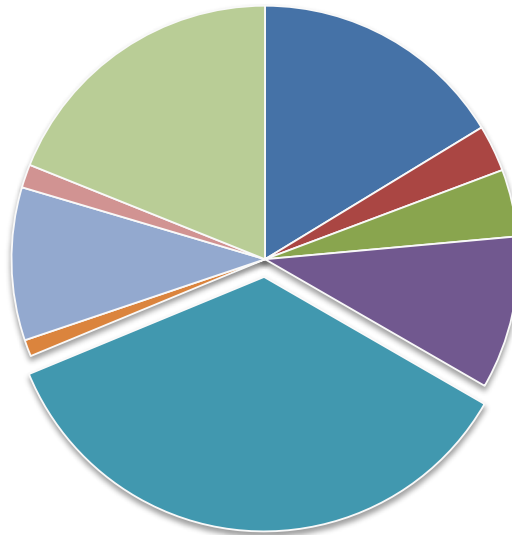
Marketing Business Strategy and Assessment

- Implementation of Network Integration Transmission Service OASIS, agency strategy for long-term ATC management, wind-related concerns regarding reliability of the FCRPS, development and implementation of Network Open Season and Generation Interconnection reform, development of transmission rates to be implemented in FY 2014 -15 rate period, tariff implementation.

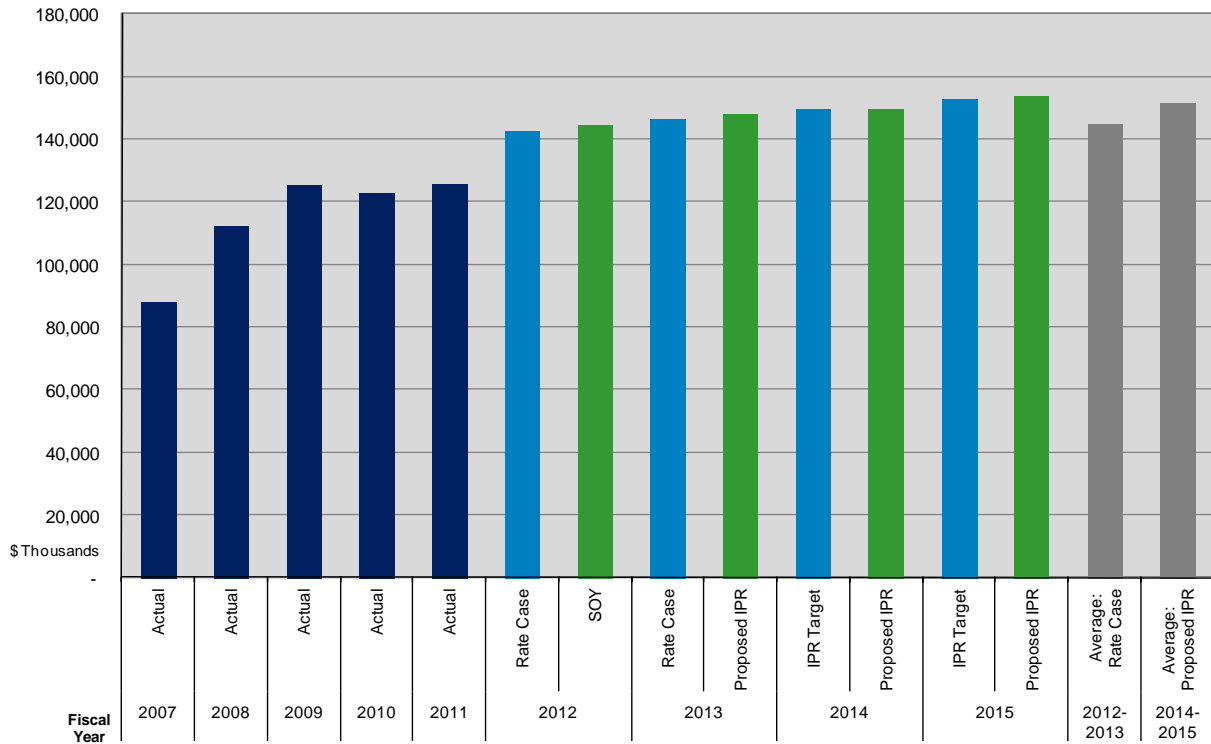
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4.6 MAINTENANCE

FY 2014-2015 Average: Proposed IPR



System
Maintenance
\$151,543
35%



Program Details

(\$\$\$)	2011			2012		
	Start of Year	Actuals	Delta	Rate Case	Start of Year	Delta
Non-Electric Maintenance	24,935	23,548	(1,387)	26,412	26,323	(89)
Substation Maintenance	26,820	25,580	(1,239)	30,167	29,940	(227)
Transmission line Maintenance	24,629	22,921	(1,708)	25,882	25,405	(477)
System Protection Controls	13,278	11,388	(1,890)	12,802	12,783	(19)
Power System Control Maintenance	13,497	11,958	(1,539)	13,423	15,933	2,510
System Maintenance Management	8,126	5,292	(2,834)	6,320	6,282	(38)
Right-of-Way Maintenance	23,824	10,386	(13,438)	24,631	8,133	(16,498)
Heavy Mobile Equipment Management	-	379	379	(17)	(249)	(232)
Technical Training	2,830	2,530	(299)	2,894	3,170	276
Vegetation Management	-	11,696	11,696	-	16,565	16,565
Total	137,939	125,680	(12,259)	142,513	144,285	1,772

(\$\$\$)	2013			2014			2015		
	Case	Proposed IPR	Delta	Target	Proposed IPR	Delta	Target	Proposed IPR	Delta
Non-Electric Maintenance	27,033	26,823	(210)	27,237	27,303	66	27,770	27,853	83
Substation Maintenance	31,038	31,003	(35)	31,121	31,122	-	31,777	31,777	1
Transmission line Maintenance	26,664	26,198	(467)	26,126	26,139	13	26,685	26,820	135
System Protection Controls	13,215	12,852	(364)	13,096	13,096	-	13,381	13,381	-
Power System Control Maintenance	13,850	16,256	2,406	16,599	16,904	305	16,948	17,582	634
System Maintenance Management	6,516	6,399	(118)	6,436	6,434	(2)	6,575	6,574	(2)
Right-of-Way Maintenance	25,256	8,438	(16,818)	8,428	8,428	-	8,597	8,597	-
Heavy Mobile Equipment Management	(19)	-	19	-	-	-	-	-	-
Technical Training	2,991	2,888	(103)	3,305	3,201	(104)	3,376	3,269	(106)
Vegetation Management	-	16,818	16,818	17,135	17,135	-	17,471	17,471	-
Total	146,545	147,674	1,130	149,484	149,763	278	152,579	153,324	744

Description, Purpose and Responsibilities

System maintenance contains costs related to technical training, heavy mobile equipment maintenance, and maintenance costs for system management, power system control, system protection control, vegetation/right-of-way (ROW), transmission line, substation, and non-electric facilities.

Non-Electric Facilities delivers a total solution non-electric facilities asset portfolio that: fully meets all operational performance requirements; is compliant with all regulatory and voluntary policies; and is executed at the lowest cost practicable. The scope of this program spans the entire life cycle of non-electric assets.

Substation Maintenance provides service and repair of BPA-owned high voltage power system equipment, including transformers, power circuit breakers and switchgear, reactive compensation installations, a HVDC converter station, and other high voltage equipment within substations and energized facilities. It includes field resources performing work on the substation power equipment and centralized resources that provide technical support and laboratory services necessary for maintaining health and service life for installed substation assets. This program also includes operations and maintenance of facilities jointly owned by BPA and outside entities.

Transmission Line Maintenance maintains and repairs nearly 15,000 circuit miles of overhead transmission lines and transmission line structures and fixtures such as steel towers, wood poles, cross arms, insulators, overhead conductors and devices, as well as roads and trails.

Power System Control (PSC) Maintenance program is responsible for Power maintenance, communications maintenance, construction and compliance activities, including costs for diagnostic support and repair of field and Control Center communications equipment. It also maintains a spare parts inventory and provides engineering support and training: PSC equipment classes and craftsman trainee selection, equipment standards writing and compliance monitoring.

System Maintenance Management: Upkeep of capital plant, property, and equipment to insure its intended function in support of the ongoing operations. Includes repairs and minor replacements of plant from point of

generation to the entrance to the distribution system.

Vegetation Management and Rights of Way (ROW) Maintenance: The Rights-of-Way program is responsible for ensuring that BPA can safely access, construct, operate and maintain its Transmission facilities. BPA's Control Vegetation program is responsible for keeping BPA's rights-of-way clear of trees, brush, and encroachments that could affect the safety, accessibility, and system reliability of the Transmission system.

Heavy Mobile Equipment Maintenance (HMEM): BPA's Fleet Management group is responsible for the acquisition, maintenance, and overall asset management of BPA's Mobile Equipment Fleet, as well as the maintenance of over 150 Emergency Generators in unmanned sub-maintenance facilities. The HMEM project is a clearing pool. The costs of operating and maintaining the equipment and vehicles are accumulated in this project and then allocated monthly to the projects that use the equipment and vehicles.

System Protection Maintenance Control (SPCM): System Protection Control Maintenance (SPCM) is responsible for testing, checking, maintaining, and adjusting meters, relays, controls, and other equipment in BPA substations. SPCM is the technical expert on obsolete equipment no longer supported by the manufacturer, but still on BPA's system. SPCM is also responsible for system protection and communications functions.

Technical Training: Provides training and continuing education for electrician, lineman, and operator apprentices, craftsman, lineman, electricians, operator and engineer training and professional training for Transmission Services annual employees.

Goals

Non-Electric Facilities: Continued work to inspect, upgrade, repair, and replace critical systems such as HVAC, roofs, and septic systems; reduce backlogged maintenance and repair of existing building systems; reduce emergency repairs; repairs and upgrades to facility life safety systems; and seismically harden critical facilities. This program area supports sustainability initiatives by upgrading to sustainable fixtures and equipment when replacements are necessary.

Substation Maintenance: As a major provider of bulk electric power transmission in the Pacific Northwest, loss of transmission availability due to failure or poor performance of substation equipment is not acceptable. Near term goal, is to assure acceptable operational performance and service life of high voltage substation components. This includes assuring availability of human resources necessary for maintaining and repairing heavy equipment to required maintenance and performance standards, and adequate management of: equipment diagnostics; maintenance procedures; FERC/NERC/WECC regulatory compliance; environmental obligations; and spare system equipment and parts for emergency repair and service restoration.

Transmission Line Maintenance: Priorities include the continuation of routine maintenance – helicopter and working (ground) patrols, climbing inspections – and the successful accomplishment of all normal BPA transmission line maintenance activities.

Vegetation Management and Rights of Way (ROW) Maintenance: The control vegetation program was developed to ensure regulatory compliance with FERC, NERC, and WECC guidelines for managing vegetation, and to prevent unplanned Transmission outages. BPA's vegetation management strategy involves an ongoing effort to clear and maintain land within transmission corridors through the implementation of integrated vegetation management (IVM) practices. The objective is to ensure that vegetation growth does not impede access to towers and potential of trees does not present the risk of arcing from energized lines.

PSC Maintenance:

- Upgrade/streamline batteries and chargers for field communications equipment to meet new transport and end equipment needs.

- Continue to implement the Communications Equipment Retrofit program, a mandatory retrofit of BPA's DC power system for the communications network to address the root cause of a number of failures in the 50-year-old system.
- Subcomponents of the Communications Equipment Retrofit program include filter/fuse panel upgrade for the CISCO 15454 SONET node main backbone communications infrastructure. This effort will insure the existing SONET node transport installations meet BES operational needs.
- Another subcomponent, the new Technical Evaluation and System Testing (TE&ST) team, will streamline BPA's equipment acquisition, integration and life cycle processes.
- Upgrade BPA's SONET channel banks to comply with NERC's Critical Infrastructure Protection requirements for both hardware and software.
- Implement T-25 or better technology, an upgrade of BPA's mobile radio system that will significantly enhance the ability of crews in the field to communicate with Dispatch.
- Keep BPA's existing communications system operational while enhancing reliability, capacity and compliance.

Heavy Mobile Equipment Maintenance:

- Right-sizing and optimizing the fleet's utility to ensure that BPA has the right vehicles, in the right locations, in the right configurations
- Improve preventative maintenance program resulting in reduced emergency or corrective maintenance.
- Perform life cycle analysis for all equipment.
- Increased capabilities for emergency response while reaping the benefits of a planned maintenance strategy

System Protection Maintenance Control: Replace equipment before it fails and to keep the power system running, using replacement program funding and SPC Alerts.

Long-Term Objective

Non-Electric Facilities: The overall, long-term objective of the Facilities Asset Management program is to *optimize*, or fully leverage, the asset portfolio to provide reliable, sustainable non-electric assets that fully meet current and known future agency business needs and ensure performance and condition standards that comply with all applicable regulations while minimizing the life cycle costs. The four long-term objectives supporting this goal include: Systems are in place to assess the health and performance of assets; investments are prioritized based on need, risk and return on investment; industry standard operations and maintenance practices are executed; and assets are sustainable and compliant.

Substation Maintenance: Long term objective is to assure that system performance is sustainable for current and forecast inventory of Transmission facilities and substation equipment. Quantify equipment performance levels as forecast costs required to ensure that BPA's maintenance backlog remains below regulatory requirements and above minimum maintenance and performance standards. Plan and execute asset management strategies under the substation maintenance program to enable complete compliance with equipment and facility maintenance regulations, environmental law and obligations. Plan for impact of an increasing asset inventory due to new service interconnects and network enhancement as outlined by BPA network planning and customer service engineering.

The costs associated with new regulatory requirements are anticipated to be a significant additional expense based on current assessments, and are seeking cost-effective solutions to managing compliance mandates and requested actions.

BPA is making use of efficiency initiatives to offset, as far as possible, the workload demands associated with an increasing inventory of substation facilities and equipment

Transmission Line Maintenance's long-term objectives include:

- Addressing impacts to the system with respect to safety and potentially-catastrophic events.
- Airway lighting replacements
- Safety signage replacement (replacement of faded and illegible signs)
- Evaluating the potential impact of seismic events on our towers
- Replacing worn hardware components based on TLM's asset management strategy.

Vegetation Management and Rights of Way (ROW) Maintenance: The long-term goal is to prevent outages from vegetation located on transmission line ROW by maintaining appropriate clearances between transmission lines and vegetation. Strategies include the preparation of annual and out-year work plans and the development of more effective strategies for scoping and estimating projects that will enable accelerated project development.

PSC Maintenance's long-term needs include upgrades to BPA's fiber capacity, maintenance and documentation capabilities.

- PSC Maintenance has also begun implementation of the Optical Network Management System (ONMS) and Optical Fiber Management (OFS) systems, which look for and monitor breaks in existing fiber networks, mobilizing maintenance personnel within minutes. These real-time fiber management systems promise reduced outage time, streamlined repair cycle and significant system reliability benefits. OFM and ONMS will also collect physical fiber baseline documentation for monitoring of age-related degradation, manage fiber plant asset data, and anticipate weather-related fiber problems such as extreme ice loading.
- BPA is already experiencing data traffic limitations due to fiber constraints. BPA's Dense Wave Division Multiplexing (DWDM) program will evaluate new technologies to extend the life and capabilities of BPA's existing fiber network. The goal is to increase the capacity of BPA's existing fiber network up to 80 times without installing new fiber. Initial DWDM scoping and analysis is already underway.

Heavy Mobile Equipment Maintenance: Development of a long-term replacement strategy.

Changes from the 2010 IPR

Heavy Mobile Equipment Maintenance: Centralized fleet management system, right-sizing initiative.

PSC Maintenance: PSC now has an asset management strategy in place – a major change in terms of timely implementation, resource efficiency and cost effectiveness.

System Protection Maintenance Control: Obsolete equipment continues to deteriorate at a faster rate.

New Programs/Projects

PSC Maintenance: Investing in new fiber lines is significantly more expensive than maximizing the capacity of existing lines, given the fact that the current cost per mile for new fiber lines is about \$140 thousand. The sooner the programs discussed under Long-Term Objectives can begin, the sooner they will begin to pay significant reliability and cost-effectiveness dividends. Other risks, if these projects are not funded, include increased outage frequency and duration for BPA and customer fiber and, ultimately, the power grid.

Substation Maintenance: An additional spend above our previous multi-year estimate for our substation maintenance program is to refurbish 75 of our 550 kV class power circuit breakers due to age and loss of reliability from an identified failure mode with the old interrupters. This program item alone represents approximately \$900 thousand material costs over FY 2013, FY 2014 and FY 2015. Battery load testing has been added to our battery maintenance program one time equipment of 13 x \$5 thousand (\$65 thousand) and 0.8 FTE / year (\$84 thousand), and this is NERC/WECC compliance driven. Both of these are stated here as they

represent a differential cost increase to the historical performance of our program spending.

Risk and Impact of Operating at Cost Target

Substation Maintenance: Program funding has demonstrated close tracking against program costs and has averaged 98.3 percent spend against forecast over the past three fiscal years. Since resource staffing levels and additional services are based on the operation and maintenance requirements of installed substation equipment, reducing the funding level below proposed funding level would drive an increasing frequency and longer duration of equipment outages. Discontinuity of service caused by poor substation or equipment performance that is due to substandard maintenance or actions would lead to self-reported findings of non-compliance with NERC/WECC standards and significant financial consequences in the form of fines and mandated mitigation actions. Some undesirable outages may include loss of service to BPA customers and lost power sale revenue for the duration of the outage.

Transmission Line Maintenance: The obvious risk is liability and lost transmission capacity if maintenance cycles are not completed on schedule.

Vegetation Management and Rights of Way (ROW) Maintenance: Risks associated with lower-than-requested funding for the ROW Maintenance program include significant system reliability issues, unplanned Transmission system outages, an increasing backlog of maintenance work and land management cases, and an attendant risk of WECC sanctionable violations.

PSC Maintenance: Risks of lower-than-anticipated PSC funding levels include unscheduled fiber outages, increased outage frequency and duration, slipped construction schedules and energization dates, and regulatory compliance issues.

Heavy Mobile Equipment Maintenance: Current funding levels are adequate. Any cuts to the expense spending will lead to vehicle down-time, resulting either in deferred work for other departments, or higher-than-budgeted vehicle rental costs. Cuts to the program's capital will result in deferral of new vehicle purchases and increased maintenance costs.

System Protection Maintenance Control: Asset Condition will continue to deteriorate, while risk of equipment failure escalates. Maintenance costs will increase as more corrective work is required. Emergency capital replacements will become the norm and will disrupt planned work. Reliability of the power system will be compromised. System failures could result.

Non-funded Items

Transmission Line Maintenance: N/A, although the lighting, hardware replacement and signage programs could be accelerated via a more aggressive funding schedule.

PSC Maintenance: Funding levels for many of the above-referenced programs are uncertain at this time. The risk, if these efforts do not receive funding, is system reliability, regulatory non-compliance and loss of optimal control system performance.

Heavy Mobile Equipment Maintenance: The fleet management system has been deferred until FY 2013, which delays Fleet Management's ability to do true cost analysis and trend analysis. The risk is lost opportunities for efficiency and cost savings through trend and life cycle analysis. Until the new system is up and running, BPA may forgo savings associated with vehicle turnover before they pass their maintenance prime.

Challenges/Constraints

Non-Electric Facilities: The asset inventory information and the asset condition and health data generated through previous efforts are currently inadequate. In order to properly prioritize and resource the program, it is critical to completely understand the condition, use and needs for each facility. BPA is not yet approaching non-electric facilities maintenance in a strategic, comprehensive, and cohesive manner.

Substation Maintenance:

- Continual increase in compliance requirements over the next few years.
- Normal inflationary cost increases for equipment, parts and repair materials.
- Over the current and next rate periods, 16 new substations will be placed in service (approximately five percent increase in station count). Substation Maintenance will use workload planning efficiency efforts to accommodate increased resource demand without increasing maintenance resources staffing level.

Transmission Line Maintenance: Environmental concerns, transmission outages.

Vegetation Management and Rights of Way (ROW) Maintenance: Funding has fallen significantly every year since FY 2009, from a high of \$34.6 million to \$22.1 million in FY 2011.

PSC Maintenance: Labor costs and the need for additional FTE is the major constraint on accomplishing PSC's goals and objectives. FTEs (as opposed to contractors) are especially valuable to PSC, because a holistic understanding of BPA's extremely complex communications system is necessary in order to integrate new communications technologies without negatively impacting existing communications networks. BPA's transition to Carrier Ethernet Transport is also a constraint in the sense that BPA is the current industry leader in the use of this technology to control the power system.

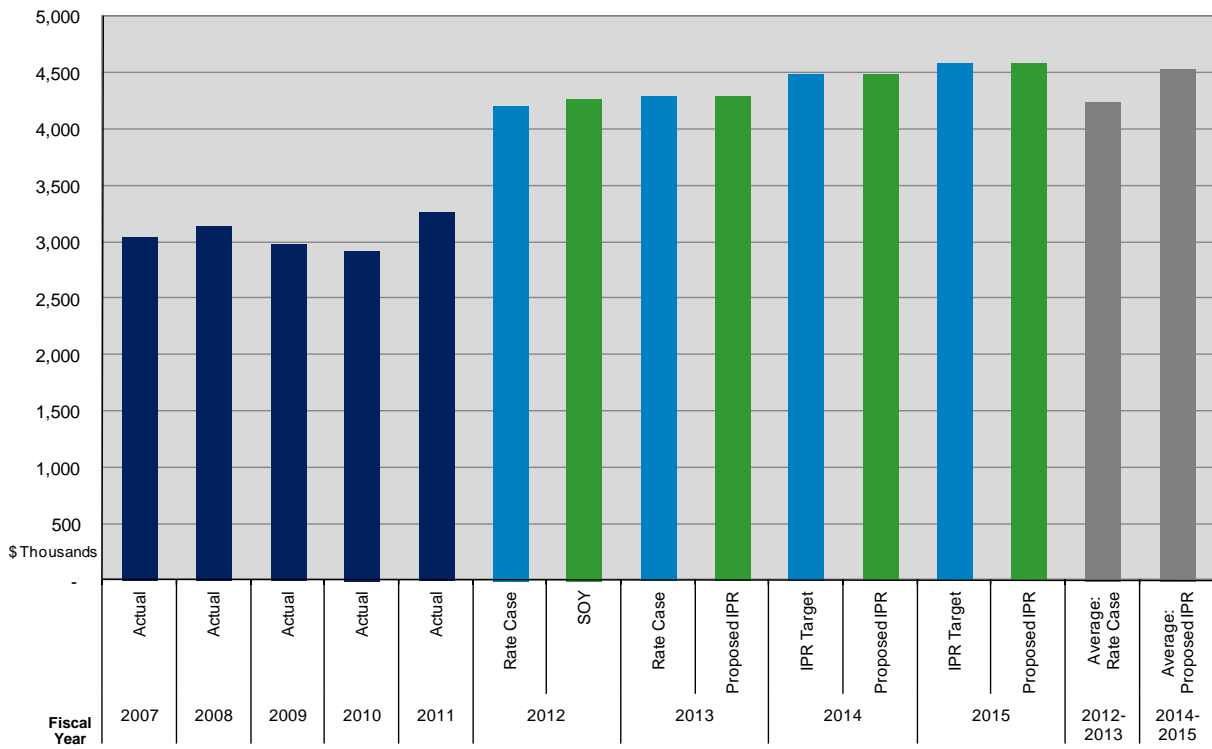
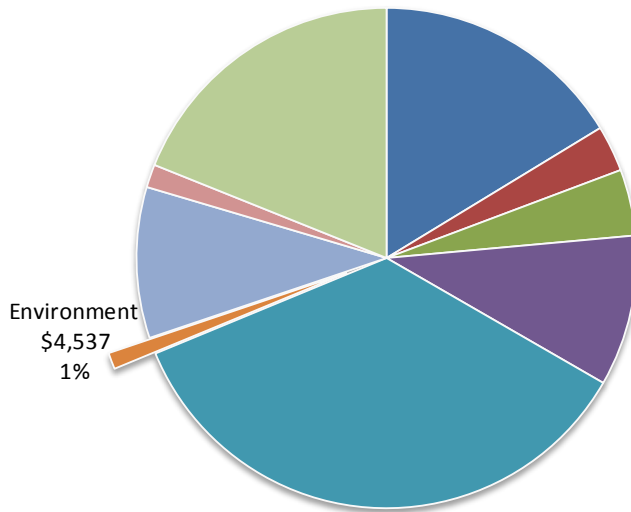
Heavy Mobile Equipment Maintenance:

- Ongoing reorganization to a centralized fleet management system.
- Transition to a standardized fleet (makes and models, reducing parts inventory and training requirements).
- Establishing sound maintenance principles without a dedicated, functional fleet management system (historical data validity issues).
- Presidential directives on fuel reduction, DOE mandates on hybrid vehicles, result in constraints on the types of vehicles BPA is allowed to operate.

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4.7 ENVIRONMENT – POLLUTION PREVENTION AND ABATEMENT

FY 2014-2015 Average: Proposed IPR



Program Details

(\$\$\$)	2011			2012		
	Start of Year	Actuals	Delta	Rate Case	Start of Year	Delta
Environmental Analysis	80	21	(59)	81	81	-
Pollution Prevention and Abatement	4,133	3,236	(896)	4,119	4,180	61
Total	4,213	3,258	(955)	4,199	4,261	61

(\$\$\$)	2013			2014			2015		
	Rate Case	Proposed IPR	Delta	IPR Target	Proposed IPR	Delta	IPR Target	Proposed IPR	Delta
Environmental Analysis	82	82	-	83	83	-	85	85	-
Pollution Prevention and Abatement	4,204	4,207	3	4,404	4,404	-	4,501	4,501	-
Total	4,286	4,289	3	4,488	4,488	-	4,586	4,586	-

Description, Purpose and Responsibilities

Pollution Prevention and Abatement develops, coordinates, and manages environmental compliance actions and programs associated with the operation, maintenance, and construction of BPA’s transmission system. Key organizational responsibilities include the management of BPA’s Water Resource Protection and Polychlorinated Biphenyl’s (PCB) reduction programs, as well as management of environmental investigations and remediation projects for the agency.

Support from Agency Services

The success of the Pollution Prevention and Abatement Program is heavily dependent upon services from Supply Chain, Asset Program Support, Transmission Project Management, System Operations, Transmission Field Services, Substation Maintenance and High Voltage Engineering, Facilities Asset Management, Laboratory Services

Goals

- Transmission Environmental Compliance – Ensure that all transmission activities, projects and facilities are in compliance with all applicable environmental regulations.
- PCB Reduction – Reduction of PCBs, a primary persistent bioaccumulative toxic chemical found in BPA’s transmission system.
- Water Resources Protection – Ensure that storm water discharge at BPA’s transmission facilities (i.e., substations and maintenance complexes) meets all Federal and State standards established under the Clean Water Act.
- Oil Storage Facilities – Ensure that BPA’s oil storage facilities meet all Federal and State standards established under the Clean Water Act and Hazardous Materials Regulations.

Near-Term Strategies:

- Transmission Environmental Compliance – Provide environmental guidance, training, monitoring, facility inspections, and implementation of environmental requirements.
- PCB Reduction – Replace 30 or more pieces of high voltage equipment annually that are regulated for PCB content under the Toxic Substances Control Act.
- Water Resources Protection – Install or upgrade drainage treatment and containment systems at environmentally sensitive transmission facilities to maintain water resources protection and to prevent regulatory non-compliance.
- Oil Storage Facilities – Install or upgrade oil storage at key transmission facility locations to meet environmental regulatory standards and requirements.

Risk and Impact of Operating at Cost Target

The impact and risk of operating at the cost target below the department's proposed IPR program level would likely include the following adjustments to the Pollution Prevention and Abatement Program:

PCB replacements would need to be slowed resulting in:

- A likely increase in the number of PCB spills from equipment failures, impacting the expense spending for the Transmission Maintenance program
- The potential for lost Transmission revenue due to outages caused by failure of 40+ year-old equipment
- Increased likelihood that BPA will not meet EPA's proposed 2025 deadline to have all equipment containing greater than 50PPM PCB removed from service.
- High-priority oil spill containment projects, storm water treatment projects and oil storage projects at environmentally sensitive sites will need to be pushed out to later years resulting in an:
 - Increased likelihood of environmental fines and penalties from regulatory agencies that will impact Transmission's expenses,
 - Increased likelihood of natural resource and property damage caused by off-site release of insulating oil from spills at BPA substations, and
 - Increased risk of releases from Transmission facilities damaging critical ESA habitat previously improved with funds from BPA's Fish and Wildlife program.

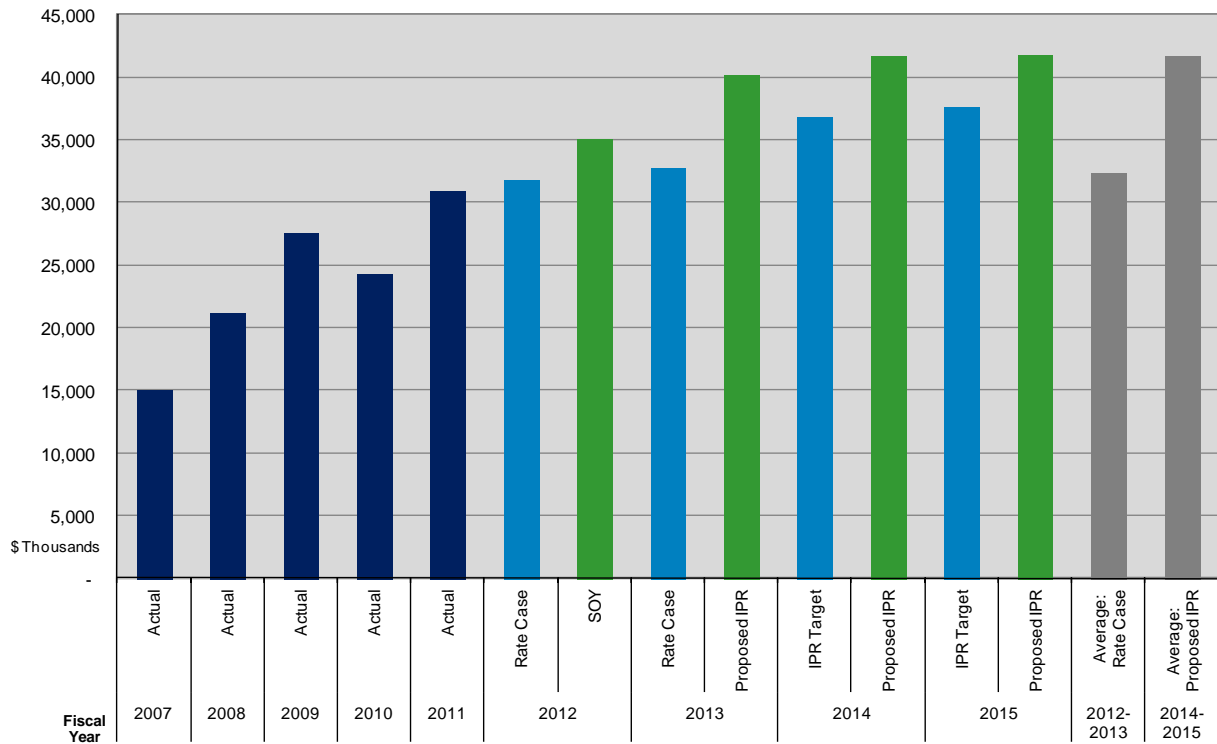
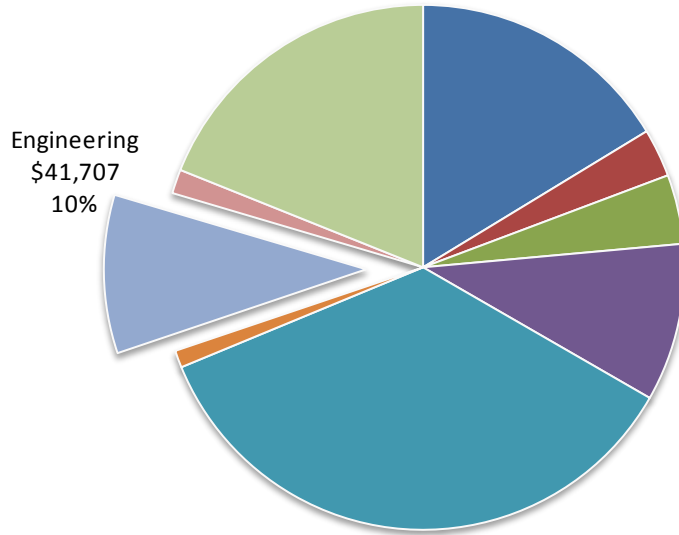
Challenges/Constraints

- Human resource limitations coupled with increases in process management requirements and increased transmission construction may increase the likelihood of future environmental non-compliance.

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4.8 ENGINEERING

FY 2014-2015 Average: Proposed IPR



Program Details

(\$\$\$)	2011			2012		
	Start of Year	Actuals	Delta	Rate Case	Start of Year	Delta
Research and Development	6,604	6,656	52	7,583	7,517	(66)
TSD Planning and Analysis	12,110	10,801	(1,309)	11,531	12,767	1,235
Capital to Expense Transfers	4,000	3,826	(174)	4,032	4,000	(32)
Regulatory Costs	7,551	8,403	852	6,858	8,476	1,618
Engineering Line Rating	-	-	-	-	1,173	1,173
Environmental Policy and Planning	1,768	1,208	(559)	1,797	1,118	(679)
Total	32,033	30,895	(1,138)	31,800	35,050	3,250

(\$\$\$)	2013			2014			2015		
	Rate Case	Proposed IPR	Delta	IPR Target	Proposed IPR	Delta	IPR Target	Proposed IPR	Delta
Research and Development	8,000	7,991	(9)	7,785	7,785	-	7,943	7,943	-
TSD Planning and Analysis	11,895	15,880	3,985	13,013	14,013	1,000	13,289	13,289	-
Capital to Expense Transfers	4,072	4,072	-	4,124	4,124	-	4,202	4,202	-
Regulatory Costs	7,008	10,091	3,083	8,867	12,015	3,148	9,049	12,561	3,512
Engineering Line Rating	-	382	382	1,958	2,539	580	1,996	2,589	593
Environmental Policy and Planning	1,828	1,776	(52)	1,145	1,166	20	1,169	1,189	20
Total	32,803	40,192	7,389	36,893	41,642	4,748	37,648	41,773	4,125

Description, Purpose and Responsibilities:

System engineering consists of costs in support of the research and development program, transmission system development planning & analysis, region association fees, and engineering line rating including the allocated costs for industry restructuring, environmental planning & analysis, and costs associated with cancelled capital projects and inventory adjustments.

Research and Development: BPA's Technology Innovation (TI) initiative has an annual cycle of portfolio funding based on strategic needs identified in the agency's technology roadmaps. BPA's technology innovation projects constitute a portfolio of near, medium, and long-term projects that are expected to produce direct financial benefits to BPA, and deliver value to the Pacific Northwest electric system. Key business challenges such as environmental/global, market, policy and regulatory, and technology innovation affect the Federal Columbia River Power System (FCRPS). To address these challenges, research and development programs need to address identified technology needs. The aim of BPA's Technology Innovation program is to transform R&D into best practice applications. The road-mapping process identifies critical technologies that have the potential to improve system reliability, lower rates, advance environmental stewardship and provide regional accountability.

TSD Planning & Analysis provides technical support activities for the capital infrastructure program, such as Transmission system planning studies in support of reliability standards compliance, non-wires solutions, feasibility studies, pilot projects, and standardizing the programs for assets, grid modeling software maintenance and evaluating potential system enhancements.

BPA's Engineering Line Rating program surveys BPA's entire 14,000-mile Transmission system to verify capacity ratings and performance.

Regulatory and Regional Association Fees: The bulk of the funding for BPA's Regulatory and Regional Association Fees program covers staff time for meeting the NERC mandatory 693 and 706 (Critical Infrastructure Protection) standards. This program addresses compliance with NERC mandatory standards and provides input during standards development; maintaining compliance once standards are enacted, supporting annual WECC self-certification; providing staff support for FERC and WECC audits. The program also includes BPA's WECC dues.

Environmental Policy and Planning: Provides guidance and direction on the integration of environmental stewardship into BPA's business decision-making. This provides BPA business lines with robust and

comprehensive environmental planning & analysis in a cost-effective way using innovative methods and techniques.

Capital to Expense Transfer Program: Conduct annual analysis of BPA’s outstanding capital work orders to assess whether they should be expensed. As obsolete inventory is identified and disposed of, it is expensed to this program.

Support from Agency Services

Research and Development relies heavily on the Technology Innovation program for project management.

Engineering Line Rating utilizes Aircraft Services, Surveying Services, Supply Chain, and Contracting.

Regulatory and Regional Association Fees rely on a number of organizations – HR, IT and security.

Environmental Policy and Planning relies on public affairs, real property services, supply chain, legal, HCM, IT and print and mail services.

Goals

Research and Development: The Transmission Technology Roadmap specifically addresses challenges facing BPA’s high voltage transmission system and its interactions with generation sources and the distribution systems of its customers. These challenges are planning operational and new technology integrations. The planning operational challenges are addressed by:

- Power System Modeling -- Development and Use of Common System Models
- Transmission Operations
- Situational Awareness and Visualization Tools -- Power Grid Optimization
- Power Flow Controls
- Power System Stability Control
- Transmission Scheduling -- Shorter Duration Scheduling, Outage Management, Congestion Management
- The new technology integration challenges are addressed by:
 - Changing Generation Resources -- Integration of Variable Resources, Wind Modeling
 - Changing Load Characteristics
 - End Use (Customer/Utility) Devices

TSD Planning & Analysis: Comply with NERC Reliability Standards

- Perform planning studies to meet the NERC reliability standards requirements. This includes system screening studies for the near-term and long-term planning horizons to assess the system reinforcements required to meet load growth.
- Develop plans of service to accommodate load growth and firm Transmission service obligations
- Develop ATC base cases to comply with NERC MOD standards. Address Pending Transmission Service Requests (TSR) by developing base cases to determine the existing Available Transfer Capacity (ATC) for long-term Transmission service requests.
- Perform cluster studies to determine the system expansion needed to address long-term Transmission service requests as part of the Network Open Season (NOS) Process.
- Assess Non-Wires solutions as part of the overall planning process to identify the feasibility of implementing a non-wire solution as an alternative to Transmission reinforcement.
- Conduct BPA’s Regional Transmission planning coordination /process (Attachment K Process, participation in study teams or WECC rating process)
- Integrate and coordinate Transmission asset management strategies into a comprehensive, overarching strategy to evaluate trade-offs among replacing Transmission’s multiple assets and expanding the system

using a standard and consistent total economic cost methodology.

- Examine current estimating methodologies and tools in order to propose a replacement system for the current system.

TSD Planning & Analysis:

- Conduct Transmission planning studies to identify any mitigation plans necessary for NERC Compliance.
- Determine short-term and long-term Transmission inventories.
- Conduct periodic Network Open Seasons and cluster studies to determine the impacts and identify reinforcements to accommodate Transmission service requests.
- Perform studies to reliably integrate renewable generation into the BPA Transmission system.
- Apply the joint asset strategy methodology developed in 2011 and 2012 across BPA's remaining asset strategies/programs and incorporate those into an integrated model.
- Create an estimating system project team and begin evaluating the current process, system, and requirements.

Engineering Line Rating: The Engineering Line Rating program is using data from the ongoing LIDAR survey project to gather information about existing Transmission facilities, to enable validation of BPA's line rating catalogue through field observations and data, providing a clear picture of the actual performance of the Transmission system. One purpose of that analysis is to identify sections of the Transmission system where additional capacity can be achieved through system improvements. The analytical phase of the Engineering Line Rating (ELR) program is currently scheduled to continue through 2016, with further activities to be determined. Implementation of ELR findings and recommendations will likely continue through FY 2020-21.

Regulatory and Regional Association Fees:

- Maintaining compliance, addressing ever-changing standards to ensure that BPA is prepared to be in compliance once new standards are approved.
- Addressing the new equipment that will be covered by the new standards -- ensuring that policies, procedures and resources are in place to ensure that the new equipment is compliant.
- Ensuring compliance of BPA's new RAS system.
- Continued maturation of BPA internal processes – Transmission recognizes that there are internal opportunities to improve assurance that BPA will remain compliant moving forward.
- The regulatory landscape is extremely dynamic, constantly changing, and staying abreast of all those changes requires constant attention and analysis.
- With respect to BPA's Available Transfer Capability (ATC), BPA's available transmission inventory, develop a process improvement project to better integrate the efforts of multiple transmission organizations.

Environmental Policy and Planning: Transmission Services near-term goals are to continue to provide appropriate, comprehensive, and cost-effective environmental analyses in support of Transmission programs and activities, including major new projects such as the I-5 Corridor Reinforcement Project Environmental Impact Statement; on-going transmission upgrades and replacements; and interconnection proposals, while upholding BPA's environmental stewardship responsibilities.

Environmental Planning & Analysis' strategies to achieve its near-term goals include:

- Coordination and communication with Transmission planning and design staff to ensure that environmental considerations are integrated early in the process;
- Effective utilization of contract resources (both supplemental labor and external consultation) to increase flexibility and adaptability; and
- Training for transmission project and program staff to increase awareness and consideration of environmental analyses in business practices.

Long term objective is to continue to provide Transmission with timely, comprehensive, and robust environmental analyses to enable Transmission to conduct its business in an environmentally sound and cost-

effective manner. Its Long-Term Strategy consists of:

- Continued efforts to integrate environmental considerations as early as possible in Transmission planning and design.
- Support for internal efforts to innovate and streamline processes and procedures.
- Maintenance of a high-quality, collaborative, motivated staff with the skill mix and resources to accomplish complex analyses clearly and effectively.
- Continue monitoring projects post-implementation to adaptively learn and improve mitigation measures to address environmental effects of projects.

Capital to Expense Transfer Program: When capital projects are initiated, they are analyzed to ensure that they qualify for capital funding consistent with capitalization policies and written guidance in the Plant Unit Catalog. Performing this review up front reduces the number of projects that will be expensed in this program. BPA's Investment Recovery Center (IRC) coordinates and manages the disposal of all BPA-owned equipment, including inventory, in compliance with Federal Law concerning the disposal of federally owned assets. IRC directs the flow of material returns from the field, construction sites, and the central warehouse back to the system. They provide services to assist all BPA organizations in achieving the most efficient use of materials and equipment and are responsible for recovering the maximum value for materials and equipment that are either damaged or excess to the agency's needs.

New Programs/Projects

TSD Planning and Analysis: Funding is for a total economic evaluation across the remaining Transmission asset strategies (programs) and incorporating those programs into an integrated model that will allow BPA to optimize asset replacement and Transmission system expansion options. The cost of this 30-month project is \$2 million (\$1 million in FY 2013 and \$1 million in FY 2014).

Engineering Line Rating: The entire program is new since the 2010 IPR.

Regulatory and Regional Association Fees: Compliance work associated with OMET and WISP, the expanded suite of control center cyber-assets to be covered under CIP V. 4 and V. 5, and maturing the transmission inventory environment under the new ATC standards, are all new initiatives since the 2010 IPR process.

Risk and Impact of Operating at Cost Target

Research and Development has committed to operate at the cost targets.

Engineering Line Rating: Missing the 2014 deadlines could mean that BPA is out of compliance with this NERC alert.

Regulatory and Regional Association Fees: As a federal agency BPA cannot be fined for non-compliance; however, the regulators can direct BPA to take action on an accelerated schedule if non-compliance is found, which could have severe and unanticipated financial impacts. There is also a credibility risk, because if BPA does not have the right capital structure in place for WISP, OMET and other projects, full implementation will be delayed. The Transmission inventory project has significant revenue implications for BPA.

Environmental Policy and Planning has committed to operate at the cost targets.

Non-Funded Items

Research and Development: Typically Technology Innovation receives about 75 project solicitations per year; every year, potentially-beneficial projects go unfunded. Proposals originating outside BPA, such as university

projects, are required to provide matching funds. Risks associated with unfunded proposals include the loss of those matching funds, up to \$4 million in some years.

TSD Planning & Analysis: Estimating system evaluation and system (once identified, system funding would be sought under the IT program).

Challenges/Constraints

Research and Development: BPA and the utility industry in general, lag far behind other industries in terms of Research Development spending as a percentage of revenue. Research and Development funding is always a challenge, particularly in difficult economic times. Other challenges include pressure to de-fund projects before they can show definitive results, and deciding which emerging technologies on which to focus limited resources. The need to assess the potential compliance implications of new technologies is another challenge.

TSD Planning and Analysis:

- NOS Program demands.
- Wind Integration demands.
- Resource hours and dollars required for initial total economic cost strategies development.

Engineering Line Rating (ELR): Access to the necessary computer hardware and software – the data collection and analysis associated with ELR will require significant IT resources. There may also be public safety issues that need to be resolved, in cases where safety issues, such as a lack of ground clearance, are discovered.

Regulatory and Regional Association Fees: The dynamic regulatory environment, and limited resources to support these crucial compliance functions, is the primary constraint faced by the Regulatory and Regional Association Fees program.

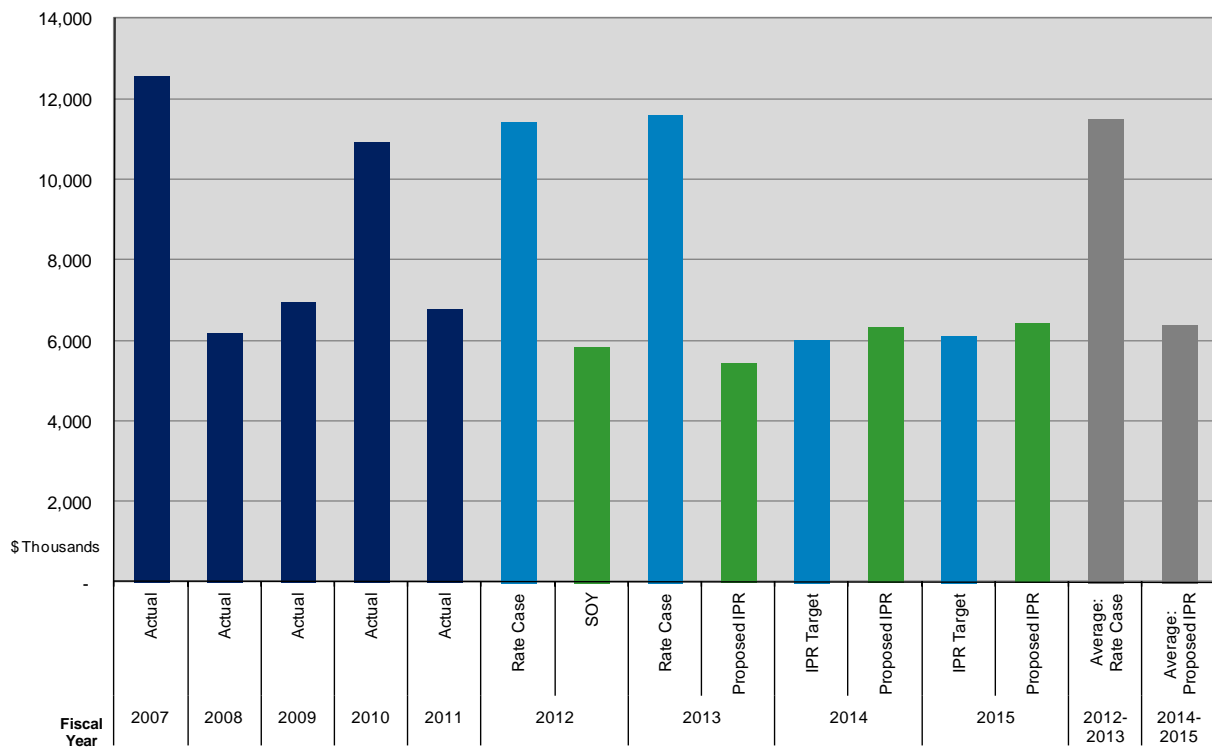
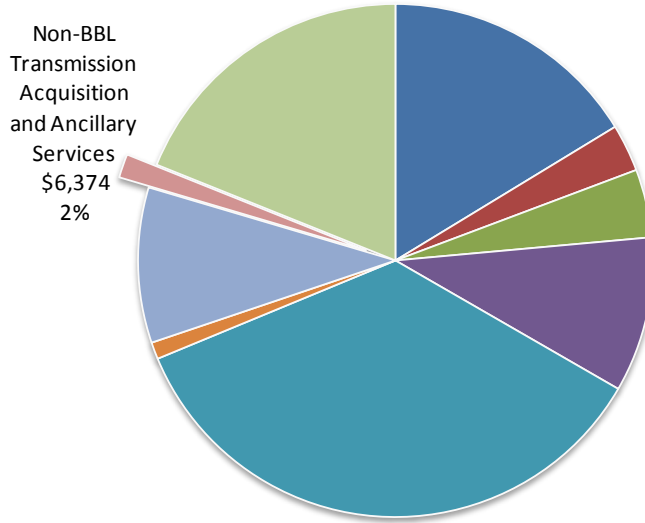
Environmental Policy and Planning primary challenge is to continue to keep pace with a significantly increasing workload without significantly increasing costs, by developing innovative ways to address environmental analysis needs.

Capital to Expense Transfer Program:

- Emergency repair of damage to minor equipment units.
- Aging transmission equipment.
- Preliminary Engineering work orders are issued to collect costs associated with specific preliminary planning, system studies and preliminary design. If this study is cancelled, any charges will be expensed to this program.

4.9 NON-BETWEEN BUSINESS LINE (NON-BBL) TRANSMISSION ACQUISITION AND ANCILLARY SERVICES

FY 2014-2015 Average: Proposed IPR



Program Details

(\$\$\$)	2011			2012		
	Start of Year	Actuals	Delta	Rate Case	Start of Year	Delta
Leased Facilities	1,489	4,257	2,768	4,127	4,130	3
Settlement Agreements	356	1,381	1,024	504	500	(4)
Non-Between Business Lines Ancillary Services	5,686	428	(5,258)	6,789	500	(6,289)
Transmission Renewables	-	684	684	-	696	696
Total	7,531	6,750	(782)	11,420	5,827	(5,593)

(\$\$\$)	2013			2014			2015		
	Rate Case	Proposed IPR	Delta	IPR Target	Proposed IPR	Delta	IPR Target	Proposed IPR	Delta
Leased Facilities	4,224	4,424	200	4,258	4,258	-	4,338	4,338	-
Settlement Agreements	509	509	-	516	516	-	525	525	-
Non-Between Business Lines Ancillary Services	6,857	505	(6,352)	516	505	(10)	525	505	(20)
Transmission Renewables	-	-	-	720	1,037	317	735	1,063	329
Total	11,590	5,438	(6,152)	6,010	6,316	307	6,123	6,432	309

Description, Purpose and Responsibilities

Non-BBL Transmission acquisition and ancillary services includes leased facility payments, settlement agreements, non-BBL ancillary services for contingent energy, redispatch, generation supplied reactive, and stability reserves, and transmission renewables.

Goals

Leased Facilities: Create lease agreements and other costs of transmission, when such arrangements are feasible and cost effective to deliver power. Proactively manage lease arrangements to develop long-term strategies.

Transmission Renewables: The WIT has implemented a number of initiatives designed to make better use of the existing system through improved wind forecasting and more flexible scheduling arrangements, and to bring additional resources (especially the region’s thermal generators) into the marketplace for balancing services. For the near term, the WIT intends to continue advancing these initiatives while finalizing and making significant progress on the development of the Enhanced BPA BA (EBBA). This includes increasing the ability of market participants to make shorter-term purchases of balancing capacity to meet the balancing needs of their Variable Energy Resources. The long-term Strategy for the WIT is to fully implement the elements of the EBBA, while BPA and the region work through the NWPP Northwest Market Assessment and Coordination Committee (MACC) that was recently formed by Northwest Power Pool member executives.

Changes from the 2010 IPR

Transmission Renewables has initiated discussions with the region on the conceptual framework of an Enhanced BPA BA (EBBA). Significant work-streams resulting from EBBA development include:

- Enhanced Supplemental Service (Third Party Supply) – increase the ability of market participants to make shorter-term purchases of balancing capacity to meet the balancing needs of their Variable Energy Resources.
- Dispatch Decisions and Visibility - Develop and upgrade the systems needed for implementing third party supplied balancing reserves.
- Dynamic Scheduling – Facilitate the ability to schedule and dispatch dynamic resources in-hour.

Risk and Impact of Operating at Cost Target

Transmission Renewables: Wind resource development is continuing to grow at a rapid pace, which in turn creates greater demand for balancing reserves. The limits of the FCRPS' ability to provide balancing reserves is approaching. If funding or FTE support for WIT is curtailed, it will limit BPA's ability to service the increasing demand for balancing services. Reducing the level of service BPA provides to the wind parties could hamper renewable generation development in BPA's BAA, with potentially detrimental political consequences for BPA. The WIT is not directly funded. The Transmission Business Line and the Power Business Line continue to fund the FTE assigned to work on WIT initiatives.

Challenges/Constraints

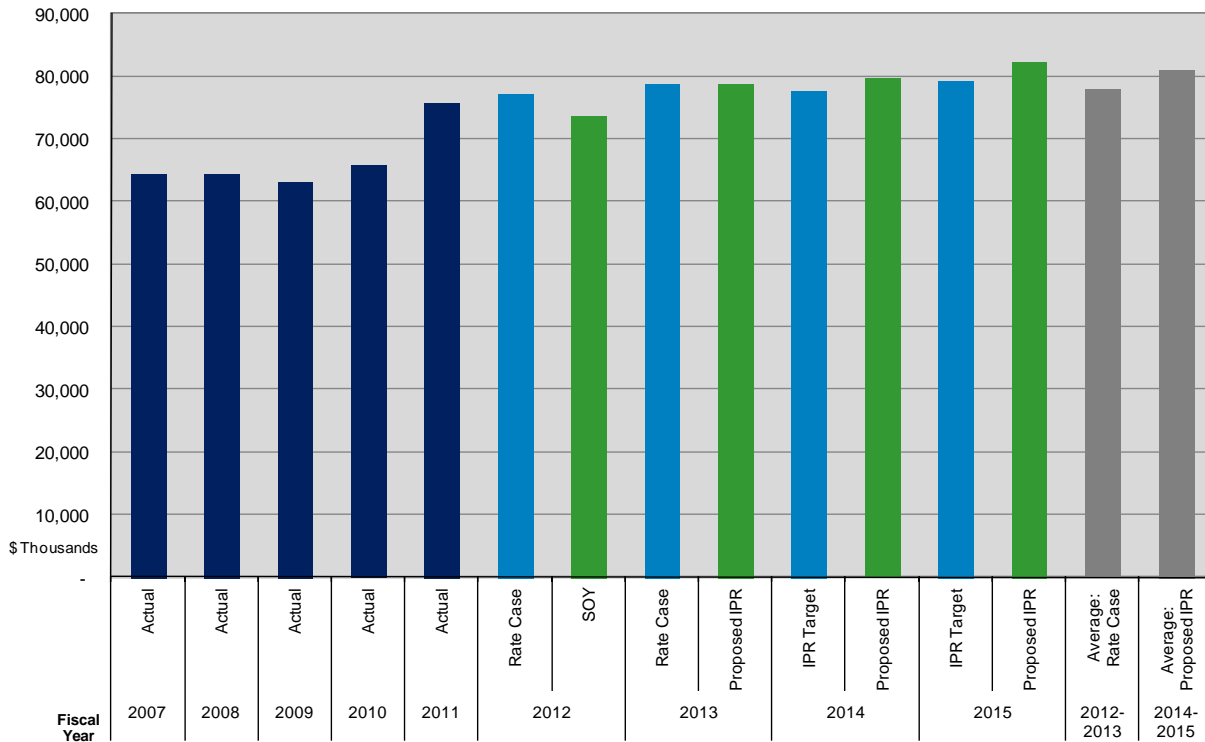
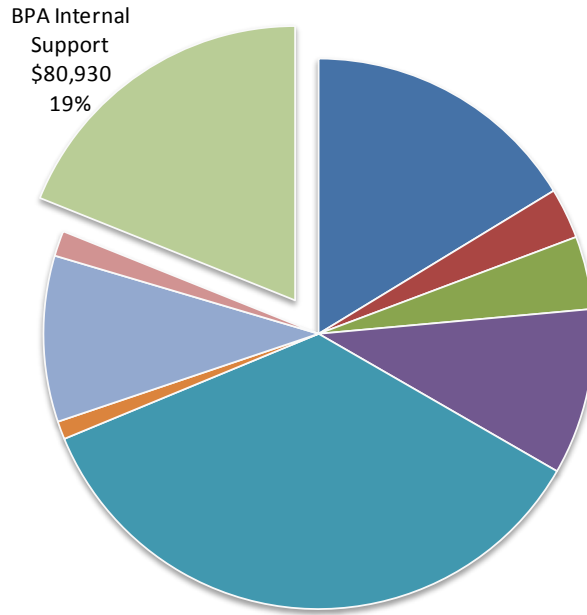
Transmission Renewables: The fact that the WIT lacks a dedicated staff – full time employees are supplied by Transmission and Power, which have other high-priority issues to address which poses a challenge. Other challenges include:

- The lack of industry standards and clear regulatory guidance for balancing services.
- The lack of a dedicated product code for wind is also a challenge – wind parties want to sell it as a firm product with Control Area Services backup, but in reality, wind is not truly a firm product. Regional discussions on potential mechanisms to allow wind parties to purchase additional balancing services are ongoing, but currently unresolved.

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4.10 TRANSMISSION INTERNAL SUPPORT

FY 2014-2015 Average: Proposed IPR



Program Details

Corporate Programs Recovered Directly Through Transmission Services

	2011			2012		
	Start of Year	Actuals	Delta	Rate Case	Start of Year	Delta
Post-Retirement Benefits	15,579	15,579		17,243	17,243	0
Agency Services G&A Allocations	56,309	60,067	3,757	59,857	56,430	(3,427)
Total	71,888	75,645	3,758	77,100	73,673	(3,427)

	2013			2014			2015		
	Rate Case	Proposed IPR	Delta	IPR Target	Proposed IPR	Delta	IPR Target	Proposed IPR	Delta
Post-Retirement Benefits	17,821	17,821	-	18,501	18,501	-	18,819	18,819	-
Agency Services G&A Allocations	60,961	60,995	35	59,176	61,141	1,966	60,414	63,399	2,985
Total	78,781	78,816	35	77,677	79,642	1,966	79,233	82,218	2,985

Description, Purpose and Responsibilities

Internal support consists of two separate programs, Additional Post Retirement Benefits Contributions and Agency Services General and Administrative. The Internal Support program is included in both the Power and Transmission revenue requirements. Since the program is the same for each business unit, the full narrative is captured in the [Power internal support section](#).

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AGENCY SERVICES



5.1 AGENCY SERVICES OVERVIEW

Agency Services is the term used to refer to all of the corporate organizations. These organizations provide benefits to Power and Transmission and their costs are ultimately covered by the Power and Transmission rates. As described earlier, corporate organizations can directly charge into Power and Transmission operations and maintenance programs, if there is a direct benefit to the program. However, other costs are shared costs and are allocated to Power and Transmission Services via the Agency Services G&A and Business Support cost pools.

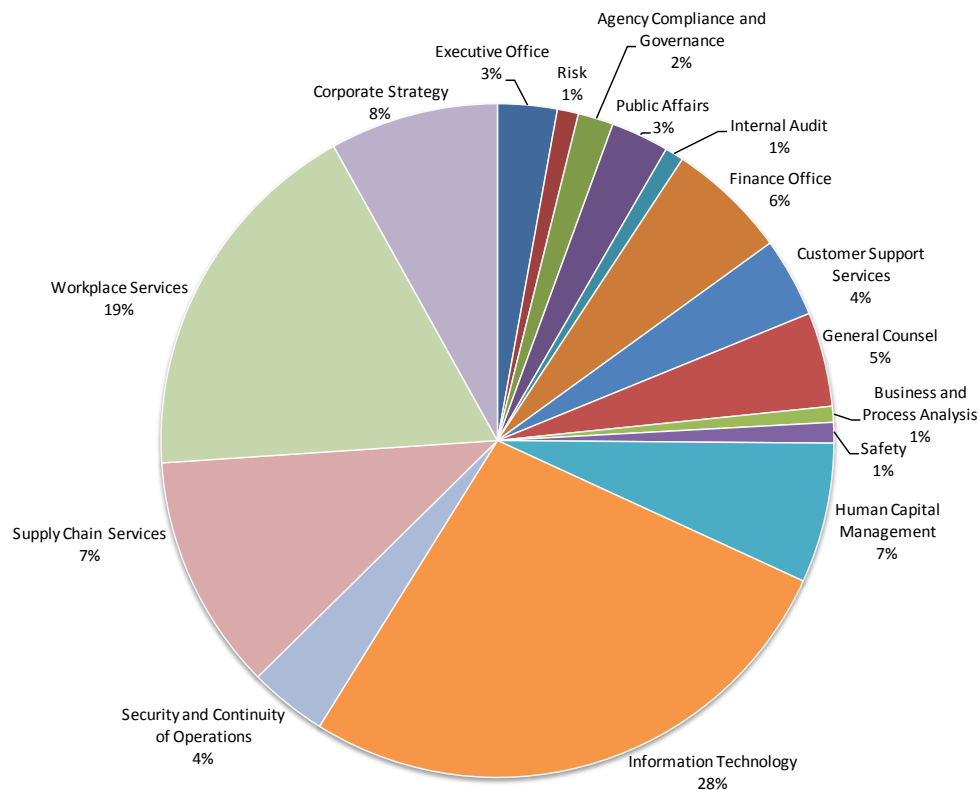
In this section of the report, the Agency Services organizations have provided information about the products and services they provide to Power and Transmission Services.

In FY 2011, the Agency Services budget was \$239.9 million. Actual expenses for the year were \$240.0 million, 100 percent of the budget.

Comparison of Forecast Growth Rate in 2010 IPR to 2012 IPR

Agency Services	2010 IPR	2012 IPR
	FY 2009 Actuals to FY 2013 Final IPR	FY 2011 Actuals to FY 2015 Proposed
Overall 5-year change	27.6%	24.9%
Compound Annual Growth Rate	6.3%	5.7%

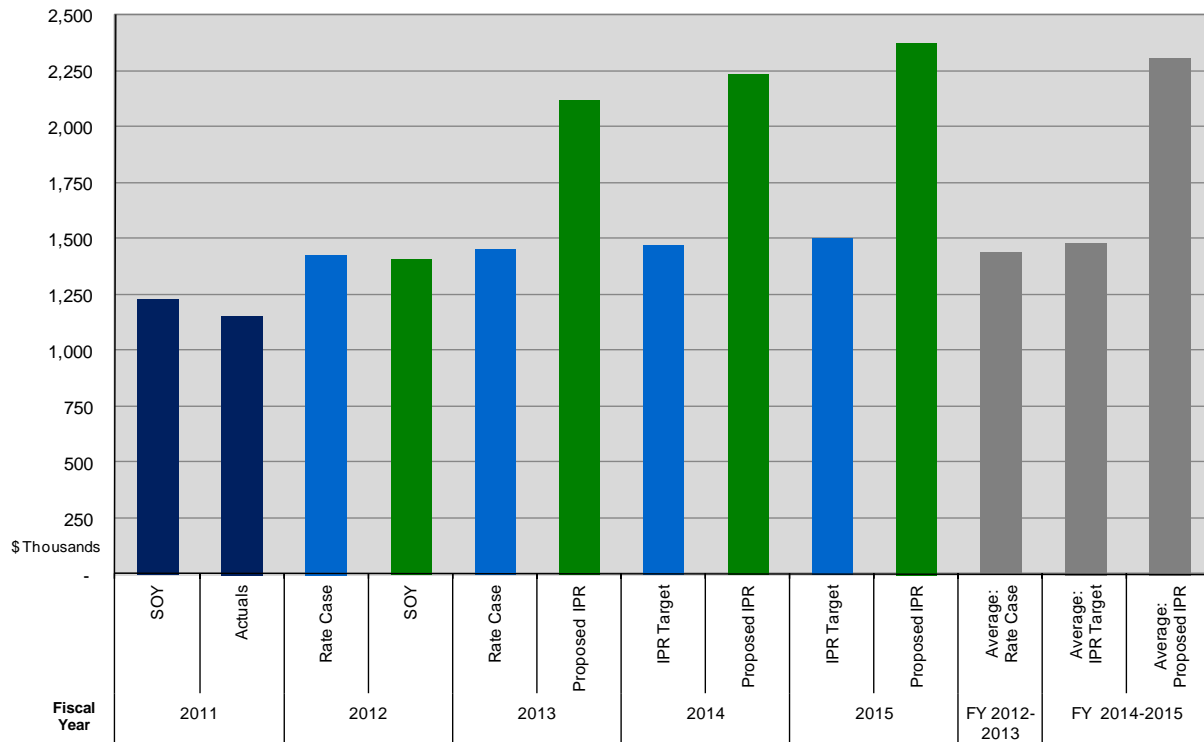
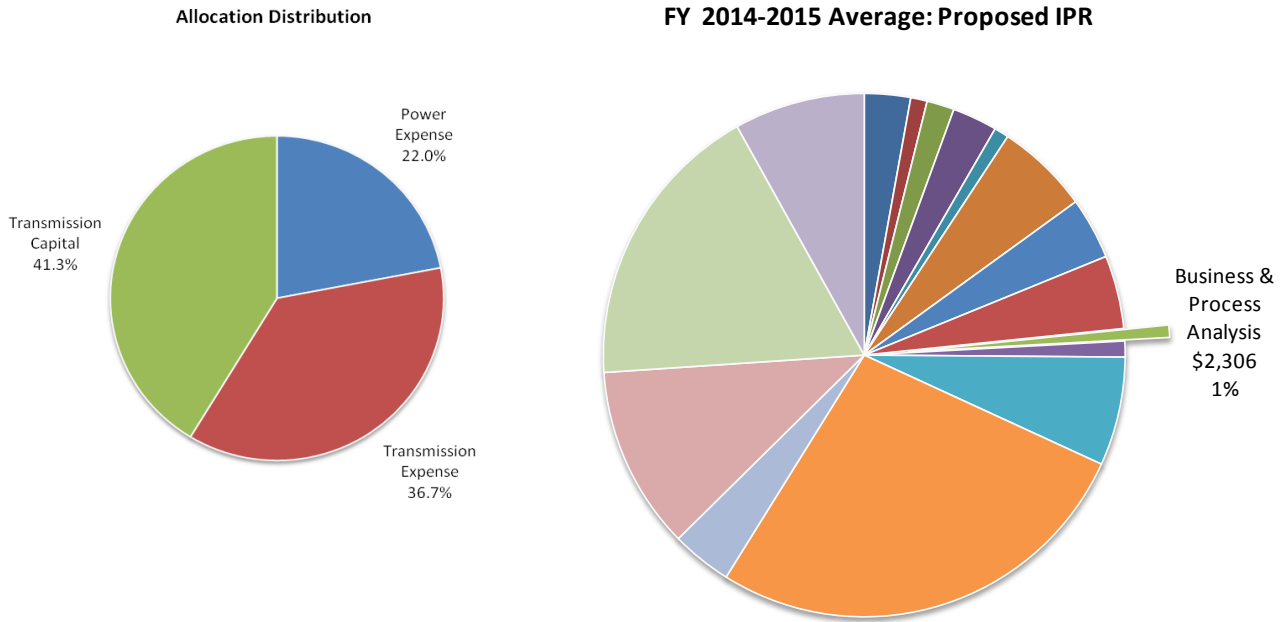
Agency Services Expense Summary
FY 2014-2015 Average: Proposed IPR



	2011			2012		
	Start of Year	Actuals	Delta	Rate Case	Start of Year	Delta
Administrator's Office	802	581	(221)	820	793	(27)
Deputy Administrator's Office	231	185	(46)	237	231	(6)
Governance & Compliance	5,035	4,157	(877)	5,031	4,711	(320)
Internal Audit	2,538	2,384	(154)	2,384	2,539	154
Risk	3,903	3,316	(587)	4,008	3,992	(16)
Public Affairs	7,997	7,527	(470)	7,961	7,885	(76)
Deputy Administrator's Total	19,703	17,569	(2,134)	19,621	19,359	(263)
Chief Operating Officer	828	654	(173)	783	771	(12)
Customer Support Services	10,313	9,950	(363)	10,535	10,828	293
Chief Operating Officer Total	11,140	10,604	(536)	11,318	11,599	281
Corporate Strategy	20,296	17,638	(2,658)	23,695	23,247	(448)
Finance	14,984	15,072	88	15,561	16,612	1,050
General Counsel	11,478	10,681	(797)	10,977	12,188	1,211
Internal Business Services	840	552	(288)	855	836	(19)
Business & Process Analysis	1,227	1,155	(72)	1,423	1,407	(16)
Human Capital Management	18,081	18,216	135	18,460	18,678	218
Information Technology	67,861	69,025	1,164	68,679	67,487	(1,192)
Safety	2,589	2,340	(249)	2,641	2,604	(37)
Security & Continuity of Operations	8,515	8,460	(54)	8,834	8,833	(1)
Supply Chain	21,139	21,789	649	21,788	22,252	464
Workplace Services	49,124	46,269	(2,855)	49,880	50,087	207
Total Internal Business Services	169,376	167,806	(1,570)	172,561	172,184	(377)
Undistributed Reduction	(7,872)	-	7,872	(211)	(1,210)	(999)
Total	239,907	239,951	44	254,342	254,772	429

	2013			2014			2015		
	Rate Case	Proposed IPR	Delta	IPR Target	Proposed IPR	Delta	IPR Target	Proposed IPR	Delta
Administrator's Office	838	806	(33)	831	831		852	853	
Deputy Administrator's Office	242	250	8	241	257	16	247	263	16
Governance & Compliance	5,060	5,355	294	4,659	5,059	400	4,767	5,171	404
Internal Audit	2,439	2,628	188	2,612	2,679	67	2,680	2,747	67
Risk	4,088	2,926	(1,162)	3,143	3,021	(121)	3,206	3,096	(110)
Public Affairs	8,134	8,134		8,267	8,268	1	8,474	8,476	2
Deputy Administrator's Total	19,963	19,292	(671)	18,922	19,284	363	19,375	19,754	379
Chief Operating Officer	796	777	(18)	895	897	2	911	917	6
Customer Support Services	10,759	11,045	286	11,360	11,360	-	11,648	11,648	-
Chief Operating Officer Total	11,554	11,822	268	12,255	12,257	2	12,559	12,564	6
Corporate Strategy	24,482	24,482	-	24,159	24,159	-	24,466	24,466	-
Finance	15,975	16,835	861	17,090	17,158	68	17,476	17,570	94
General Counsel	11,625	13,415	1,790	11,515	13,237	1,722	12,191	14,071	1,880
Internal Business Services	869	870	-	872	1,162	290	893	1,185	292
Business & Process Analysis	1,449	2,118	669	1,467	2,237	770	1,500	2,375	875
Human Capital Management	18,355	18,909	554	19,526	20,255	729	19,969	20,313	344
Information Technology	70,348	76,916	6,569	70,233	79,165	8,932	71,728	83,368	11,640
Safety	2,695	2,868	173	2,843	2,945	102	2,912	3,016	104
Security & Continuity of Operations	8,867	10,200	1,333	11,089	11,089	-	11,317	11,454	136
Supply Chain	22,377	31,717	9,341	32,397	34,131	1,734	33,102	34,130	1,028
Workplace Services	50,631	50,911	279	51,747	53,621	1,874	52,751	54,682	1,931
Total Internal Business Services	175,592	194,509	18,917	190,173	204,605	14,432	194,173	210,523	16,350
Undistributed Reduction	(174)	(300)	(126)	-	-	-	-	-	-
Total	259,855	280,862	21,006	274,944	291,531	16,587	281,092	299,801	18,710

5.2 BUSINESS PROCESS AND CONTINUOUS IMPROVEMENT



Program Details

	2011			2012		
	Start of Year	Actuals	Delta	Rate Case	Start of Year	Delta
Agency Services G&A Allocations (\$\$\$)	1,227	1,155	(72)	1,423	1,407	(16)

	2013			2014			2015		
	Rate Case	Proposed IPR	Delta	IPR Target	Proposed IPR	Delta	IPR Target	Proposed IPR	Delta
Agency Services G&A Allocations (\$\$\$)	1,449	2,118	669	1,467	2,237	770	1,500	2,375	875

Description, Purpose and Responsibilities:

The Business Process and Continuous Improvement group includes operational excellence consultants, process managers and business analysts that deploy business process tools, architectures work flow technology, and other continuous improvement methodologies to advance operational excellence throughout the Agency. Currently, there are two distinct Centers of Excellence - Operational Excellence and Business Process Management.

- Operational Excellence promotes the values, habits, tools and skills to improve the effectiveness and efficiency of BPA’s operations by providing consulting services agency wide. This function utilizes industry best practices on proven quality management systems to help managers and employees pursue Operational Excellence
- Business Process Management (BPM) deploys process and business improvement initiatives within Internal Business Service and Agency-wide using a structured methodology, leveraging best-in-class technology, and measuring success through data driven metrics and analysis.

Goals

The organization is currently undertaking the following core business initiatives: Benchmarking, Business Process Management, Sustainability, and a Corrective Action Program. The goals for these programs are as follows.

- Advance the Operational Excellence agenda - connecting improvement initiatives to strategy.
- Incorporate Change Management principles into all projects.
- Tie together employee engagement, best practices, and continuous improvement to reduce waste, rework, and save costs.
- Create an Agency vision for quality system implementation, leverage internal capabilities, while building relationships with partners and suppliers.
- Centralize resources and partner with business units to drive improvements in BPA’s performance via formal benchmarking.
- Development of the fundamentals of BPM through internal capability maturity.
- Develop measurement systems and report on progress through a governance model that monitors service delivery.

Changes from the 2010 IPR

Four initiatives have been proposed in FY 2012 for possible implementation in FY 2013 that would reap significant benefits to the Agency.

Corrective Action Program: Addresses the risk of repeated failures at BPA. A Corrective Action Program would provide cost savings by documenting issues, finding the root cause, correcting issues and preventing repeat failures.

Business Process Management IT/PMO collaboration: This capability provides the customer an assessment of current state business operations, a model of the future state and a plan for achieving it. The design provides a roadmap for more efficient and effective business operations that address a full spectrum of people, process and technology concerns.

Sustainability: Sustainability reporting is a requirement pursuant to executive Order 13514. BPA is currently required to meet a DOE requirement to address sustainability and Green House Gas (GHG) management.

Benchmarking: Across the agency, there are 72 different benchmarking efforts. A consolidated effort in both employee time and reduction in contract overlap would save the Agency money, and utilize the benchmarked data to set targets for improvement.

Risk and Impact of Operating at Cost Target

On a small scale, the activities described can be accomplished with the assigned resources and cost targets. To grow capabilities and provide tangible value to the agency, the initiatives as currently staffed prove to be of minimal value, however, have maximum potential. The consolidation of some resources from across the Agency where similar activities are occurring or an increase in funding could make further advancement possible.

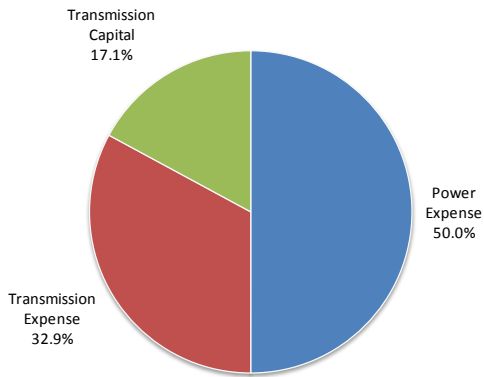
Not expanding the BPM IT/PMO collaboration capability results in the missed opportunity to reap benefits across the agency.

Our sustainability target of reducing our energy footprint by 30 percent, cannot be met without data collection, analysis and reporting.

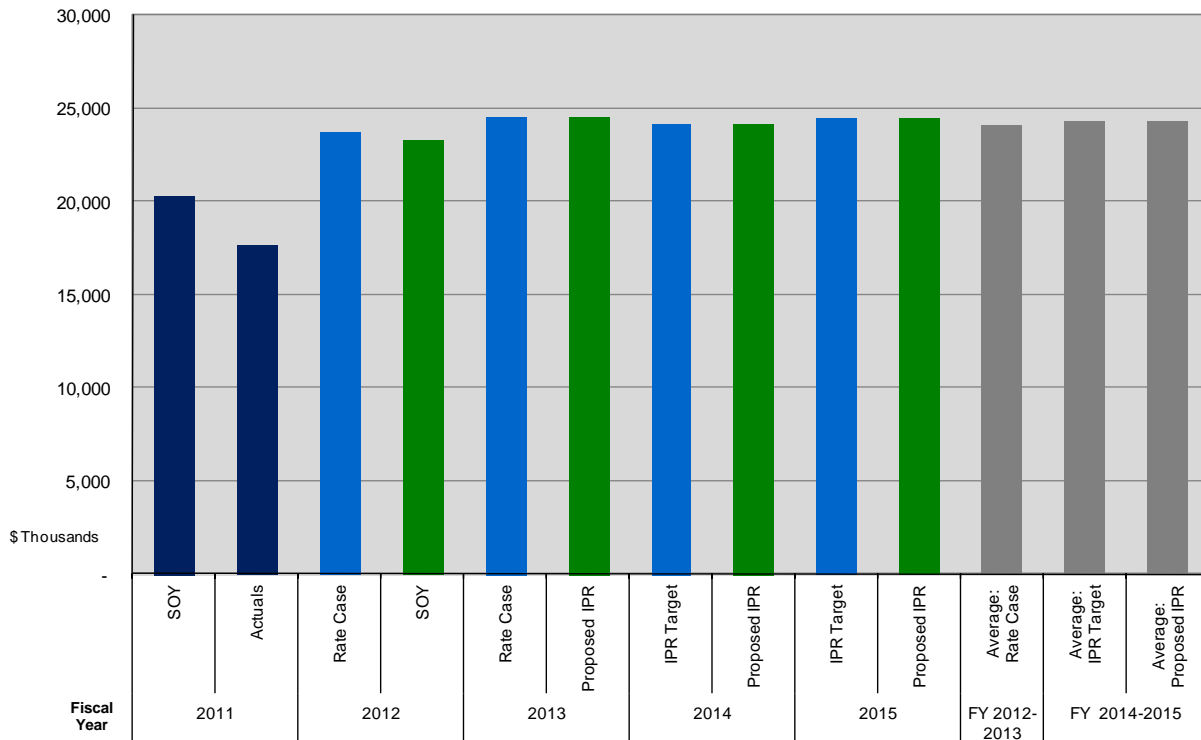
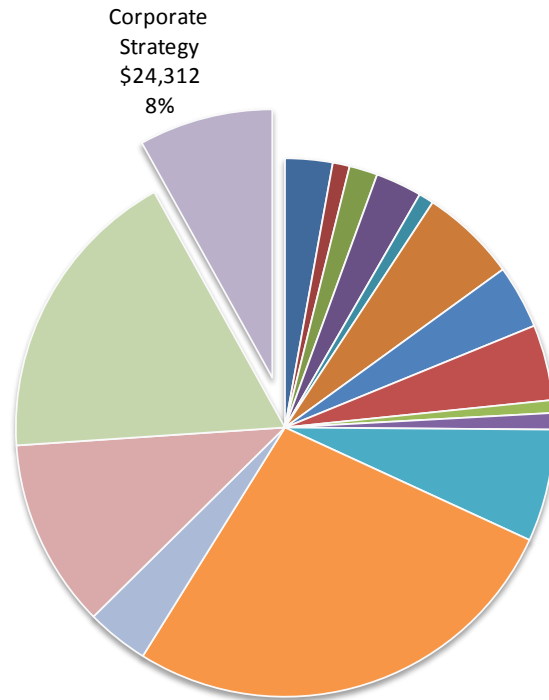
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5.3 CORPORATE STRATEGY

Allocation Distribution



FY 2014-2015 Average: Proposed IPR



Program Details

	2011			2012		
	Start of Year	Actuals	Delta	Rate Case	Start of Year	Delta
Agency Services G&A & Business Support Allocations	10,368	9,194	(1,175)	12,622	12,276	(346)
Power - R&D Project Funding	5,030	4,438	(592)	5,622	5,631	9
transmission - R&D Project Funding	4,897	4,006	(891)	5,451	5,339	(112)
Total	20,296	17,638	(2,658)	23,695	23,247	(448)

	2013			2014			2015		
	Rate Case	Proposed IPR	Delta	IPR Target	Proposed IPR	Delta	IPR Target	Proposed IPR	Delta
Agency Services G&A & Business Support Allocations	12,778	12,778	-	12,807	12,807	-	12,884	12,884	-
Power - R&D Project Funding	5,939	5,939	-	5,820	5,820	-	5,939	5,939	-
transmission - R&D Project Funding	5,766	5,766	-	5,532	5,532	-	5,643	5,643	-
Total	24,482	24,482	-	24,159	24,159	-	24,466	24,466	-

Description, Purpose and Responsibilities

BPA’s Corporate Strategy organization works with internal and external stakeholders to ensure the agency has a clear vision and corresponding strategies that are robust and actionable. Given the rapid change in today’s industry environment, BPA must anticipate future challenges and stay informed by market intelligence and policy analysis so strategies and actions are on the mark. The following teams make up Corporate Strategy.

- The BPA Strategic Planning team works with BPA’s executive leadership to develop the agency’s long-term Strategic Direction, including the Agency Strategic Objectives, supporting multi-year strategies and Key and Cross Agency Targets and the targets of our business unit balanced scorecards. This organization also has responsibility for planning, directing and managing the Agency Asset Management program.
- The BPA Strategy Integration team develops and coordinates the management of specific cross-agency strategic initiatives in anticipation of, or in response to, developments affecting BPA and the electric power industry. These include renewable resource integration, climate change, integrated resource and transmission planning, and balancing market development.
- BPA’s Technology Confirmation/Innovation organization focuses the Agency's technology initiatives in a coherent and disciplined approach and aligns them with BPA's strategic objectives. The Chief Technology Innovation Officer leads development and management of the agency strategy for how BPA researches, develops, demonstrates and deploys new technologies.

Goals

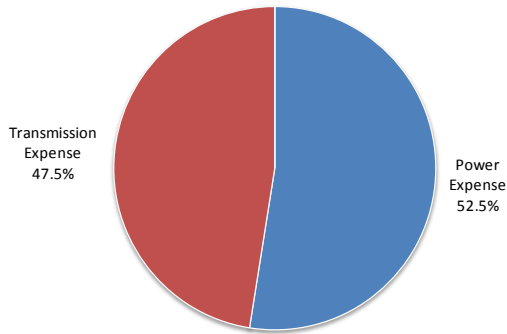
- Provide timely and relevant industry intelligence to develop strategies and policies to support achievement of BPA’s business objectives.
- Drive excellence in agency-level performance management toward accomplishment of BPA’s strategic priorities through development of clear, measurable Key Agency Targets and Cross Agency Targets, and timely, accurate, and transparent progress reporting.
- Continuously improve agency asset strategy development and implementation.
- Define and execute BPA’s renewable resource integration and balancing reserve strategy.
- Continue to drive the technology innovation research agenda and actively manage the technology portfolio to maximize the value of FCRPS assets.
- Evaluate and prepare for the physical and legislative impacts of climate change.
- Develop a sustainable strategy for meeting the long-term balancing requirements of the BPA BA.

Risk and Impact of Operating at Cost Target

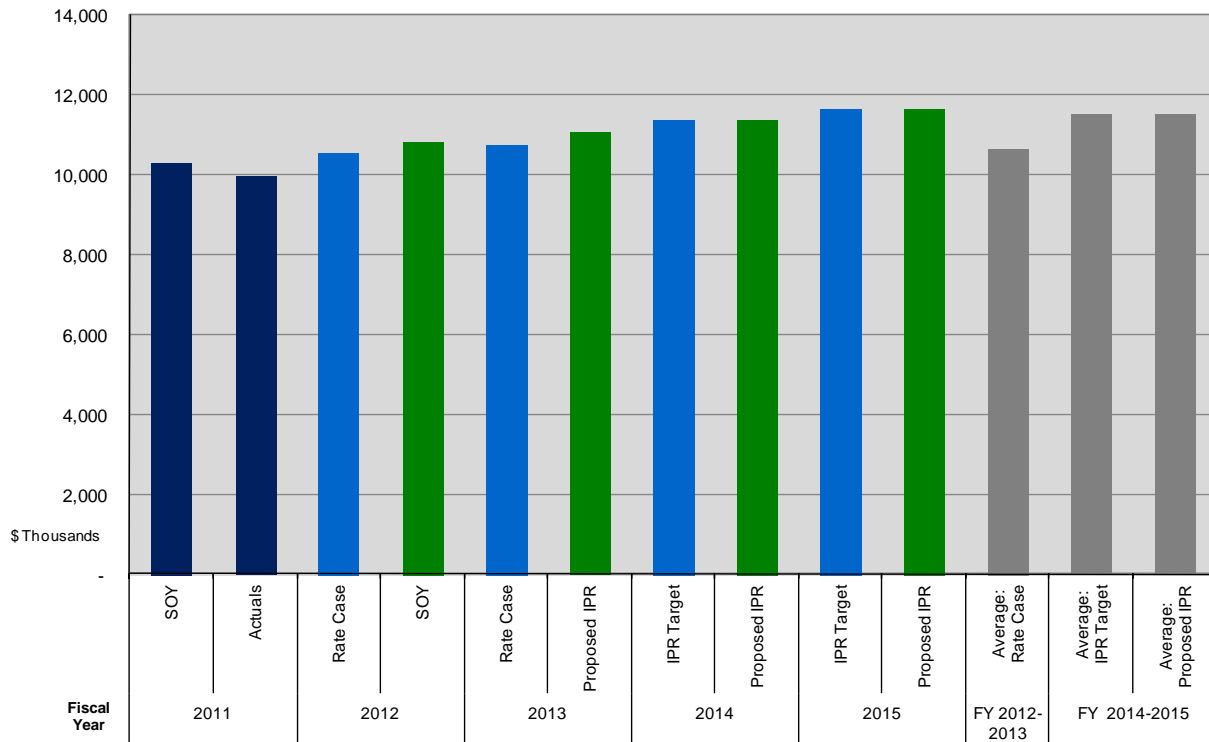
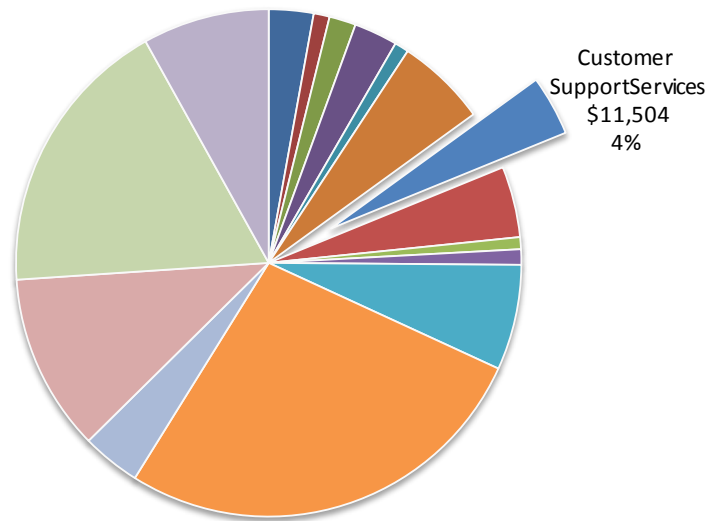
Corporate Strategy has committed to operate at the cost targets.

5.4 CUSTOMER SUPPORT SERVICES

Allocation Distribution



FY 2014-2015 Average: Proposed IPR



Program Details

	2011			2012		
	Start of Year	Actuals	Delta	Rate Case	Start of Year	Delta
Business Support Allocations	10,313	9,883	(430)	10,535	10,828	293
Power - Direct Customer Service Support	-	70	70	-	-	-
Total	10,313	9,950	(363)	10,535	10,828	293

	2013			2014			2015		
	Rate Case	Proposed IPR	Delta	IPR Target	Proposed IPR	Delta	IPR Target	Proposed IPR	Delta
Business Support Allocations	10,759	11,045	286	11,360	11,360	-	11,648	11,648	-
Power - Direct Customer Service Support	-	-	-	-	-	-	-	-	-
Total	10,759	11,045	286	11,360	11,360	-	11,648	11,648	-

Description, Purpose and Responsibilities

Customer Support Services (CSS) provides core business services and leadership central to the customer experience while meeting marketing and sales governance requirements. CSS is the source of consolidated and aligned customer contract, metering, load forecasting and billing information, and interfaces with front office organizations of Power and Transmission. Customer Support Services provides overall business management and operation, data stewardship, and integration of new customer service IT systems.

Goals

- Implement a cross-functional data quality management program to foster continuous improvement, ensure data and information is accurate and up to date, and minimize manual and duplicate data inputs.
- Implement Customer Review program to thoroughly review contractual relationships across business lines between BPA and individual customers on a continuous cycle.
- Train and develop staff to consistently deliver high quality results as well as broaden and deepen staff understanding of BPA’s business relationships.
- Raise awareness in Agency strategic initiatives and business and market trends such that CSS can assess impacts and respond in a timely manner to the changing energy landscape.
- Implement benchmarking, metrics, and corrective action programs to propel operational excellence.
- Establish a quality assurance program for billing determinants.
- Complete enhancements in CSS IT systems to maximize benefits to BPA and customers.

Changes from the 2010 IPR

- A coordinated customer review program was developed to ensure accuracy of customer information and enhance cross-functional knowledge of CSS employees. The review program implementation will be updated in response to the Accurate Billing of Customer Contracts (ABC) Project findings and transition plan to the CSS organization.
- CSS implemented five new IT systems this year, Customer Contract Management (CCM), Customer Billing Center (CBC), Customer Data Management (CDM), Customer Portal (CP), and Versioned Billing Determinants and Rate System (VBARS).

Risk and Impact of Operating at Cost Target

CSS has committed to operate at the cost targets.

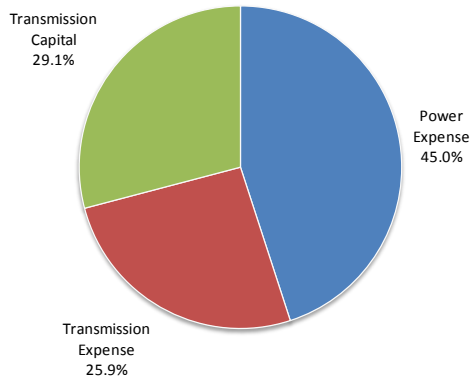
Challenges/Constraints

- Ensuring a continuous pipeline of skilled new employees to replace a large potential retirement cohort.
- IT funding, needed for implementation of new systems and changes or operations and maintenance of existing systems, that will be required to keep pace with the changing needs of the industry, appears to be so constrained as to limit needed system evolutions.
- The rapid evolution of the energy industry and Federal requirements requires great flexibility in CSS operations to be able to respond to and implement new policies and requirements.

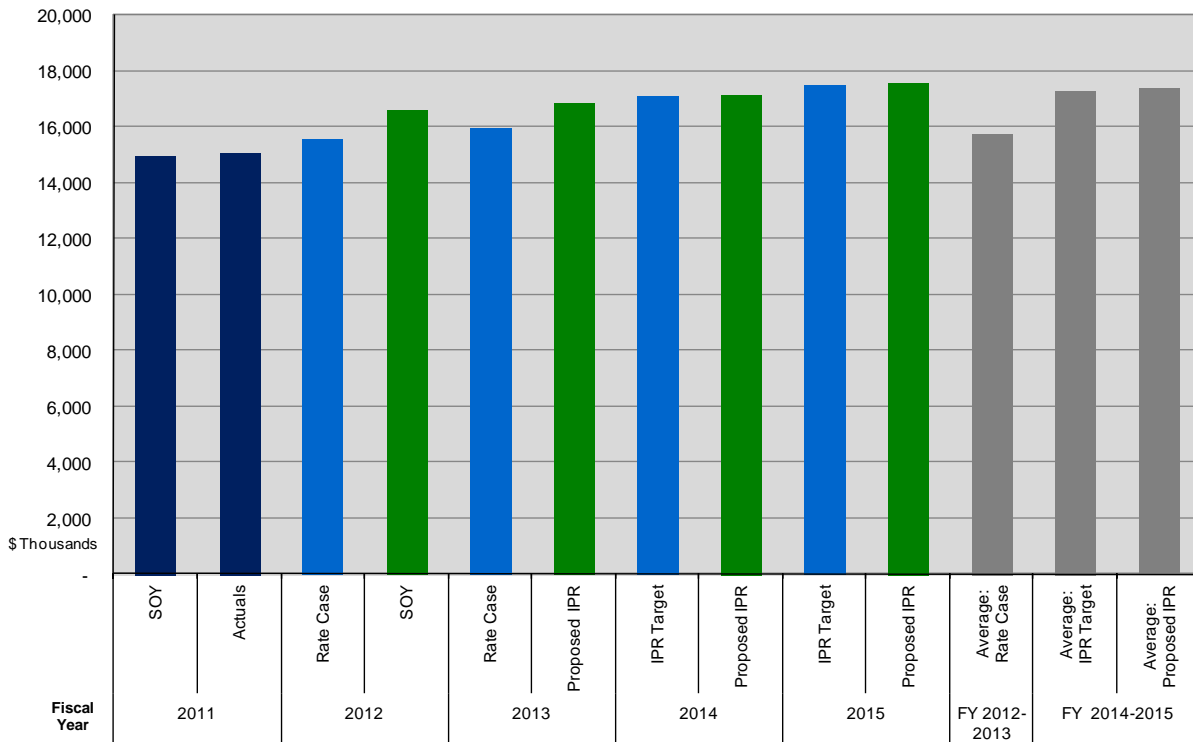
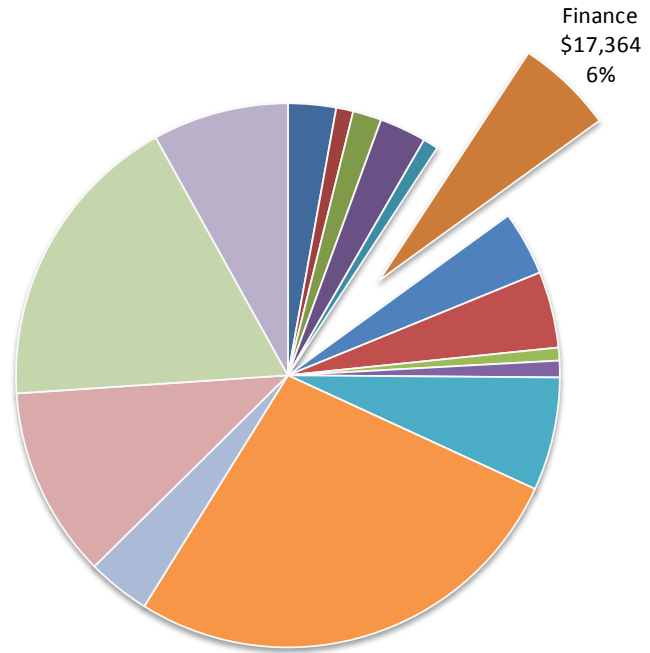
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5.5 FINANCE

Allocation Distribution



FY 2014-2015 Average: Proposed IPR



Program Details

	2011			2012		
	Start of Year	Actuals	Delta	Rate Case	Start of Year	Delta
Agency Services G&A Allocations	13,649	13,401	(248)	14,010	15,168	1,158
Power - Direct Budget and Finance Support	539	675	136	551	437	(114)
Trans. - Direct Budget and Finance Support	796	996	200	1,000	1,007	7
Total	14,984	15,072	88	15,561	16,612	1,050

	2013			2014			2015		
	Rate Case	Proposed IPR	Delta	IPR Target	Proposed IPR	Delta	IPR Target	Proposed IPR	Delta
Agency Services G&A Allocations	14,387	16,835	2,449	15,615	17,158	1,543	15,967	17,570	1,603
Power - Direct Budget and Finance Support	564	-	(564)	460	-	(460)	471	-	(471)
Trans. - Direct Budget and Finance Support	1,024	-	(1,024)	1,015	-	(1,015)	1,038	-	(1,038)
Total	15,975	16,835	861	17,090	17,158	68	17,476	17,570	94

Description, Purpose and Responsibilities

Finance provides financial planning, accounting, and reporting for the FCRPS and BPA. The organization also provides economic and analytical support for rate case and regulatory proceedings, and plans, coordinates and executes all Treasury and non-Federal financing programs. The organization provides cash and reserves management and manages the CGS Decommissioning Trust Fund. Finance has primary responsibility for relationships with Federal and non-Federal banking communities, rating agencies, investors and others in the financial community. It has primary responsibility for the development of agency budgets.

Goals

- Continue to make all Treasury payments in full and on time by setting rates to recover costs, aligning budgets to achieve this goal, and monitoring actual expenditures and revenues compared to budgets, allowing BPA to make decisions when necessary to ensure making the annual Treasury payment.
- Assure appropriate accounting treatment and transparency to achieve an unqualified (clean) audit opinion.
- Continue to develop and follow strong internal controls (A-123).
- Maintain high ratings on BPA-backed bonds.
- Develop and implement alternative funding tools.
- Refine the capital budgeting process to ensure BPA makes the right investments at the right time.
- Continue to implement recommendations from the IPR Lessons Learned such that the IPR and QBR provide financial information, adequate coordination and communication, and transparency to meet varying audience expectations.

Changes from the 2010 IPR

- Resources have been devoted to researching, analyzing access to capital funding tools.
- Finance has been increasingly investing the BPA Fund in market-based specials in lieu of earning interest-offset credits. This requires improvements to forecasting systems and active investment management.

Risk and Impact of Operating at Cost Target

The total Finance proposed spending (expense and capital combined) is slightly less than the target. However, the split between capital and expense is different such that the proposed expense portion is slightly higher. This is due to Finance eliminating the direct charging of staff time to the capital program and absorbing almost the entire amount into the existing expense targets. The change in charging is a simpler and more efficient way to forecast and track costs. This adjustment results in some risk of not being able to absorb all of the costs and meet program expectations.

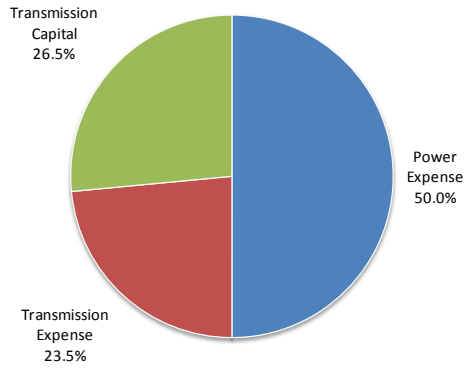
Challenges/Constraints

- Access to capital is a key challenge. BPA's borrowing authority is limited by law and capital investment is forecast to average one billion over the next ten years due to aging infrastructure. Coupled with the Debt Optimization Program, larger amounts of non-Federal debt are due for repayment in FY 2013-18 resulting in minimal replenishment of Treasury borrowing.
- Additional forms of capital such as lease financing are much more labor intensive to implement and manage than Treasury borrowing.
- The current budgeting system lacks flexibility and ability to perform what-if analysis, and creates work redundancy.
- As federal accounting requirements increase, particularly relating to intergovernmental financial reporting, more work with the financial and other agency systems will be needed to satisfy Department of Energy reporting requirements.
- Finance is forecasting an increased wave of retirements in the next five years.

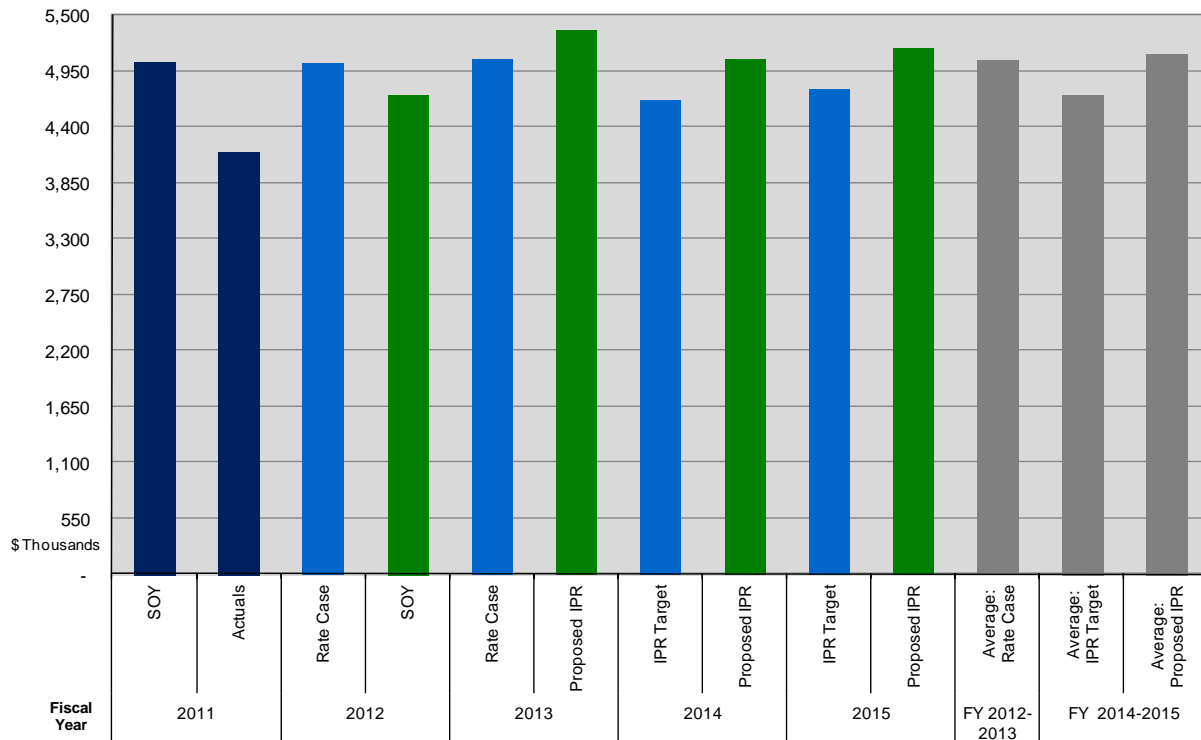
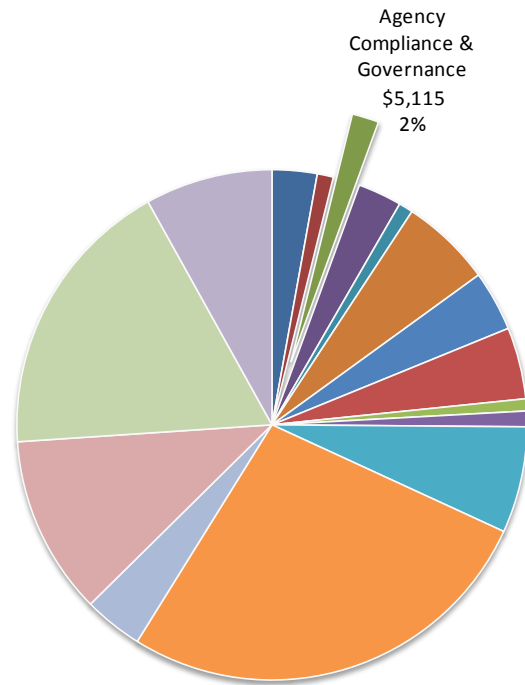
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5.6 AGENCY COMPLIANCE AND GOVERNANCE

Allocation Distribution



FY 2014-2015 Average: Proposed IPR



Program Details

	2011			2012		
	Start of Year	Actuals	Delta	Rate Case	Start of Year	Delta
Agency Services G&A Allocations (\$\$\$)	5,035	4,157	(877)	5,031	4,711	(320)

	2013			2014			2015		
	Rate Case	Proposed IPR	Delta	IPR Target	Proposed IPR	Delta	IPR Target	Proposed IPR	Delta
Agency Services G&A Allocations (\$\$\$)	5,060	5,355	294	4,659	5,059	400	4,767	5,171	404

Description, Purpose and Responsibilities

Agency Compliance and Governance establishes and maintains a comprehensive regulatory compliance and ethics program which is aligned with and fully supports BPA’s mission and objectives. There are four programs included in this organization, Governance and Internal Controls, Civil Rights and EEO, FERC Compliance, and Purchasing/Property Governance. This organization manages these programs in partnership with the Office of General Counsel and affected programs, and maintains a comprehensive program to assure compliance with applicable regulatory rules and standards by:

- Monitoring and commenting on developing regulations that apply to BPA.
- Building and maintaining relationships with regulatory bodies.
- Implementing management controls and reporting.
- Shaping and monitoring internal compliance policies and procedures.
- Working cooperatively to provide direction to business units concerning compliance processes and procedures.
- Interpreting regulatory rules and standards, in consult with the Office of General Counsel, as necessary.
- Coordinating review and testing of business unit controls and compliance.
- Communicating and training of BPA employees and contractors.

Goals

Continued ethics program management, including BPA’s Code of Conduct, ethics hotline, annual ethics survey, and ethics communication and training for employees.

Promote Equal Employment Opportunity counselors as a resource for conflict resolution regarding employment discrimination based on race, color, religion, sex and national origin and provide services to employees across the organization. Additionally, lead the effort to ensure BPA meets the EEOC’s criteria for a Model EEO Program.

In partnership with other BPA business units track federal legislative changes impacting purchasing and property policy. Additionally, partner with property management representatives throughout the agency to compile quarterly property loss data.

Coordinate with all agency partners to file all FERC, NERC and WECC reliability self certifications by established deadlines.

Monitor and review agency performance against regulatory requirements. Define compliance risks and anticipate future risks or high risk trends.

Assist in developing agency-wide policies, procedures and guidelines to facilitate compliance with applicable

laws and regulations, including those to be followed by BPA employees.

Develop and deliver training and education programs to keep BPA employees and contract staff informed of policies, procedures and regulatory events.

Monitor business activity to encourage continual compliance with established policies and procedures. Provide early identification of potential areas of noncompliance.

Detect and objectively investigate compliance program violations and misconduct that threaten BPA's reputation.

Coordinate with the Office of General Counsel and Internal Audit to respond to inquiries and perform investigations of regulatory violations or noncompliance.

Risk and Impact of Operating at Cost Target

The increase in regulations, the cost of complying with regulations and the consequences of non-compliance are risks in two major compliance and governance programs. In the short-term, Compliance and Governance need additional contract staff to augment work in the following areas:

Two additional contract staff will be needed in FY 2013-15 to maintain the IGLM project once it is complete.

One additional CFTE will be needed in FY 2013 and two additional CFTE in FY 2014-15 due to NERC CIP Versions 4 & 5 implementation.

The risks of not funding these additional contract positions are:

Information Governance and Lifecycle Management (IGLM)

- The agency may not have the ability to produce information requested by the courts as part of litigation.
- Increased costs to store information and find relevant information for e-Discovery, FOIA and other purposes poses a risk to other program areas, if resources need to be used for more RIM and e-discovery work.
- If the agency is found to be non-compliant, then there is a reputational risk and possible financial risk.

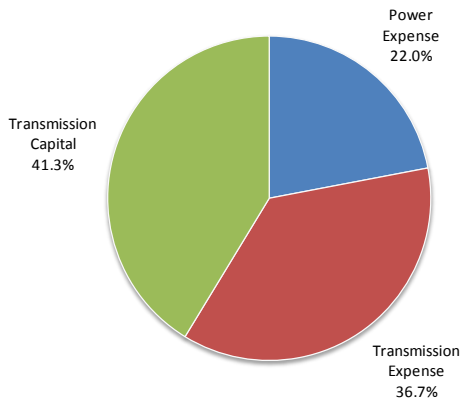
Federal Energy Regulatory Commission standards related to the Open Access Transmission Tariff (OATT)

- If regulations increase, the cost of doing business may increase. This is a financial risk that may lead to increased regulatory costs through FERC or litigation costs through FERC and/or the court system.
- If FERC determines the agency is non-compliant, then BPA could incur reputational risk with our customers.

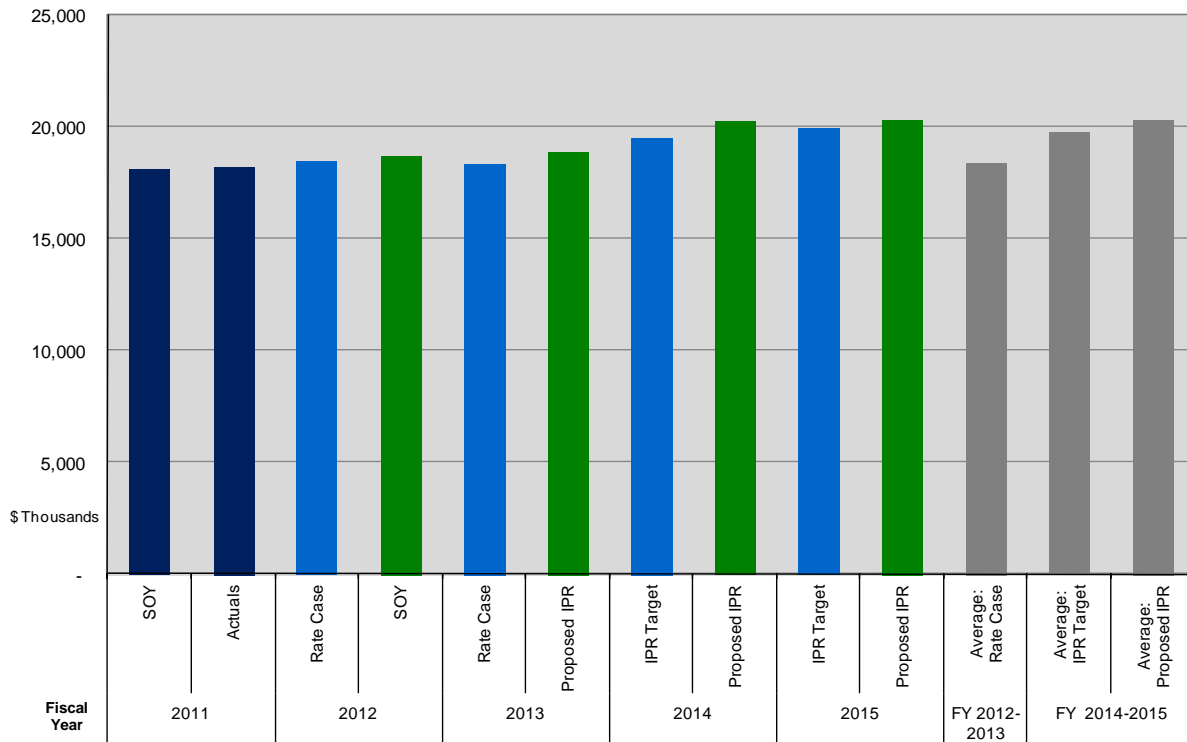
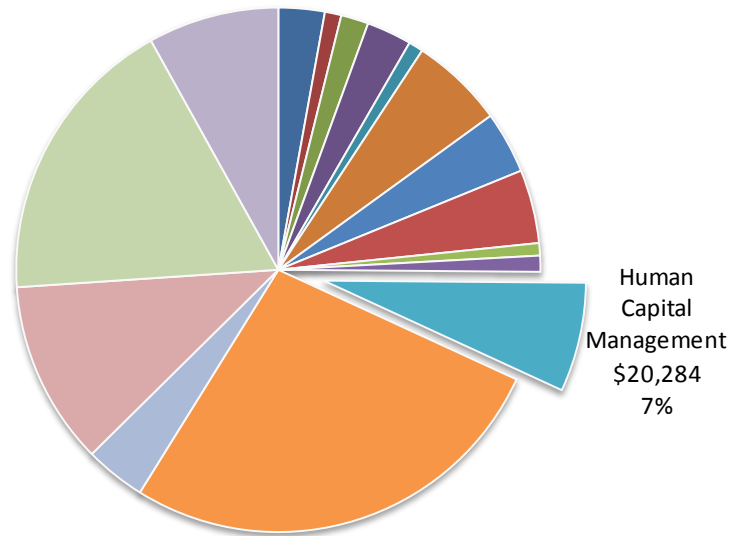
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5.7 HUMAN CAPITAL MANAGEMENT (HCM)

Allocation Distribution



FY 2014-2015 Average: Proposed IPR



Program Details

	2011			2012		
	Start of Year	Actuals	Delta	Rate Case	Start of Year	Delta
Agency Services G&A Allocations	14,431	15,227	796	14,760	14,978	218
Transmission - Workers Compensation	3,650	2,989	(661)	3,700	3,700	-
Total	18,081	18,216	135	18,460	18,678	218

	2013			2014			2015		
	Rate Case	Proposed IPR	Delta	IPR Target	Proposed IPR	Delta	IPR Target	Proposed IPR	Delta
Agency Services G&A Allocations	14,605	15,159	554	15,711	16,440	729	16,082	16,426	344
Transmission - Workers Compensation	3,750	3,750	-	3,815	3,815	-	3,886	3,886	-
Total	18,355	18,909	554	19,526	20,255	729	19,969	20,313	344

Description, Purpose and Responsibilities

HCM plans, directs, and manages a comprehensive human capital management strategy and program aligned to meet agency mission and objectives. This function performs ombudsman and conflict resolution functions, oversees Human Resources (HR) Strategic Partners with responsibility for developing, communicating, and coordinating HR strategies, policies, and initiatives with the business units and corporate organizations. Also, this function communicates business unit strategies, objectives, issues, and initiatives to HCM. This is accomplished through delivery in six major program areas: Integrated Strategy and Policy, Business Unit Strategic Partnering, Talent Acquisition, Talent Development and Organizational Effectiveness, Talent Sustainment, Performance Enhancement, Labor Relations, and Internal Operations.

Goals

The Business Operations Board identified three strategic objectives for BPA’s workforce necessary to achieve established business outcomes. These objectives are to have a workforce that 1) is the right size and composition, 2) possesses the right skills and competencies and 3) works in a positive environment. The Agency incorporated these objectives into BPA’s strategy map, showing foundationally how BPA will build people and culture to deliver business outcomes.

BPA faces a number of gaps between its workforce needs and its current workforce capabilities. These gaps have been identified and prioritized in terms of the risk they pose to meeting business objectives. In order to reduce these risks, BPA’s Business Operations Board identified the following as priority initiatives.

- Drive high performance in the federal workforce.
- Improve accessibility, efficiency, and effectiveness of federal employee hiring process.
- Improve ability to anticipate and meet Agency skill and competency needs.

However, during the biennial Talent Management Strategy development cycle, HCM will incorporate new information about the workforce into its understanding of the workforce risks. As a result, new priority initiatives may emerge in order to mitigate their effects on business outcomes. Setting strategic targets for these initiatives will help maintain reasonable workforce costs, flexibility in meeting business needs, and stability in delivering the BPA mission.

Risk and Impact of Operating at Cost Target

Reduction of travel and training for HCM: HCM is introducing both new technology and new staff. This typically puts upward pressure on training needs. Given that training was restricted in 2012 as well, HCM faces a risk of inadequate training limiting our ability to deliver on our targets.

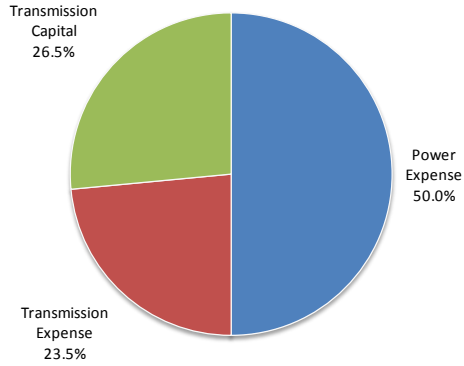
Executive Search: BPA has been challenged in recruiting a diverse, qualified pool of candidates to its senior management and executive positions. While HCM expects to build internal capability in FY 2014-15, insufficient attention to this activity could mean candidates are inadequate to meet needs requiring significant rework and lost time .

Automation Support: HCM is absorbing considerable unbudgeted costs associated with the deployment of new technology. These costs are focused on process mapping and redesign (as-is and to -be) for the new technology, process documentation, change management and technology integration. There continues to be an increase demand for HCM services.

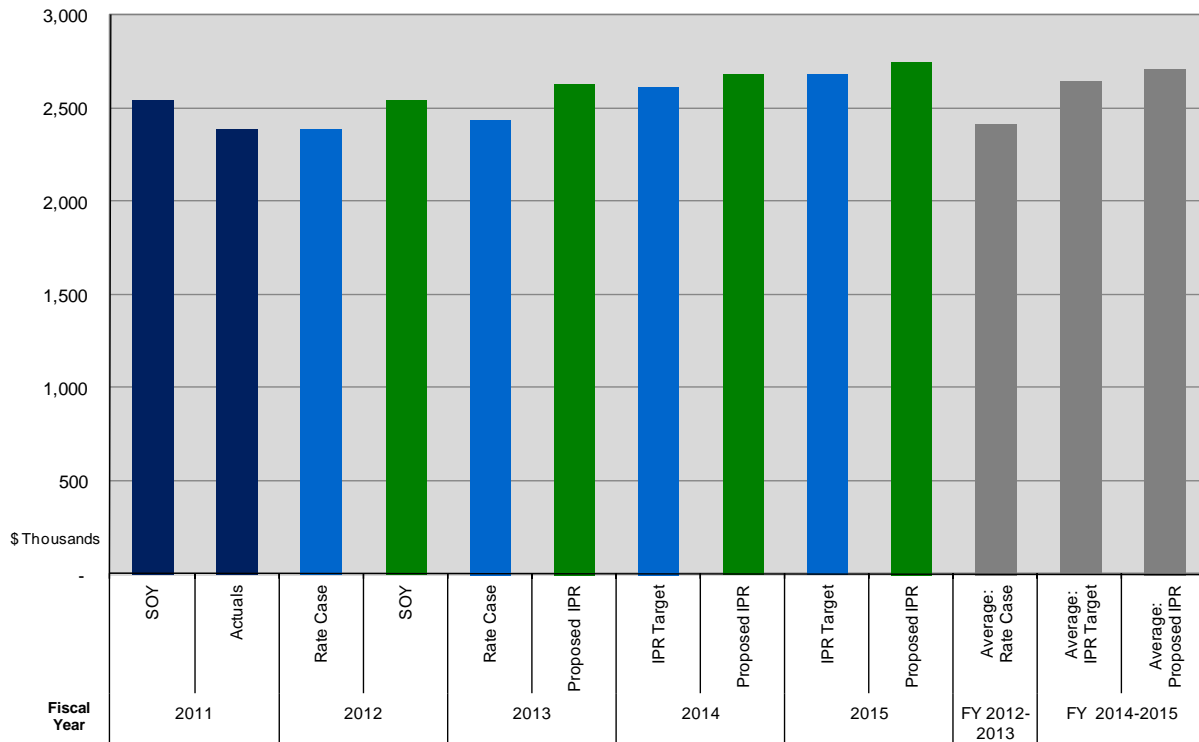
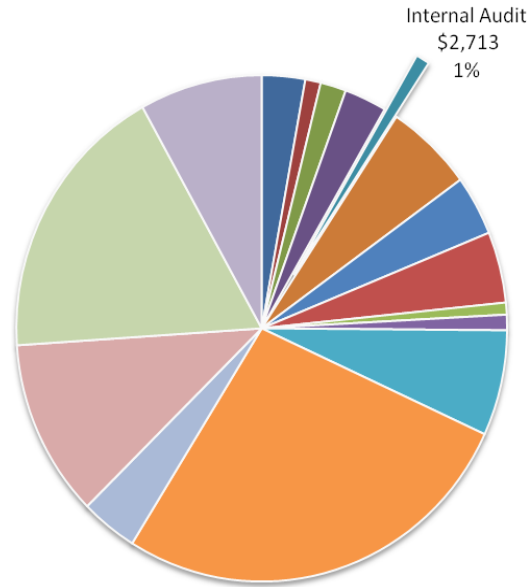
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5.8 INTERNAL AUDIT

Allocation Distribution



FY 2014-2015 Average: Proposed IPR



Program Details

	2011			2012		
	Start of Year	Actuals	Delta	Rate Case	Start of Year	Delta
Agency Services G&A Allocations (\$\$\$)	2,538	2,384	(154)	2,384	2,539	154

	2013			2014			2015		
	Rate Case	Proposed IPR	Delta	IPR Target	Proposed IPR	Delta	IPR Target	Proposed IPR	Delta
Agency Services G&A Allocations (\$\$\$)	2,439	2,628	188	2,612	2,679	67	2,680	2,747	67

Description, Purpose and Responsibilities

Internal Audit provides independent, objective assurance and consulting services designed to evaluate and help BPA improve the effectiveness of its internal control, risk management and agency governance processes. This includes evaluating whether BPA processes are adequately designed and functioning to help assure:

- Risks are appropriately identified and managed.
- Controls and risk management activities are adequately designed and operating effectively.
- Interaction between BPA’s various control, risk and governance groups is effective.
- Significant financial, managerial and operating information is accurate, reliable and timely.
- Employee actions comply with policies, standards, procedures, laws and regulations.

The scope of work also includes services such as contract audits and preliminary investigations, which support operation of BPA internal control systems

Goals

Foster development and effective/efficient delivery of the assurance component of BPA governance by:

- Developing and maintaining an agency-wide, risk-based inventory of BPA programs and processes that require periodic assurance regarding internal control over key objectives (strategic, operations, compliance, and financial reporting).
- Partnering with Agency Compliance and Governance, Risk Management, Operational Excellence and business units to establish clear roles and responsibilities for implementing the internal control and assurance discipline of OMB Circular A-123 and the BPA Governance Model within the programs and processes of the Assurance Inventory.
- Leveraging audit management software, improved operating standards, and enhanced staff engagement and business acumen to effectively and efficiently meet Internal Audit’s assurance role and responsibilities.

Changes from the 2010 IPR

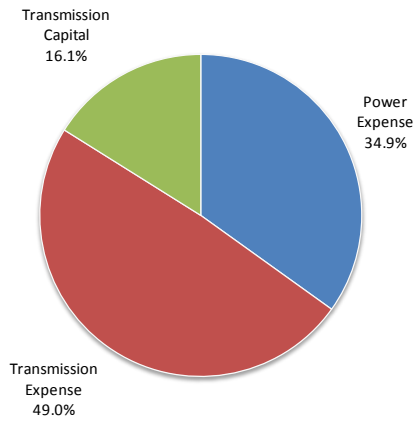
- Implemented the new Internal Audit organization aligned with and focused on the processes, functions and management needs of BPA business units. There has been no significant change in cost.

Risk and Impact of Operating at Cost Target

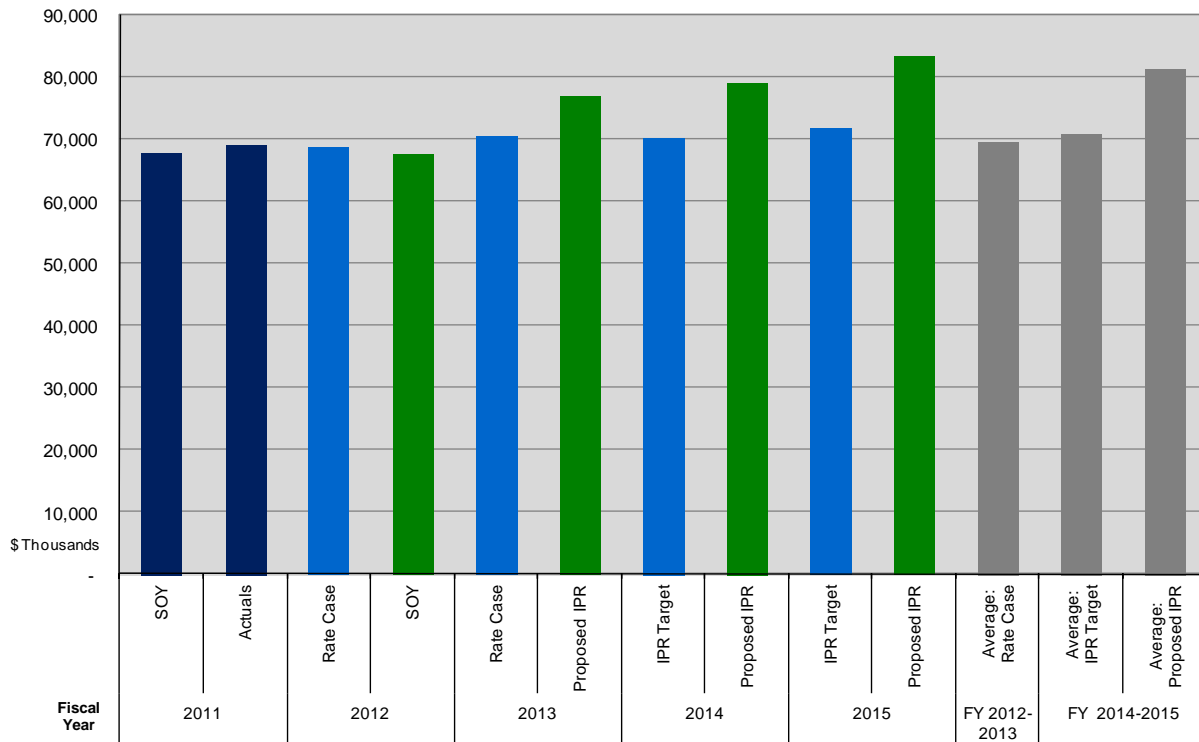
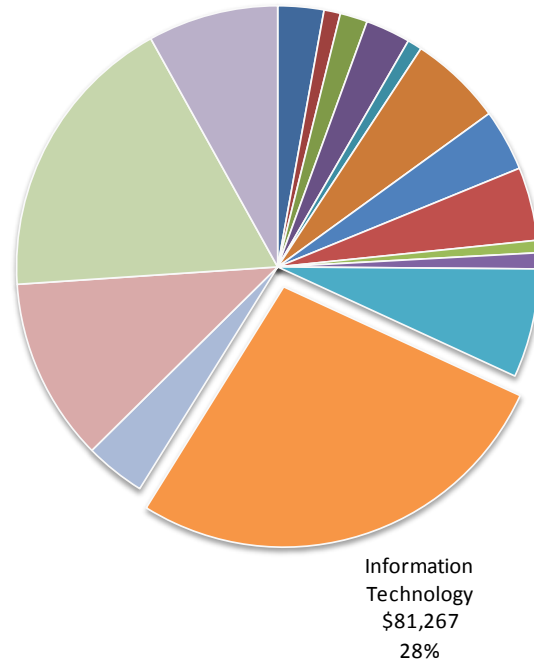
Operating at the cost target would put at risk the ability to acquire management software and audit services contract funding. The software can improve audit planning, quality control, process standardization, and efficiency. Delaying its acquisition will limit Internal Audit’s efficiency gains over the period.

5.9 INFORMATION TECHNOLOGY

Allocation Distribution



FY 2014-2015 Average: Proposed IPR



Program Details

	2011			2012		
	Start of Year	Actuals	Delta	Rate Case	Start of Year	Delta
Agency Services G&A & Business Support Allocations (\$\$\$)	67,861	69,025	1,164	68,679	67,487	(1,192)

	2013			2014			2015		
	Rate Case	Proposed IPR	Delta	IPR Target	Proposed IPR	Delta	IPR Target	Proposed IPR	Delta
Agency Services G&A & Business Support Allocations (\$\$\$)	70,348	76,916	6,569	70,233	79,165	8,932	71,728	83,368	11,640

Description, Purpose and Responsibilities:

Information Technology (IT) develops and supports agency-wide business automation systems and provides information technology governance, planning, and standards for the agency’s general business activities. IT has overall responsibility and accountability for all BPA information technology-related (non-Grid Ops) programs. This includes establishing IT strategies, objectives, and performance standards in alignment with financial targets and agency direction.

IT has responsibility for maintaining assets including telecommunications components, circuits, servers, storage devices, desktop systems, printers, copiers, faxes, phone systems, and software. The software assets are categorized as critical business systems, general business systems, web applications and task systems. Critical business systems must operate and be available around the clock to enable power marketing and transmission scheduling functions. General business systems allow BPA to manage its staff, finances, facilities, supply chain, transmission assets and services such as managing circuits and work planning services. Task systems are small web based applications that enable BPA staff to perform work more efficiently.

Goals

Desktops and Mobile Devices

- Reduce the total cost per workstation through replacement of desktops and laptops with a virtual desktop infrastructure (VDI), zero clients and mobile thin clients
- Reduce operation and maintenance costs through automated software deployment and user provisioning
- Increase mobility and flexibility by implementing wireless network connectivity and access to BPA’s system from anywhere, anytime and on any device
- Reduce desktop software titles and associated costs

Network and Data Center

- Lower data center costs, footprint and power consumption through server virtualization and consolidation
- Reduce operating costs and complexities by consolidating field servers and moving to a more centralized data center model
- Improve system awareness and responsiveness by implementing end to end continuous monitoring solutions
- Reduce storage costs by implementing a tiered storage model that places less critical data on lower cost storage alternatives
- Replace end of life phone and voice mail systems with a voice over IP solution

Applications

- Improve system reliability and performance by maintaining business applications on current refresh cycles
- Deliver new and improved applications to meet the agency’s business needs

- Reduce the total cost of ownership of business applications by increasing business self-service for administration, configuration and operations
- Improve business productivity by delivering greater business analytics and reporting capabilities

Operational Security

- Reduce security vulnerabilities by implementing an end to end patch management solution and program
- Increase threat awareness and responsiveness by implementing centralized logging and network monitoring solutions in support of a staffed Network and Security Operations Center

People and Processes

- Develop an IT workforce strategy that positions IT for the future and optimizes the balance of contract and federal employees
- Improve operational excellence through a broader use of standard processes, continuous improvement, and targeted measurement
- Identify focused improvement targets that will position Bonneville in the top quartile of utility IT organizations as benchmarked in UNITE, a consortium of 20 U.S. utility IT organizations

Long-Term Objectives

- Improve the security, reliability and extendibility of the Agency's network infrastructure by migrating to IPv6 protocol
- Reduce costs and improve flexibility and agility through increased adoption of cloud based solutions (software as a service, platform as a service and infrastructure as a service)
- Further drive reductions in the total cost of ownership of end user devices through continued deployment of VDI, standardized printing solutions, automated software deployment and user provisioning
- Further drive mobility and flexibility by adopting "bring your own device" policies and architecture

Changes from the 2010 IPR

The impact of several emerging drivers on Information Technology's spending requirements were not fully understood when the 2010 IPR spending levels were developed. These drivers include: (1) the support of new regional contracts; (2) automating transmission's asset management and work planning and scheduling processes; (3) the adoption of Software as a Service (SaaS) solutions; and (4) evolving compliance requirements.

IT experienced an unanticipated rapid ramp-up in projects to support these Power and Transmission initiatives. Beginning in 2012, IT began delivering over 20 new systems per year. To support this increase in work, IT required additional expense funds to carry out project planning. These new systems result in new vendor service contracts and new expense funding requirements.

The implementation of SaaS solutions requires expense dollars instead of capital dollars. And, because it is not possible to know in advance of planning, whether a project will adopt a SaaS solution, the portfolio spending balance between capital and expense requirements are somewhat unpredictable.

Risk and Impact of Operating at Cost Target

Automation provides the agency the means to meet evolving business needs, evolving compliance requirements, and to achieve efficiencies and cost savings. The IT spending represents a shaping of capital and expense dollars to meet the known requirements; however, there are risks with the proposed levels. These risks include the opportunity to deliver a more effective and lower cost solution from adopting a cloud based

solution, which requires expense dollars where capital dollars were programmed. While this would reduce the need for capital, it requires expense funds that have not been programmed – a reshaping of IT capital and expense requirements. Additional risks are from unforeseen compliance requirements or new business requirements.

Challenges/Constraints

There are five main challenges impacting expense funding levels that IT is working to manage. These challenges can be categorized as:

- Industry trend towards cloud based solutions
- New operations and maintenance expense funding requirements resulting from implementing new systems
- New compliance requirements
- Consumerization of IT – increasing employees’ expectations to be able to use and leverage consumer technology, such as smart phones and tablets, in the workplace
- Delayed upgrades for existing older systems

Taken together, these challenges are putting upward pressure on the IT expense funding levels and in the case of cloud services, requiring a shift from capital to expense funding.

Cloud Services

Additional cloud based services, such as Software as a Service, Platform as a Service, and Infrastructure as a Service are subscription based services. Since these services are provided to BPA by commercial vendors, BPA is not acquiring any new physical assets with SaaS solutions that can be capitalized. In past IPR cycles, only capital funds were programmed for implementing project solutions. In this IPR cycle, expense funds are being programmed in anticipation of adopting new SaaS solutions. Our challenge is to estimate which projects may find SaaS solutions to be the best fit and estimate the associated expense requirements.

Adopting a larger number of SaaS solutions than anticipated or adopting a particular SaaS solution that has a higher cost than expected can cause wide variations between required and programmed capital and expense funding. Without accurate forecasts of how many projects will adopt and implement SaaS solutions, IT will be challenged with potential large variations in funding requirements.

New Operations and Maintenance

The IT Capital Portfolio has doubled in recent years, placing upward pressure on the IT expense spending by increasing the number of new systems with new operation and maintenance costs. In FY 2010 and FY 2011 eight new systems were put into service each year. In FY 2012 and FY 2013 IT is expecting to place 22 and 26 systems into service each year respectively. Historically, IT has not increased operational budgets to cover the “expense tails” of delivered IT systems; the net result is IT absorbs the unfunded operations and maintenance costs

The Regional Dialogue and the Transmission Process Improvement Program were the primary drivers that have resulted in the need for increased budgets to support these programs. These new systems are delivered with new service contracts and operation and maintenance costs. Since these solutions are placed into service between IPR cycles, IT operates these new systems absorbing the operation and maintenance costs for several years before it has an opportunity to increase its expense spending to catch up with the operating costs. In prior years, IT has been absorbing these new operating costs by finding efficiency savings in infrastructure operations, using the savings from reduced infrastructure operations to offset these new service contract costs. IT will not be able to maintain this strategy to offset new costs and must now plan increases in expense

funding to accommodate new operation and maintenance costs.

Regulatory

There are a number of emerging regulatory drivers that could affect the information technology expense forecast. Some of the more significant impacts will be associated with compliance to National Energy Regulatory Commission (NERC) Critical Infrastructure Protection (CIP) version 5, and meeting evolving National Institute of Standards and Technology (NIST) requirements to adequately secure IT assets in accordance with Federal Information Security Act of 2002 (FISMA).

The impact to IT budgets from implementing NERC is for enhancing and expanding physical access control to additional sites. This will require additional expense funds to deploy additional digital cameras, readers and other networked security measures. In addition to NERC requirements, BPA is estimating achieving compliance with FERC Order 890 will require additional expense funding in FY 2013; in addition, there will be additional costs for achieving compliance with NERC/WECC reliability requirements.

IT is planning to implement a Security Operation Center (SOC) to provide enterprise-wide cyber security operational awareness to prepare for and defend our IT assets against cyber attacks.

The SOC will perform

- Threat analysis in conjunction with National, Industry, and Local threat and vulnerability analysis Operations Centers
- Cyber Security Monitoring
- Reporting
- Incident Handling Coordination

Consumerization

Smart phones and tablets are continually delivering a wide range of new capabilities to consumers, enabling the average user to have constant access to services from anywhere. There is a building demand for adopting these technologies in the workplace. Response to this demand will provide a combination of issues that will need to be addressed which include:

- Mobile management,
- Potential security,
- Rapid market changes to hardware and software, and
- Increased device variety which translates into increase support costs.

To date, IT has taken a “Just say no” approach to these devices; however, these issues must be resolved in order to attract and retain skilled staff and to provide the benefits these devices offer. The full cost of integrating these devices is uncertain. IT is also exploring Bring Your Own Device (BYOD) strategies to reduce impacts on expense funding and to enable end users greater flexibility with the devices they can use.

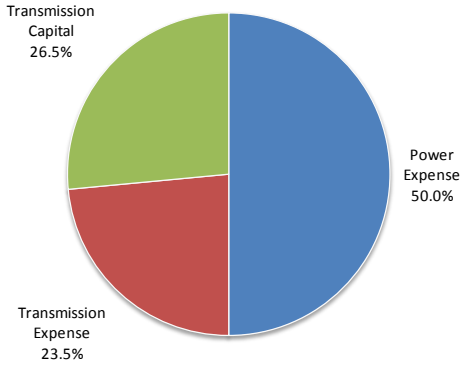
Delayed Upgrades

Since FY 2009, IT resources have been focused on delivering systems in support of Regional Dialogue and Transmission Process Improvement Program. As a consequence, many major upgrades to our existing systems have been delayed. In some cases, the software is approaching end of vendor support. In other cases, current software version(s) will not run on the new server operating systems and requires IT to upgrade in order to host the application on new hardware running the up to date operating system. Not upgrading the software and staying in the current configuration increases risks due to a combination of the lack of vendor support for the application software and concerns that applying security patches on the operating system may break the application. Our enterprise applications will collectively have large expense requirements to bring them up to the current versions.

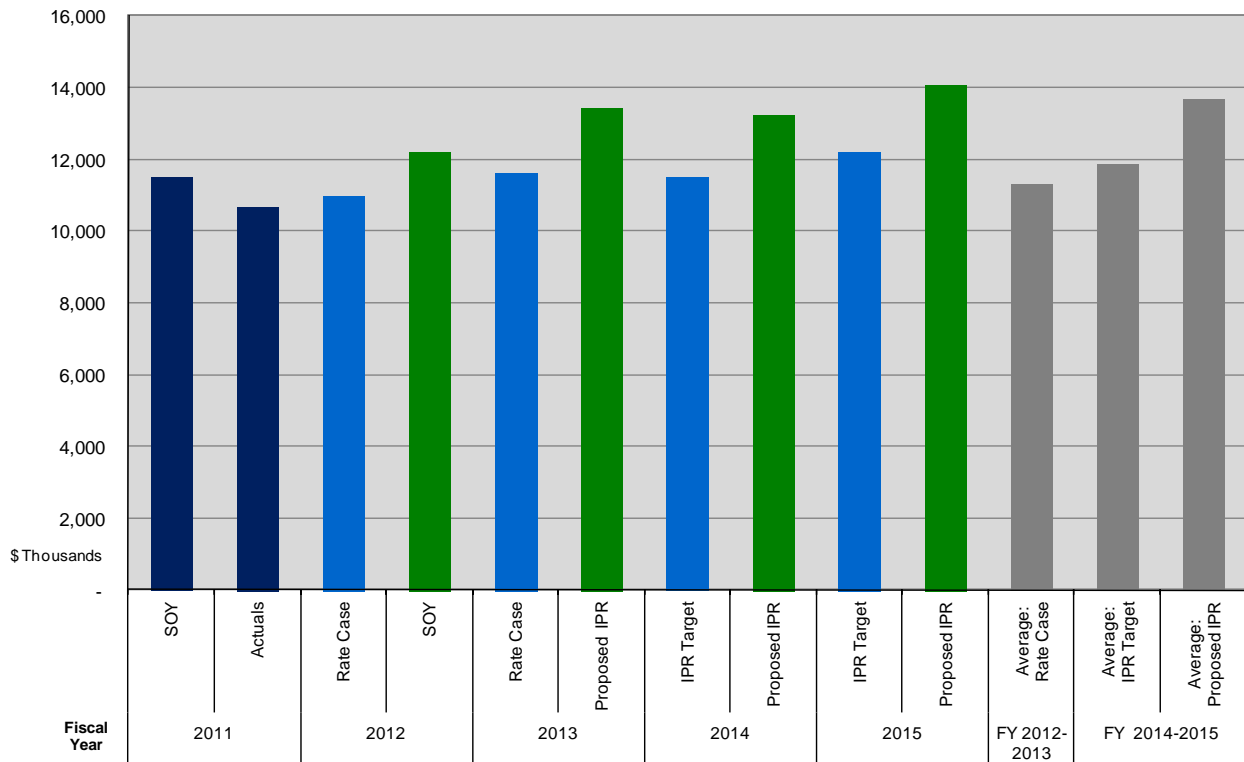
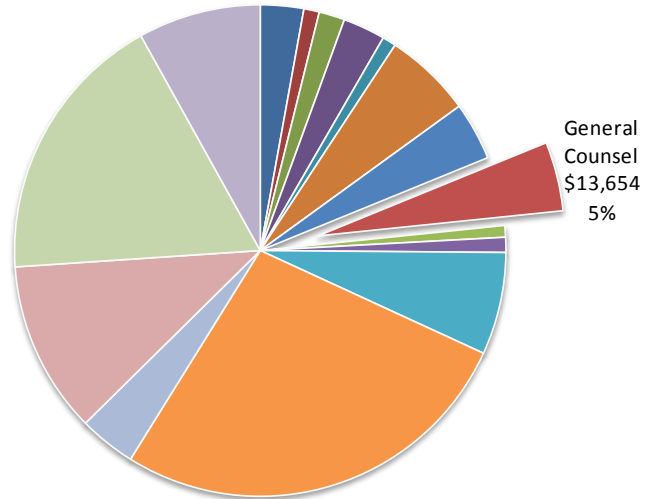
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5.10 GENERAL COUNSEL

Allocation Distribution



FY 2014-2015 Average: Proposed IPR



Program Details

	2011			2012		
	Start of Year	Actuals	Delta	Rate Case	Start of Year	Delta
Agency Services G&A Allocations	3,114	3,499	385	3,217	4,829	1,612
Power - Direct Legal Support	5,098	3,946	(1,152)	4,791	4,537	(254)
Trans. - Direct Legal Support	3,266	3,236	(29)	2,969	2,822	(147)
Total	11,478	10,681	(797)	10,977	12,188	1,211

	2013			2014			2015		
	Rate Case	Proposed IPR	Delta	IPR Target	Proposed IPR	Delta	IPR Target	Proposed IPR	Delta
Agency Services G&A Allocations	3,322	4,088	766	3,968	4,070	101	4,063	4,167	104
Power - Direct Legal Support	5,092	5,286	194	4,647	5,290	644	5,162	5,954	792
Trans. - Direct Legal Support	3,211	4,041	830	2,900	3,877	977	2,966	3,951	985
Total	11,625	13,415	1,790	11,515	13,237	1,722	12,191	14,071	1,880

Description, Purpose and Responsibilities

General Counsel provides legal advice and representation for or in connection with all Bonneville Power Administration activities. It charges directly to Power and Transmission Services when supporting projects exclusively for the business unit. However, it also has costs in support of Agency initiatives, and allocated to the business units. The support covers the gamut of legal representation from provision of legal advice to representation of the agency in all areas of claims, and administrative or judicial litigation. This support function covers the Columbia River Treaty; storage agreements; corporate authority, governance and delegations; financial management; Tribal issues; fish and wildlife program support; procurement of goods and services; tort claims; Freedom of Information Act/Privacy Act; employee claims; ethics, including conflicts of interests and financial disclosure; human capital issues, including labor issues, disciplinary actions, reasonable accommodations requests, and EEO claims; copyright and patent issues; and security processes and procedures.

Goals

OGC's goals and priorities are to continue to provide advice related to, and defend actions associated with, the widely varying functional areas identified above. All issues are important, but more activity is expected than is ordinarily the case associated with Treaty review; Bonneville's Environmental Redispatch activities and Oversupply Protocol; Bonneville authority issues; implementation contracts and activities associated with the fish and wildlife program; procurement issues associated with infrastructure development; and possibly cyber security issues. Our goal is to assist the agency in making informed, risk-based decisions that are defensible; assist in documenting decisions so that they are appropriately thorough and articulated; and defend, or assist in the defense of, challenges to those actions.

OGC's strategy to provide these services is to ensure attorneys are trained and knowledgeable in the area of representation, and teamed closely with policy and technical staff to assure responsive and collaborative representation. If outside counsel is needed in an area beyond OGC's expertise, or can be more cost-effectively provided (e.g., specialized counsel such as tax or bankruptcy counsel), it will be secured.

Changes from the 2010 IPR

The primary changes have been the increased focus and the amount of work in certain areas. Environmental

Redispatch and the Oversupply Protocol have consumed a significant number of hours. The marked increase in personnel actions, and defense of same, due to heightened management attention to underperforming employees has resulted in attorneys from other sections pitching in with the increased workload. Procurement activities, and challenges to same, have necessitated the focus of two attorneys rather than one. Outside counsel costs have increased due to the increased use of tax and bond counsel associated with nonfederal financing solicitations, tax audits associated with prior financings, state taxation issues, and exploration of alternative sources of financing.

Risk and Impact of Operating at Cost Target

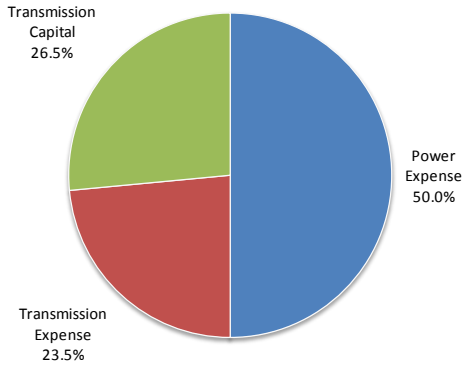
The primary increase in this area is for bond and tax counsel. Without the increases, work in the areas of taxation, bonded indebtedness (e.g., ENW bonds), lease financing, and securing alternative sources of financing (e.g., Port of Morrow, prepaid debt) work would have to be prioritized to tax audits and unavoidable work. Refinancing and other work dependent on specialized counsel would suffer. Refinancing results in significant savings to the agency, and a portion of that would be lost. Similarly, work on alternative sources of financing would be inadequate due to the absence of outside counsel.

Second, a smaller part of the increase in this area is for an additional Assistant General Counsel (AGC) for Corporate work. The current AGC manages 29 BPA and contract staff. The breadth of responsibility and sheer numbers are cause for concern, especially given that the existing AGC is eligible to retire, and many of the senior attorneys will be eligible as well. The risk of not funding this FTE is either that management focus suffers or that OGC is inadequately positioned to manage the Corporate work when the current AGC retires.

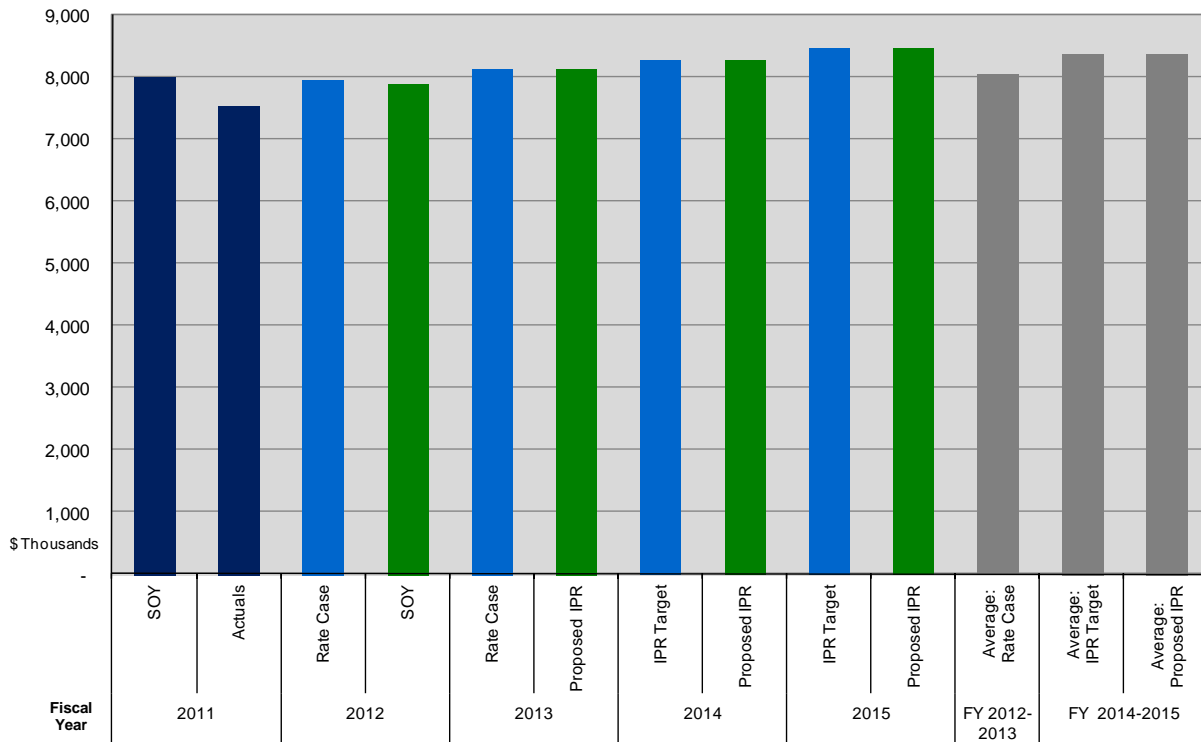
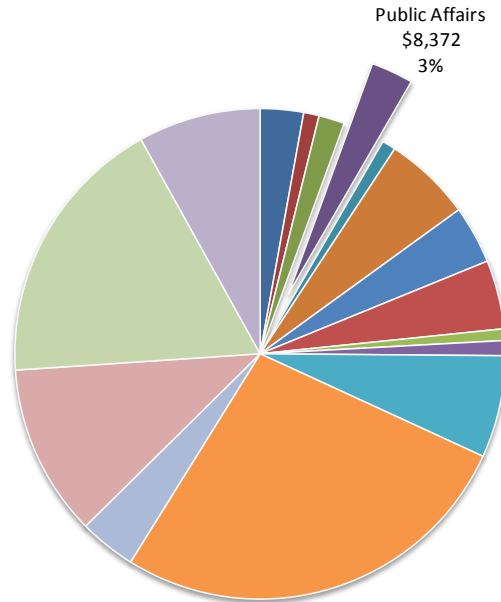
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5.11 PUBLIC AFFAIRS

Allocation Distribution



FY 2014-2015 Average: Proposed IPR



Program Details

	2011			2012		
	Start of Year	Actuals	Delta	Rate Case	Start of Year	Delta
Agency Services G&A Allocations (\$\$\$)	7,997	7,527	(470)	7,961	7,885	(76)

	2013			2014			2015		
	Rate Case	Proposed IPR	Delta	IPR Target	Proposed IPR	Delta	IPR Target	Proposed IPR	Delta
Agency Services G&A Allocations (\$\$\$)	8,134	8,134	-	8,267	8,268	1	8,474	8,476	2

Description, Purpose and Responsibilities

Public Affairs is responsible for developing and managing the implementation of a comprehensive public affairs strategy. This includes direction and support for national, regional, and tribal relations, media and internal and external communications. This function is responsible for fostering support, knowledge, and awareness of BPA’s activities, including the regional engagement required by section 2.3 of the 1980 Northwest Power Act, achievements, and value to the Pacific Northwest. Public Affairs is also responsible for ensuring programs are in place to secure appropriate public input into BPA’s decision-making processes. The accountability for the agency’s Freedom of Information Act and Privacy Act responsibility also rests in the Public Affairs organization.

Goals

Public Affairs works with each business line to provide the appropriate messages, materials, and outreach, both internally and externally, to improve understanding of the agency’s decisions and policies. Of significance for 2013-15 are:

- Support regional engagement in support of the 2014 Columbia River Treaty Decision
- Support BPA initiatives to successfully integrate renewable electricity generation and mitigate for oversupply conditions
- Seek legislative solutions for generation oversupply
- Support public and elected officials outreach for transmission infrastructure development
- Support FCRPS Biological Opinion development and implementation

Public Affairs works with tribes and local, state and federal government to provide education and a mutual understanding of the needs of the region. To provide the public voice through the public meetings and comment processes. To participate as a partner with agency leadership to develop meaningful, clear messages that best define the agency’s goals and direction. Of significance for 2016-21 are:

- Support regional processes to address expiration of Columbia River Fish Accords
- Support operational decisions to mitigate for electricity generation oversupply
- Support biannual rate case processes

Risk and Impact of Operating at Cost Target

Even though the requested increase is relatively small, the impact of operating at the lower levels would have visible impacts:

- Reduces funding for public meetings

- Reduces funding for public outreach through sponsorships, community relations activities, and tribal grants
- Reduces ability to purchase supplemental graphics services and materials
- Reduces ability to fund equipment upgrades/purchases for video/media team

Challenges/Constraints

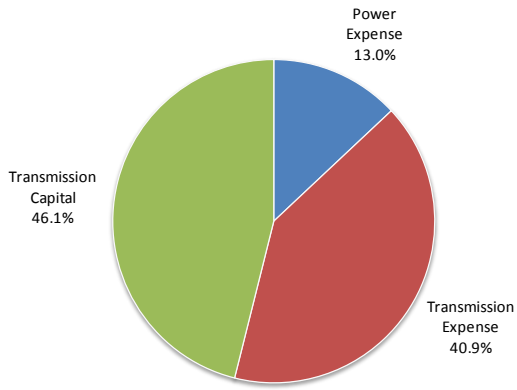
The current and near-term (FY 2013-15) challenges and constraints to the Public Affairs mission are:

- The degree of tribal and state coordination expected for the Columbia River Treaty
- The resumption of constituent coordination and outreach for 2014 revisions to the FCRPS BiOp
- Ongoing public communications for solutions to generation oversupply

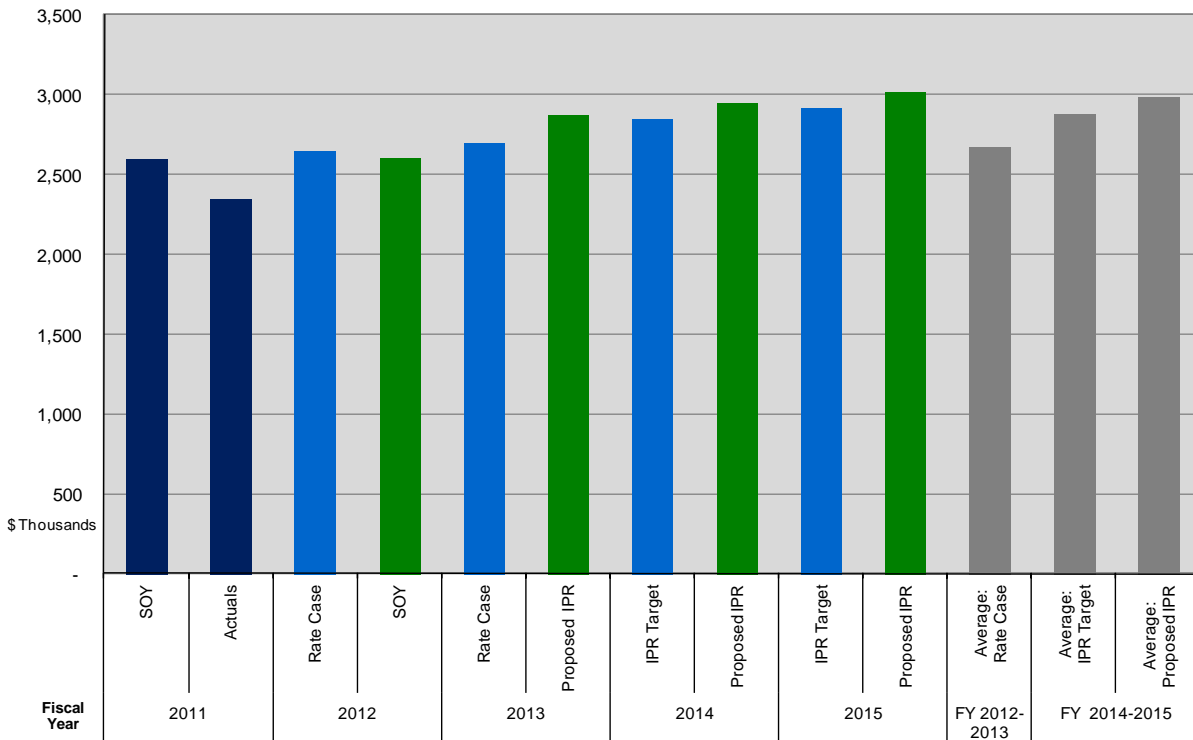
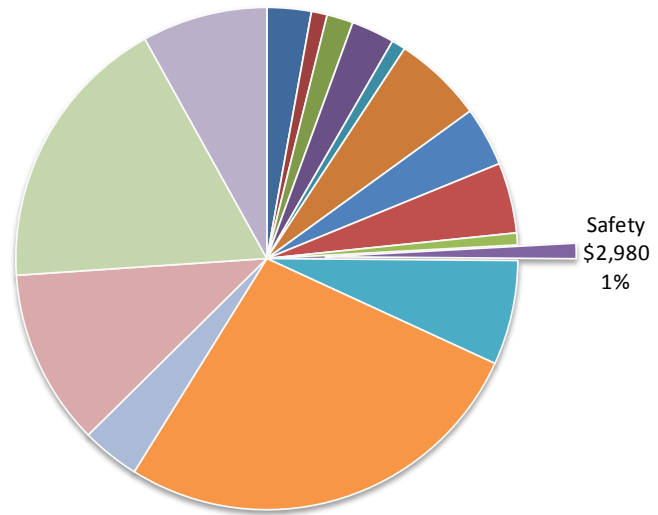
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5.12 SAFETY

Allocation Distribution



FY 2014-2015 Average: Proposed IPR



Program Details

	2011			2012		
	Start of Year	Actuals	Delta	Rate Case	Start of Year	Delta
Agency Services G&A Allocations (\$\$\$)	2,589	2,340	(249)	2,641	2,604	(37)

	2013			2014			2015		
	Rate Case	Proposed IPR	Delta	IPR Target	Proposed IPR	Delta	IPR Target	Proposed IPR	Delta
Agency Services G&A Allocations (\$\$\$)	2,695	2,868	173	2,843	2,945	102	2,912	3,016	104

Description, Purpose and Responsibilities

The Safety Office provides advice, information and support to all employees to enable BPA, as an employer, to fulfill its primary safety responsibility of providing a workplace free from all recognizable safety and health hazards.

This function reviews and approves contractor site specific safety plans in compliance with host utility responsibilities. The Safety Office is the point-of-contact with the Department of Energy (DOE) for the Federal Employee Occupational Safety and Health (FEOSH) Program. It conducts inspections, investigations, and appraisals and makes recommendations concerning safe work practices and procedures.

Goals

The Safety Office will continue the trend of reducing accidents with increased situational awareness emphasis and utilization of leading indicators such as near miss reporting. Injury and accident prevention keeps workers compensation and equipment costs low. Building the trust and respect of all employees by demonstrated expertise and professionalism will provide the foundation of a safety culture that is one of the best in the industry.

The Safety Office will continue to work collaboratively with executive management and the workforce to effectively implement a more robust safety and health program and ensure that reduction of accidents and injuries remains a priority for the agency. Keep abreast of improvements in the safety discipline via participation in industry forums and benchmarking. Adapt safety and health best practices to fit the needs of the agency.

Changes from the 2010 IPR

- **Contract Oversight:** The amount of construction contract oversight has outpaced the staff’s ability to keep pace. The agency is currently looking at staffing and workload to find the correct balance in order to mitigate any risk to the agency.
- **Facility Inspection:** BPA has increased its facility renovation program which has increased the need for hazardous material inspections and facility surveys. The amount of samples taken for hazardous material surveys has exponentially increased in the past two years from a few facilities each year to over thirty facilities sampled in 2011.

Risk and Impact of Operating at Cost Target

- Use of Industrial Hygiene (IH) services at BPA have been increasing over the past few years. Use of a

contract IH has been in place since 2008. These services include, consulting, training, hazardous material sampling, laboratory cost etc. Current cutbacks have led to unacceptable delays in addressing employee safety and health issues in a timely fashion. This is a risk Safety is not comfortable with, as the incidents of sampling requests and emergency consultation requests continue to increase. There would be a substantial cost savings by funding a staff Industrial Hygienist

Challenges/Constraints

Lack of Available Contract Resources

- With a slowing economy many outside service contractors have reduced staffing. One area that has affected BPA is in the Industrial Hygiene field. BPA has relied on this service to be performed by outside third party contracts. With less work in the industry, outside staffing levels have been reduced which has caused delays for emergency and critical services. This delay has caused extended outages, work stoppages, and lengthy evacuations of facilities.

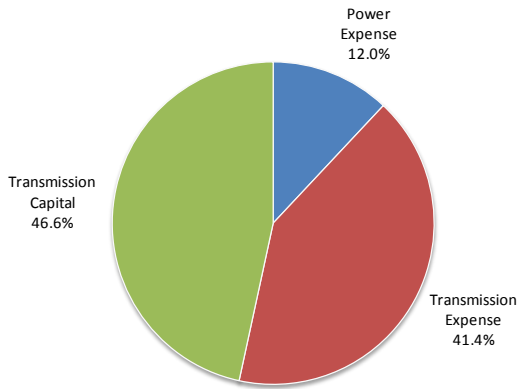
Increased Contractor Oversight Workload:

- BPA has exponentially increased the use of contract work. This has caused workload and staffing issues that may lead to insufficient safety oversight with both contract and BPA employees and an increased risk to the agency. The Safety Office has been using CFTE to augment the staffing shortages, but finding qualified and available personnel has been difficult.

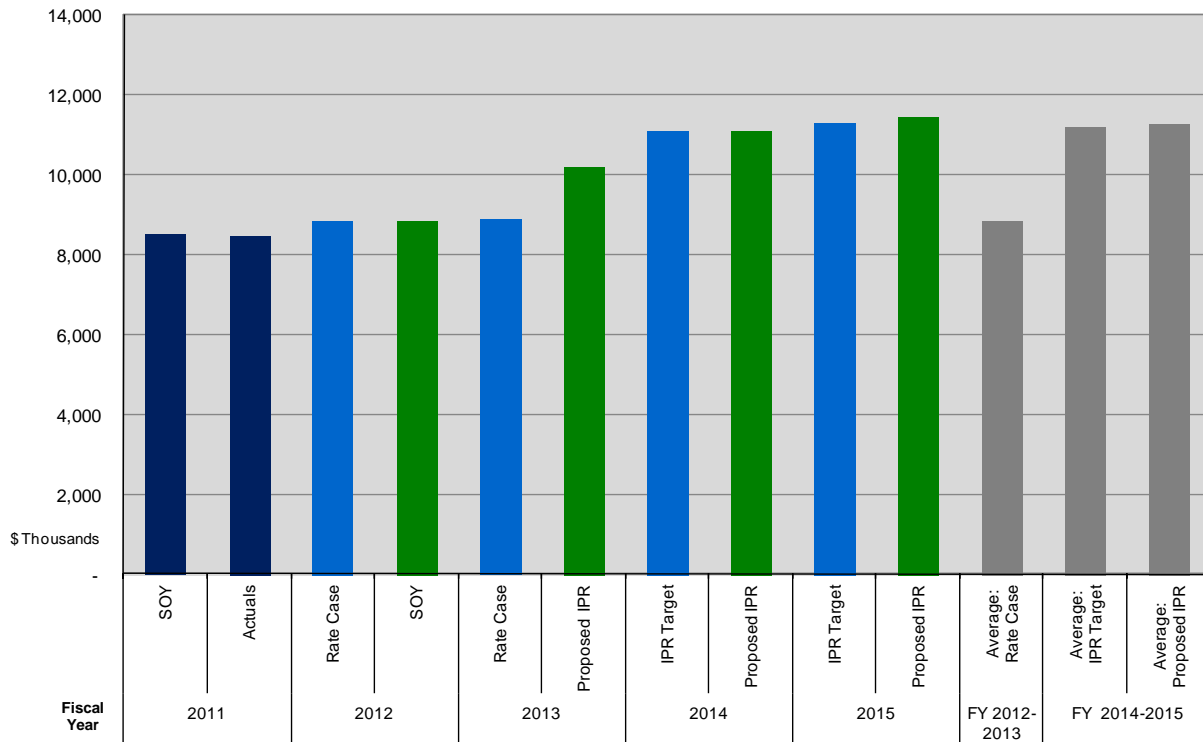
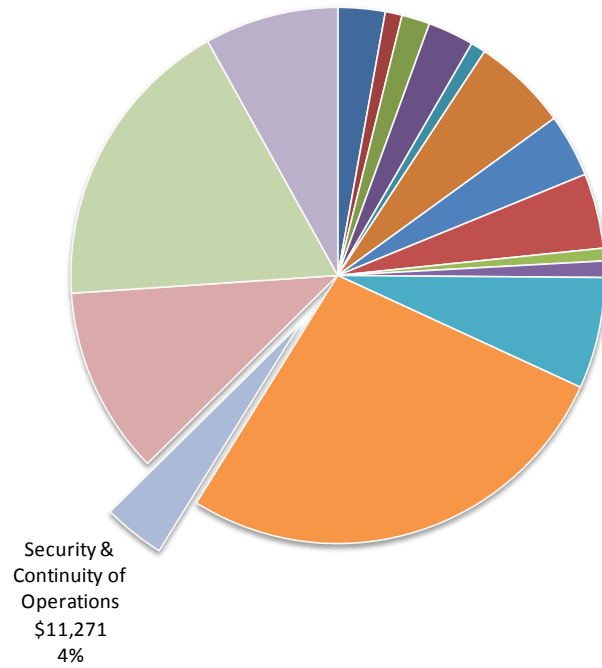
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5.13 SECURITY AND CONTINUITY OF OPERATIONS (OSCO)

Allocation Distribution



FY 2014-2015 Average: Proposed IPR



Program Detail

	2011			2012		
	Start of Year	Actuals	Delta	Rate Case	Start of Year	Delta
Agency Services G&A Allocations	8,515	7,933	(582)	8,834	8,833	(1)
Transmission - Security Support	-	527	527	-	-	-
Total	8,515	8,460	(54)	8,834	8,833	(1)

	2013			2014			2015		
	Rate Case	Proposed IPR	Delta	IPR Target	Proposed IPR	Delta	IPR Target	Proposed IPR	Delta
Agency Services G&A Allocations	8,867	10,200	1,333	10,496	11,089	593	10,713	11,454	740
Transmission - Security Support	-	-	-	593	-	(593)	604	-	(604)
Total	8,867	10,200	1,333	11,089	11,089	-	11,317	11,454	136

Description, Purpose and Responsibilities:

The Office of Security and Continuity of Operations integrates the disciplines of security, emergency management and business continuity to ensure the protection of BPA’s workforce, its operational systems, and the overall critical physical assets used to reliably carry out its mission for the citizens of the Pacific Northwest. This organization assists BPA’s headquarters and field organizations with strategies and logistics in achieving adequate security, supports response readiness in preparation for major disruptive events, and helps to offset the Agency’s security and emergency response risks.

OSCO ensures its planning strategies do not pose undue risks or costs to Agency customers, while meeting requirements prescribed by the North American Electric Reliability Corporation (NERC), Federal Energy Regulatory Commission (FERC), U.S. Department of Energy (DOE), U.S. Department of Homeland Security (DHS), Occupational Safety and Health Administration (OSHA), and Federal Continuity Directives (FOD).

Goals

With focus on efficiency and continual improvement, OSCO will support its strategic objectives of *compliance, protection, life-safety* and *disaster preparedness* by focusing on the strategic initiatives identified below.

Physical Security

- Increased focus on field presence to drive down losses due to vandalism, metal thefts, etc.
- Assessment of its Security Force contract to identify efficiencies through automation and determine performance effectiveness.
- Protection of BPA's critical assets as defined in the Critical Asset Security Plan (CASP) and security asset management strategy to include implementation of NERC CIP Versions 4 and 5.

Personnel and Information Security

- Prepare for anticipated increase in credentialing activities due to Homeland Security’s HSPD-12 Smart Card maintenance activities as well as expected increases in on-boarding due to employee turnover based on the Agency retirement profile.
- Deliver multi-year Information Security Program strategy.

Business Continuity

- Deliver multi-year Continuity Program strategy.
- Implement Continuity Portal, housing essential records and plans.
- Execute approved Alternate Operating Facility business case/project plan.

- Benchmark external evacuation practices and develop strategy to improve BPA's evacuation/accountability program.
- Adopt a method to assess current recovery capabilities and measure increases over time.

Changes from the 2010 IPR

BPA's security, emergency response and continuity programs have experienced significant changes in the past two years, including:

- Reconfiguration of Security and Emergency Response (SER) and Business Continuity (BC) into OSCO
- Adoption of NERC CIP Version 4 and planning for changes that will occur under NERC CIP Version 5
- Implementation of NERC CIP Information Protection standards and planning and preparation for expected government-wide changes in identifying and marking of Controlled Unclassified Information
- Implementation of HSPD-12 requirements regarding updates and reissuance of government-wide identity Smart Card credential and related personnel risk assessments for NERC CIP

Risk and Impact of Operating at Cost Target

OSCO has committed to operate at the cost targets by reprioritizing initiatives.

Operating at the cost target would require deferring replacement for critical components that were to be completed during a scheduled system wide maintenance. With delayed replacement there is a greater risk of failing critical components which may impact security system reliability, as well as increase in costs due to one-off break/fix vendor call out.

Challenges/Constraints

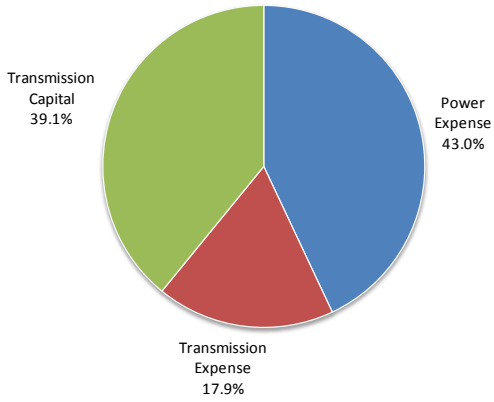
Regulatory requirements in the security and continuity arenas are increasing in frequency and implementation cost. Currently, compliance-driven programs dominate OSCO's activities and resource expenditures.

Additionally, the planning horizon for NERC CIP requirements is under three years, impacting OSCO's ability to develop long-term plans and strategies. Overcoming these challenges while adhering to budgetary constraints requires reprioritization of initiatives and adoption of new strategies to find efficiencies through process improvements, automation, and where appropriate, applying risk-informed reductions to re-deploy resources in support of core objectives.

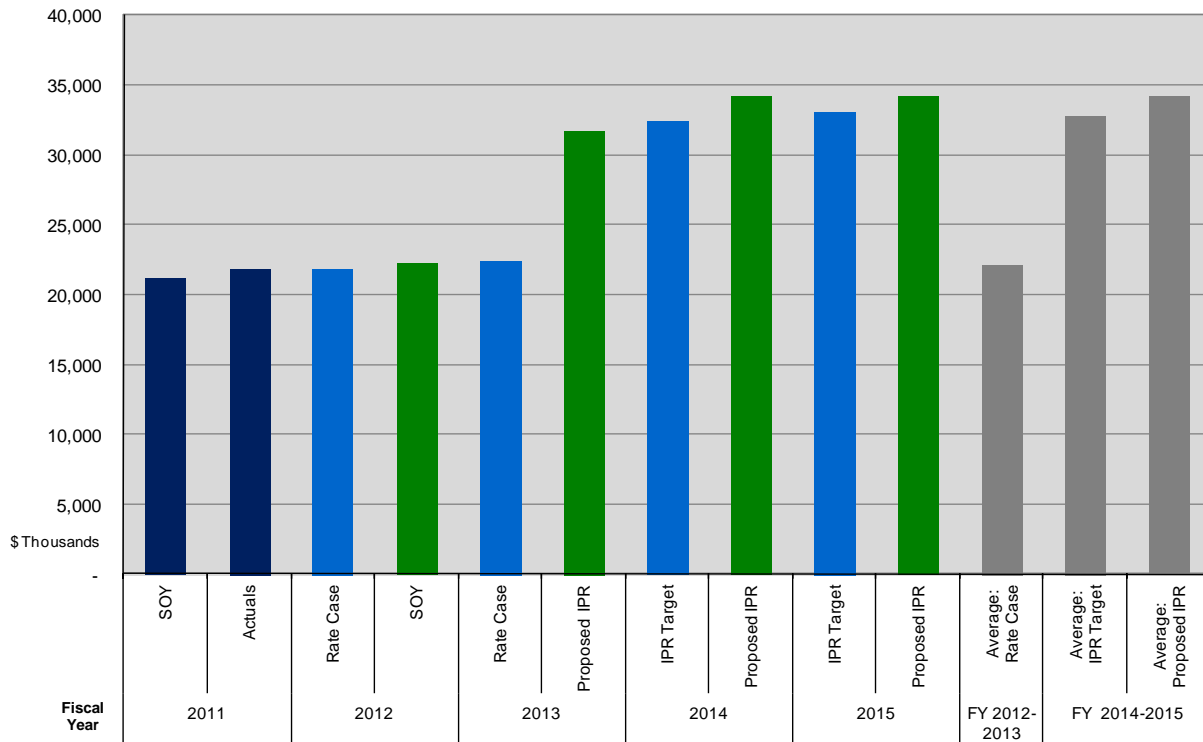
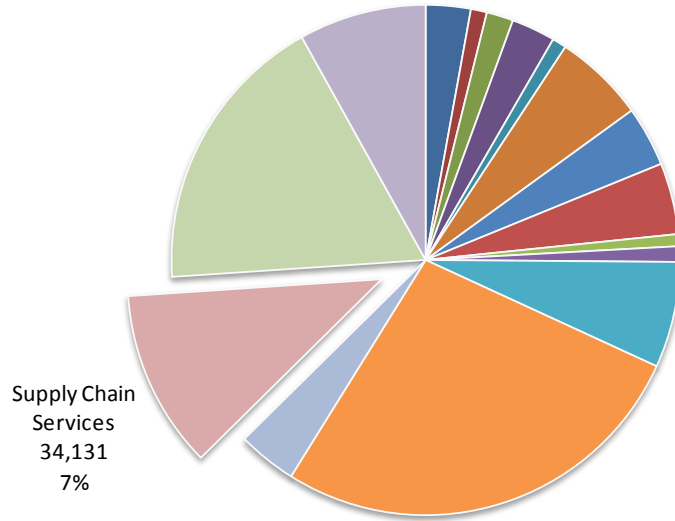
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5.14 SUPPLY CHAIN

Allocation Distribution



FY 2014-2015 Average: Proposed IPR



Program Detail

	2011			2012		
	Start of Year	Actuals	Delta	Rate Case	Start of Year	Delta
Business Support Allocations	4,870	4,700	(170)	4,942	4,963	22
Trans. - Supply Chain Direct Support ¹	16,269	17,088	819	16,847	17,289	442
Total	21,139	21,789	649	21,788	22,252	464

	2013			2014			2015		
	Rate Case	Proposed IPR	Delta	IPR Target	Proposed IPR	Delta	IPR Target	Proposed IPR	Delta
Business Support Allocations	5,092	5,161	69	5,386	5,567	181	5,515	5,696	181
Trans. - Supply Chain Direct Support ¹	17,285	26,557	9,272	27,010	28,563	1,553	27,587	28,434	847
Total	22,377	31,717	9,341	32,397	34,131	1,734	33,102	34,130	1,028

¹Supply Chain supports both capital and expense programs. 77% of the Supply Chain costs for Logistics Services are allocated to the capital program and are included in capital program estimates. This is approximately \$14 million per year. 100% of the Fleet Management costs are also budgeted as part of other program costs, both capital and expense, and are allocated based on vehicle and equipment usage.

Description, Purpose and Responsibilities:

Supply Chain Services (SCS) is a full service provider of procurement, materials management, fleet, supplemental labor and logistics services. SCS provides a method for obtaining equipment, materials, and services to support work requirements, while ensuring ethical, risk appropriate business practices that are compliant with internal controls. SCS monitors and manages the timely and efficient execution and conduct of all Supply Chain functions across the Agency.

Goals

Supply Chain Services’ mission is to deliver the best value through collaborative partnerships, utilizing effective and efficient processes. SCS plans to achieve that mission by continuing to focus on LEAN (a process of streamlining systems) and applying those principles to all aspects of the services SCS provides. Where possible, SCS applies technology to facilitate those processes. SCS plans to continue emphasis on agency wide, long-term strategic management. Increasing performance through emphasis on metrics to benchmark against peers. SCS plans to continue utilizing the Contract Management Office (CMO) for as many projects as possible and continuing to work with customers earlier in the procurement cycle to maximize efficiency and cost.

Over the long term, Supply Chain Services is focusing on efforts in four major areas:

- Building an integrated team through one SCS team.
- Increasing our competencies and performance through talent management.
- Ensuring compliance operations through appropriate risk management.
- Continually improving our value to carry out the agency’s mission through continuous process improvement.

Changes from the 2010 IPR

FY 2012 was the start of the consolidated Fleet Management organization. Adding the fleet management functions increased the Supply Chain organization costs by \$8.9 million in FY 2013, increasing to \$9.7 million in FY 2015. The benefits of the consolidation are yet to be seen and will ultimately offset future fleet costs at BPA, however significant challenges exist to ensure appropriate funding for maintenance work on BPA’s fleet equipment. Moving maintenance costs from business lines into agency operations allows for a strategic BPA

perspective on managing the fleet, but also exposes the agency to the risk that current budgets may not fully reflect the projected workload.

Risk and Impact of Operating at Cost Target

Fleet maintenance may be impacted, such that funding is not available for some major overhaul services to fleet equipment. This may increase the risk of field failure of equipment potentially resulting in a safety incident or a service reliability interruption.

Warehouse operations may be negatively impacted due to increased risk of safety incidents related to outdated racking systems, efficiency losses due to the missed opportunity to improve efficiency of pick/pack/store/retrieve warehouse operations

BPA is currently out of compliance with staffing and developing minority/women owned/veteran owned/small business owned, and other minority owned supplier/vendor programs that benefit those business classifications across our region and nationally. The impact of not funding this position and work would be one of non-compliance and loss of goodwill.

Challenges/Constraints

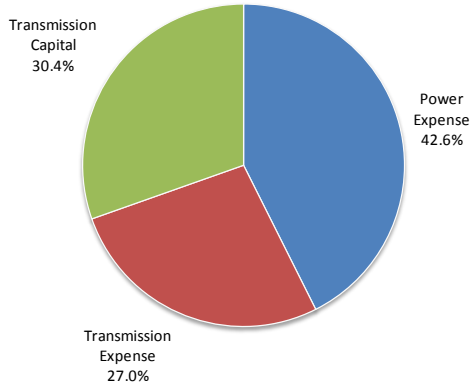
Supply Chain Services relies on technology to effectively and efficiently facilitate work products. As technology has progressed, the agency has been slow to transition to newer more user friendly and sophisticated software and provide the technology common in the industry today which would significantly impact efficiency and effectiveness. This results in SCS compensating with more manual processes that require manpower to complete while introducing greater margin for error and increased cost.

The tremendous volume increase in workload throughout the agency corresponding to the Transmission build out and implementing lease financing has resulted in more reactive solutions to what should be systematic processes throughout the procurement cycle. Supply Chain Services would benefit greatly from more thorough planning and standardization upstream, and more well defined and consistent specifications for all materials and services procured at BPA.

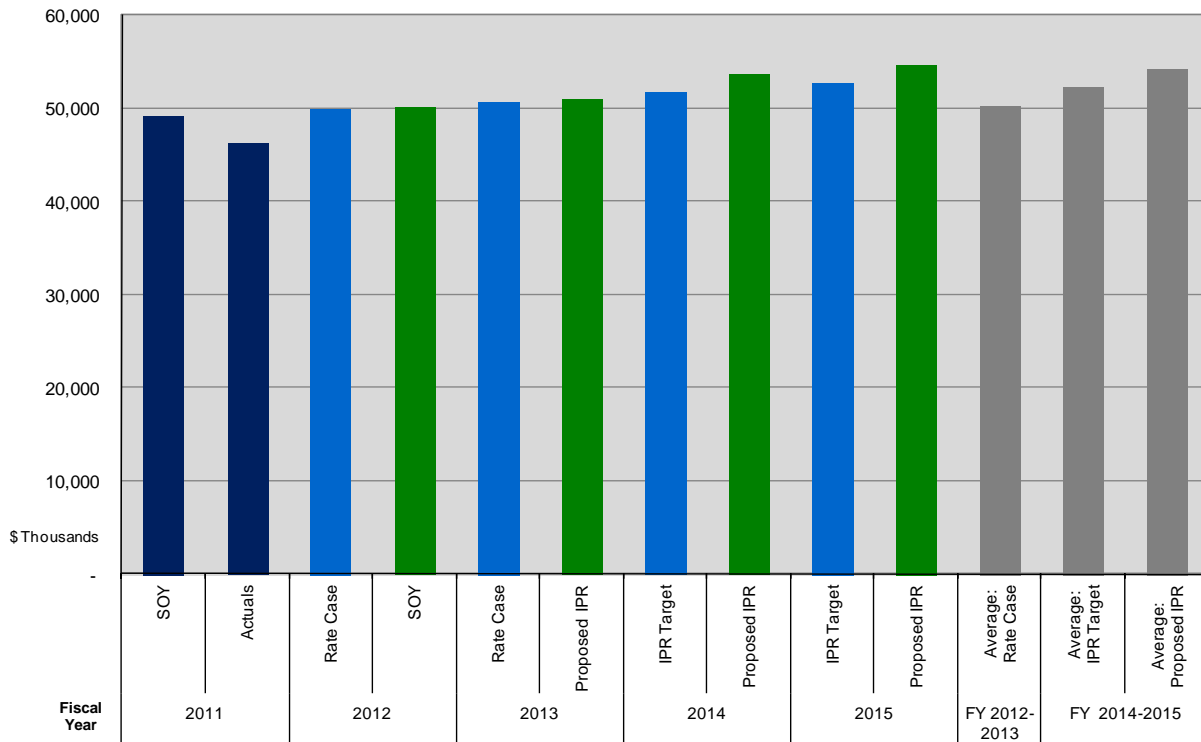
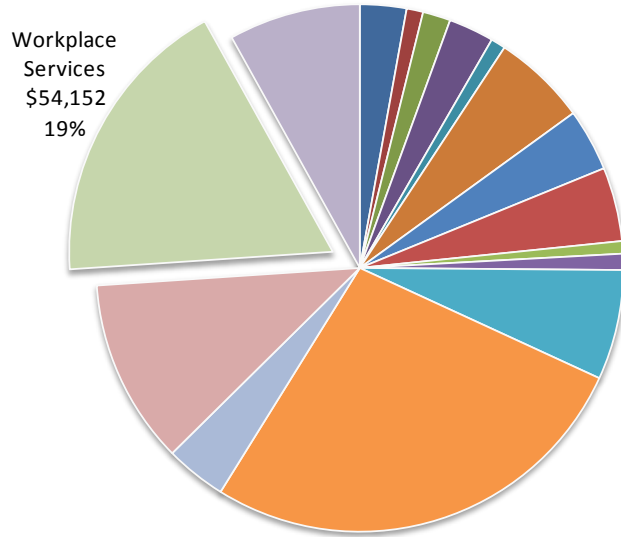
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5.15 WORKPLACE SERVICES

Allocation Distribution



FY 2014-2015 Average: Proposed IPR



Program Details

	2011			2012		
	Start of Year	Actuals	Delta	Rate Case	Start of Year	Delta
Agency Services G&A Allocations	28,857	29,308	451	29,287	29,583	295
Trans. - Facilities and Non-Electric Plant Maint.	20,266	16,960	(3,306)	20,593	20,504	(89)
Total	49,124	46,269	(2,855)	49,880	50,087	207

	2013			2014			2015		
	Rate Case	Proposed IPR	Delta	IPR Target	Proposed IPR	Delta	IPR Target	Proposed IPR	Delta
Agency Services G&A Allocations	29,583	30,072	489	30,573	31,740	1,167	31,170	32,376	1,205
Trans. - Facilities and Non-Electric Plant Maint.	21,049	20,839	(210)	21,174	21,882	707	21,581	22,306	726
Total	50,631	50,911	279	51,747	53,621	1,874	52,751	54,682	1,931

Description, Purpose and Responsibilities

Workplace Services is responsible for overall agency direction, strategic planning, management and governance of facilities, asset management, and facilities maintenance and operations, space management, printing services, mail services, and office services. The Facilities Management Officer (FRO) has the overall responsibility and accountability for the agency office facilities strategic planning and facilities (nonelectric) asset management programs. This includes establishing the business strategic objectives, financial targets, and performance standards in alignment with the agency’s strategic direction and the agency Asset Management Council. The FRO provides oversight and management of the program implementation.

The Facilities Asset Management and Ross Facilities programs are included in the Transmission Expense – Maintenance narratives and proposed IPR levels.

Goals

- Operations and Planning
 - Promote sustainable commute options, which support Federal, State and Municipal mandates
 - Provide systems that accurately track and support reporting requirements, which includes monitoring costs and savings to ensure best value for Stakeholders and Customers
 - Provide office supplies and equipment with sustainable options that are cost-effective and support Executive Order 13514, Federal Leadership in Environmental, Energy and Economic performance
- Printing and Mail Services
 - Ongoing application of continuous process improvement methodology to identify and eliminate waste, inefficiencies and non-value-added activities that support timely and accurate communications with BPA Stakeholders and Customers, and also complies with Government Printing Office regulations
- Facilities Operations
 - Continue to develop and support both emergency and alternate facilities requirements for critical functions, which support business objectives
 - Implement identified actions from benchmarking survey that provide long-term value
 - Continue reducing energy usage by employing new cost-effective technology
- Space Management
 - Continue implementation of Portland/Vancouver office space strategy that include attributes of Workplace of the Future, which offers opportunities for a more productive and cost-effective

work environment

- A streamlined space management program with increased flexibility and efficiency in space use and staff movement, better response time, reduced impact on employees, increased reorganization mobility, minimal reconfiguration and reduction in cost of service

Changes from the 2010 IPR

- Compliance with DOE regulations for mail screening
- Implementation of Critical Facilities Program for Operations and Maintenance of Critical Facilities to comply with agency data center standards
- Implementation of the Portland/Vancouver office space strategy
- Implementation of Workplace of the Future
- Compliance with DOE order to achieve 200 usable square feet per person

Risk and Impact of Operating at Cost Target

To the extent practical and possible, Workplace Services absorbed programmatic increases within existing budgetary limits. Below are potential risks and impacts to planned programs:

- Return to using non-recycled papers, which would require deferring sustainability goals
- Implement Workplace of the Future at a slower rate than originally proposed, which will take longer to achieve the savings and execute on the future goals
- Limited moves, which may impact productivity - workers may not be placed in workstations adjacent to their workgroups or in the ideal location to maximize business collaboration. Productivity impacts may reach a point where granting an exception to the moratorium is critical to meet business requirements.
- Limited workstation adjustments, which may raise union concerns and impact employee satisfaction with work environment.

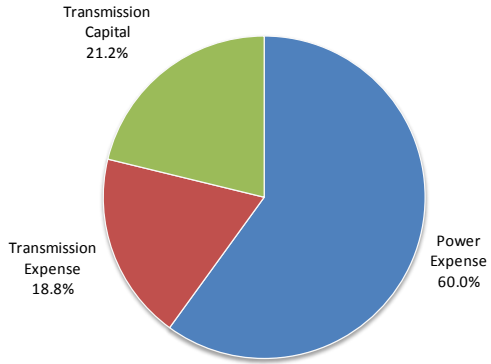
Challenges/Constraints

- Reliance on permanent and full time contract labor constrains process improvement opportunities that include approvals to purchase supplies and equipment, reporting on regulatory requirements, and providing oversight of contract staff (regular and off hours). Constraints on training development of contract staff reduce opportunities to develop back up support and cross utilize across programs and services
- Retention of the critical skill sets required to support and maintain operations – several retirements pending with no BFTE allocation
- Continued significant increases in HQ building utilities costs are challenging to absorb within existing planned spending.
- Provide ongoing space management activities while adding the Portland/Vancouver office space strategy and Workplace of the Future initiatives within existing planned spending
- Continued hiring and staff changes puts pressure on limited space available within current real estate. Current space policy constrains some creative space use options
- Change Management – Negotiating and making the cultural shift within BPA to a new approach for the workplace and work environment
- Further implementation and refinement of the automated request and workflow management tool (Service Connection) and associated processes.

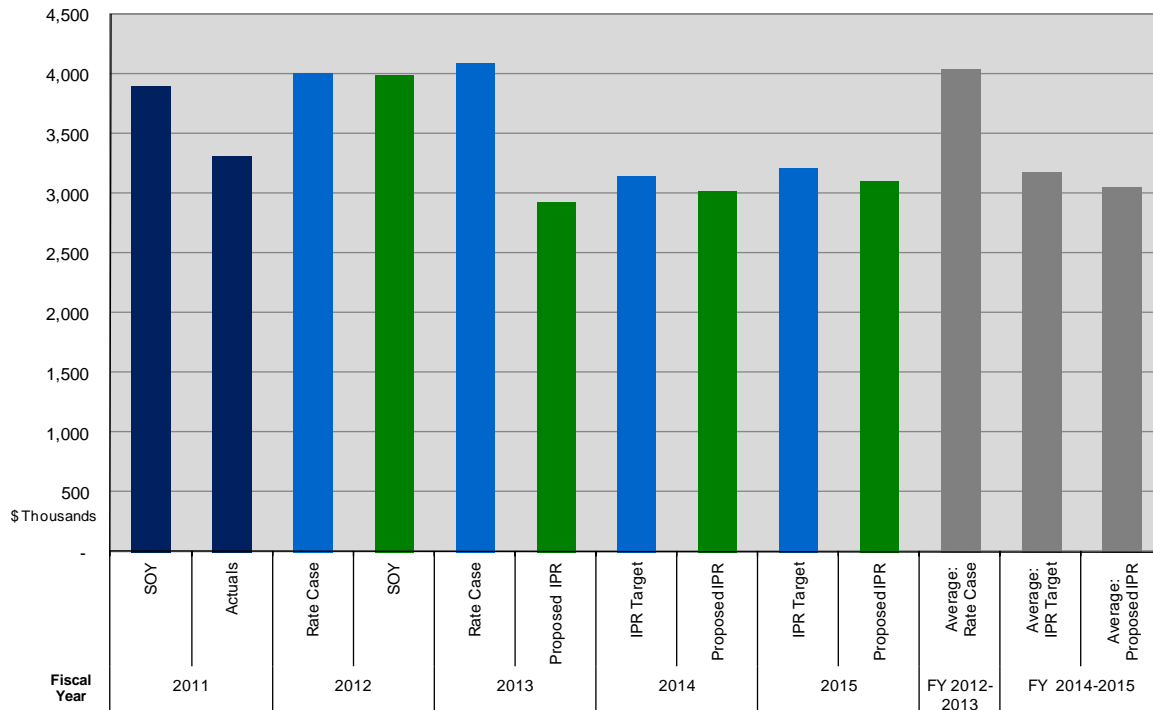
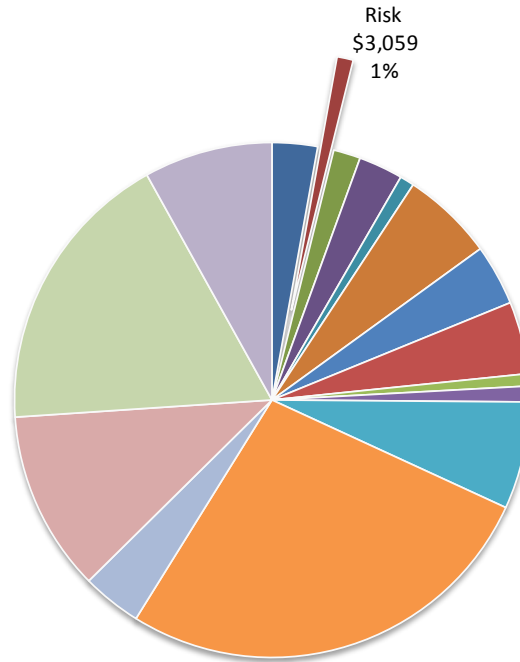
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5.16 RISK

Allocation Distribution



FY 2014-2015 Average: Proposed IPR



Program Details

	2011			2012		
	Start of Year	Actuals	Delta	Rate Case	Start of Year	Delta
(\$\$\$) Business Support Allocations	3,903	3,316	(587)	4,008	3,992	(16)

	2013			2014			2015		
	Rate Case	Proposed IPR	Delta	IPR Target	Proposed IPR	Delta	IPR Target	Proposed IPR	Delta
(\$\$\$) Business Support Allocations	4,088	2,926	(1,162)	3,143	3,021	(121)	3,206	3,096	(110)

Description, Purpose and Responsibilities:

The Risk Management office is led by the Chief Risk Officer (CRO) and is comprised of the Enterprise Risk Management (ERMA) and Transacting and Credit Risk Management (TERM) functions.

Risk Management’s mission is to enable high quality and durable business decisions and improve the likelihood that the agency achieves its business objectives. Risk does this by ensuring decisions are “risk informed” - objectives are clearly understood, a broad range of alternatives are evaluated with consistent criteria, and significant risks are identified and appropriately treated, and by ensuring that all significant risks are systematically and effectively addressed by accountable organizations consistent with the agency’s risk tolerance. Risk promotes consistent and disciplined consideration and treatment of risk as part of the agency’s day to day processes, making the risk management ethic a visible and integral part of BPA culture.

Goals

To work collaboratively with executive management and staff to effectively implement a more robust risk management program and ensure that effective risk management remains a priority for the agency. Keep abreast of improvements in the risk management discipline via participation in industry forums and benchmarking. Adapt risk management best practices to fit the unique situation of the agency.

- BPA’s strategic objectives are clearly defined, measurable, and reflect the agency’s risk tolerance
- Top tier enterprise risks to strategic objectives are identified and addressed through a consistent and disciplined process
- Emerging risks to agency objectives are dynamically identified and managed
- Decisions and policy are based on a complete and shared understanding of objectives and a robust consideration of risks to delivering on, and alternative means for, achieving those objectives
- Consistent and disciplined consideration and treatment of risk is part of our day to day processes – risk management ethic is a visible and integral part of BPA culture

Changes from the 2010 IPR

Since the last IPR, BPA reorganized the Business Continuity responsibilities to the Office of Security and Continuity of Operations.

6 FINANCIAL POLICIES AND METHODOLOGIES

6.1 AGENCY SERVICES GENERAL ALLOCATION METHODOLOGY

The G&A and Business Support pools are collections of costs from the centralized Agency Services organizations. The description of products and services provided by these organizations can be found in the individual organizations executive summaries.

BPA has 15 General and Administrative (G&A) cost pools: Executive; IT Applications System Support; Security; Legal Services; Human Resources; Finance and Accounting; Safety; IT Management and Administrative; IT Infrastructure; IT Cross Agency Projects; Workplace Services; Public Affairs; Supply Chain Purchasing; and Dedicated Workplace Services Power/Transmission.

In addition, BPA has nine Business Support pools. These are: Industry Restructuring; Risk; IT Dedicated Projects Power/Transmission; Supply Chain Administrative; Technology Innovation; Aircraft Services; Billing and Metering Services; and Contracting and Forecasting Services. These Business Support pools are assigned to the Power Services and Transmission Services programs that are directly benefitted by the services provided. The description of these services can be found in each benefitting program summary.

G&A and Business Support pools are used to spread shared corporate costs to the Power Services and Transmission Services business units.

Before each IPR process, BPA's Accounting and Reporting group conducts a review of the Agency Services cost allocations pools and the cost drivers used to assign Agency Services costs to Power and Transmission Rates. As part of this review, they meet with key managers to verify that the makeup of the cost pools and the drivers are up-to-date and accurately reflect cost causation.

Each pool is examined to determine the appropriate drivers of cost. The drivers are used to determine the allocation rates. The costs associated with these pools are assigned to the Agency Services G&A program or the benefitting O&M program for each business unit.

When the allocation rates are reviewed, these principles apply:

- Methodologies are equitable and fair
- Methodologies represent a causal relationship to the services provided
- Methodologies are defensible in a rate setting environment
- Methodologies are defensible with internal and external auditors
- Methodologies can be implemented and are cost effective
- Methodologies are direct and simple: improving understanding and transparency
- Methodologies are used to develop rates that will be implemented and unchanged on an annual basis without exception

G&A and Business Support costs can be allocated either evenly to the Power and Transmission business units or based on specific cost drivers, such as number of employees or square footage occupied.

- Even Allocations - Traditional General and Administrative Costs: Cost pools that serve the general purpose of agency support functions (split 50/50 to power and transmission rates)
 - No consistent, measurable method of assigning support costs directly to the benefactor
 - Functions are general in nature and are not directly affected by changes in traditional cost drivers (i.e. FTE levels, budget levels, etc.)
 - Collection of costs or measurement of driver is cost prohibitive – it is uneconomical to attempt more precise allocations
 - Lack of causal relationship to benefactors prevents a clear distinction for assigning those costs

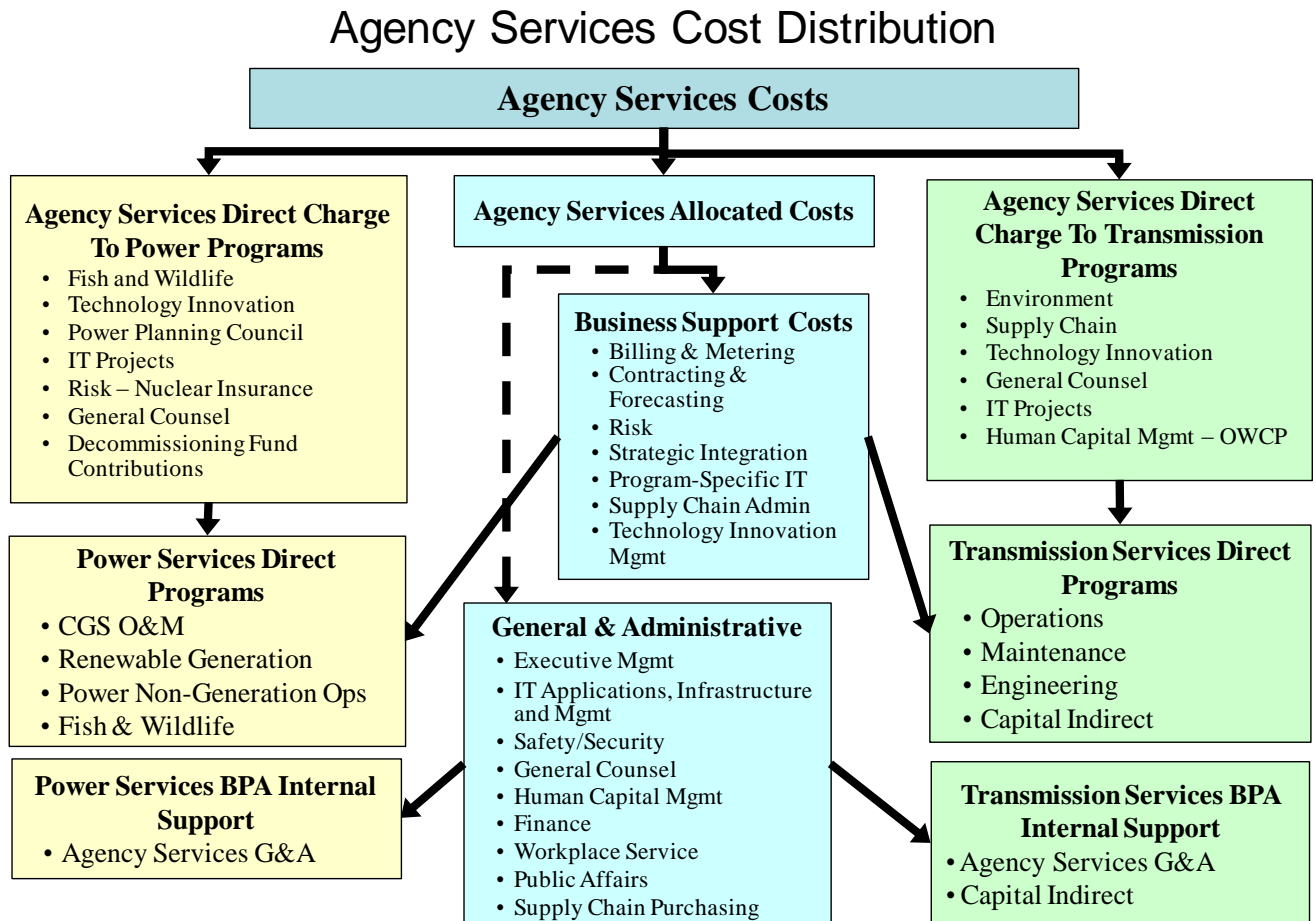
- Directed Allocation Pools: Cost pools that can be distributed with more precision, based on specific cost drivers (split other than 50/50 to power and transmission rates)
 - Activities are managed and budgeted centrally, but methods exist to assign costs to benefactors
 - Functions can be linked to cost drivers and can change based on those drivers
 - Direction of effort studies or other means can be used to allocate in a cost-effective manner

Upon completion of the cost pool review, potential changes to allocations are presented to the Chief Accounting Officer and the Chief Financial Officer for review and approval. They are then implemented in the IPR, the upcoming year’s budgets and the allocation of actual costs.

The accounting review for the 2010 IPR resulted in minor changes to a number of pools. The most significant change came in the portion of overheads assigned to transmission capital, which increased due to the large transmission capital programs. A summary of the cost pool changes can be found on the next page and in the Internal Support section of this report.

The following graphic depicts how agency services costs are assigned to the business units.

Agency Services Cost Distribution



Corporate G&A Allocations for 2012 IPR (FY 2013-15)

	COST POOL	2013/IPR Rates			2012 Rates				DRIVERS	COMMENTS
		POWER	F&W*	TRAN	POWER	F&W	EE	TRAN		
1	G&A EXEC/PLANNING/GOVERNANCE	50%		50%	50%			50%		
2	G&A APPLICATION SYSTEM SUPPORT	35%		65%	35%			65%	Applications	IT intends to move to "Applications as a Service" in 2013 for new software rather than doing in house. At this time impacts cannot be projected, so the rate stays unchanged at this time.
3	G&A SECURITY SERVICES	10%	2%	88%	22.4%	1%		76.6%	Work Orders	Rate change based on updated strategic priorities and new organizational structure.
4	G&A LEGAL SERVICES	50%		50%	50%			50%		
5	G&A HUMAN RESOURCE SERVICES	20%	2%	78%	21.6%	1.8%		76.6%	FTE by Function	Updated based on direction of effort. HR pool now includes "Business Process and Continuous Improvement."
6	G&A ACCOUNTING & FINANCE	45%		55%	50%			50%	FTE Specifically Supporting BLs/Vouchers	Change made in allocation logic, with CFO concurrence. Allocating FB, FS, and FTD costs based on support provided to business lines.
7	G&A SAFETY	13%		87%	11%			89%	Direction of Effort	Change made based on direction of effort study.
8	STRATEGIC INTEGRATION	50%		50%	50%			50%		
9	RISK MANAGEMENT	60%		40%	42%			58%	Manager Direction	Updated per Risk Officer. Change due to movement of COOP from Risk Office, offset somewhat by more work being done to support Transmission.
10	G&A IT ADMINISTRATION	34%		66%	50%			50%	Underlying IT Cost Pools	Changed rate from a simple 50-50% to reflect the rates for the underlying functions performed by IT.
11	DEDICATED IT PROJECTS	100%		100%	100%			100%		
12	G&A IT INFRASTRUCTURE	24%	2%	74%	24%	1%		75%	IT Devices by Function	Updated direction of effort study produced minor change in rates.
13	G&A WORKPLACE SERVICES	38%	4%	58%	38.8%	3.6%		57.6%	Square Feet	Updated direction of effort study produced minor changes in rates.
14	SUPPLY CHAIN ADMINISTRATION	7%		93%	13.4%			86.6%	Underlying SC Cost Pools	Change due to more support being provided for Transmission.
15	G&A PUBLIC AFFAIRS	45%	5%	50%	45%	5%		50%		
16	SUPPLY CHAIN PURCHASING SERVICES	41%	26%	33%	29.8%	37.0%	8.0%	25.2%	Work Orders Charged	Purchasing Services is now doing contracts for Transmission design. EE no longer a business segment.
17	TECHNOLOGY INNOVATION	50%		50%	50%			50%		
18	AIRCRAFT SERVICES	38%			33%				Aircraft Log	Not a G&A Allocation. Costs source from Transmission. Now charging a portion of down time to Power rather than having Transmission absorb all down time costs.
19	G&A WORKPLACE DIRECT PROJECTS	100%		100%	100%			100%		
20	BILLING & METERING SERVICES	52%		48%	58%			42%	Manager Direction	Updated direction of effort study produced changes in rates.
21	CONTRACTING & FORECASTING SRVC	53%		47%	48%			52%	# of Contacts/ Forecasts	Updated direction of effort study produced changes in rates, particularly for contract management.

*Some allocations were rounded up for F&W while others were rounded down.

6.2 BETWEEN BUSINESS LINE COST ALLOCATION METHODOLOGY

The proposed spending levels and revenue requirements of the business units include costs that must be charged to the other business unit for appropriate recovery in rates. Unlike when Power purchases service from Transmission to market secondary energy, these are costs that originate in one business unit, but are associated with a service or services provided by the other business unit.

Prior to establishment of business units, all costs were determined at the agency level and were "functionalized" to generation and transmission to be recovered in the appropriate rates. Now, the business units have responsibility for specific groups of assets, plan spending levels according to their responsibilities, have separate revenue requirements and recover costs separately. For inter-business unit costs to be recovered through the appropriate rates, there must be an explicit charge to the other business unit and corresponding revenues that are recognized by the source business unit, both in forecast and actual financial statements.

These types of costs can be of a singular nature, such as the spending in Transmission for staff that participate on the Wind Integration Team, or they can consist of multiple cost elements and need to be quantified in the rate case, such as the total annual cost of transmission facilities at Corps and Reclamation projects. In the case of the Wind Integration Team, the collective cost for this joint business unit effort is assigned to Power in the rate case for recovery from the Variable Energy Reserve Balancing Service rate. Transmission charges their portion of those costs to Power and recognizes revenues from Power as an offset to its own costs. The transmission facilities at Corps and Reclamation projects have associated costs in various programs or cost categories: Corps and Reclamation Operation and Maintenance expenses, depreciation expense, net interest expense and, when necessary, Minimum Required Net Revenue. The total of these elements for the transmission facilities is billed to Transmission to be included in the appropriate transmission rates and Power recognizes equivalent revenues that it can credit against its total costs.

Any inter-business unit charge requires that the receiving business unit recognize the cost in its proposed spending/revenue requirement, include it in the development of specific rates, recover the cost in their revenue and then expense the charge from the other business unit. The originating business unit can then include that this revenue in the forecast so that the expected revenue can be credited against the total revenue requirement ensuring that the costs are not double-recovered.

7 NEXT STEPS

If you need additional information, clarification on IPR materials, or wish to request a discussion meeting e-mail BPAFinance@bpa.gov by June 29th.

- Follow-up information, and if necessary, detailed discussions are planned for the week of July 16th in order to respond to any follow-up items.
- Close of comment on the IPR is August 10th in order to consider and reflect comments before finalizing the IPR spending levels for the BP-14 Rate Case.

Participants have an opportunity to submit public comments on BPA's Initial IPR Publication and proposed IPR levels during a ten-week public comment period beginning June 5, 2012 and concluding August 10, 2012. Comments can be submitted [online](#); by [email](#); or by mail to: BPA, P.O. Box 14428, Portland, OR 97293-4428

Please send questions to: BPAFinance@bpa.gov

8 FINANCIAL DISCLOSURE

FY 2011 actuals have been made publicly available by BPA and contain Agency-approved Financial Information.

FY 2012-13 forecasts for Rate Case and Start of Year have been made publicly available by BPA and contain Agency-approved Financial Information.

FY 2013-15 IPR target and Proposed IPR levels have been made publicly available by BPA on June 5, 2012 and reflect information not reported in agency financial statements.

9 ACRONYM GLOSSARY

ABC	<i>Accurate Billing of Customer Contracts</i>
AGC	<i>Assistant General Counsel</i>
aMW	<i>Average Megawatts</i> - The unit of energy output over a year, equivalent to the energy produced by the continuous operation of one megawatt of capacity over a period of time; also an average of one million watts transferred over a period of time (often a year, thus average annual megawatts).
APRB	<i>Additional Post-Retirement Contribution</i>
ASC	<i>Alternative Scheduling Capabilities</i>
ATC	Available Transfer Capacity - Measure of the transfer capability remaining in the physical transmission network for further commercial activity over and above already committed uses. Total transfer capability less existing transmission commitments, less a capacity benefit margin, less a transmission reliability margin.
BA	<i>Balancing Authority</i> - Synonym for Load Control Area agency. The responsible entity that schedules generation on transmission paths ahead of time, maintains load-interchange-generation balance within a Balancing Authority Area, and supports interconnection frequency in real time.
BAA	<i>Balancing Authority Area</i> - The collection of generation, transmission, and loads within the metered boundaries of the Balancing Authority. The balancing authority maintains load-resource balance within this area.
BC	<i>Business Continuity</i>
BiOps	<i>Biological Opinion</i> - Document resulting from formal consultation that states the opinion of the US Fish and Wildlife Service, or National Marine Fisheries Service, as to whether a federal action is likely to jeopardize the continued existence of listed species or results in destruction or adverse modification of critical habitat.
BPA	<i>Bonneville Power Administration</i> - The Federal power marketing agency under the Department of Energy responsible for marketing wholesale electric power from 31 Federal dams and one non-Federal nuclear plant throughout Washington, Oregon, Idaho, and western Montana and portions of California, Nevada, Utah, and Wyoming. BPA also sells and exchanges power with utilities in Canada and California. Also known as Bonneville.
BPM	<i>Business Process Management</i> - A holistic management approach focused on aligning all aspects of an organization with the wants and needs of clients.

CASP	<i>Critical Asset Security Plan</i> - Provides the agency's strategy for the implementation of safeguards and security programs as they relate to protecting critical assets.
CBC	<i>Customer Billing Center</i>
CCM	<i>Customer Contract Management</i>
CDM	<i>Customer Data Management</i> - BPA-wide centralized web-based source for account and contact information for customers, associations, and developers, sharing data widely with other agency business line applications and systems; operated by the Customer Support Services Contract Management & Administration group.
CGS	<i>Columbia Generating Station</i> - Nuclear power plant owned by Energy Northwest, for which BPA markets all power. Formerly known as WNP2.
CIP	<i>Critical Infrastructure Protection</i> - Coordinates all of NERC's efforts to improve physical and cyber security for the bulk power system of North America as it relates to reliability.
CP	<i>Customer Portal</i>
CRO	<i>Chief Risk Officer</i>
CSRS	<i>Civil Service Retirement System</i>
CSS	<i>Customer Support Service</i>
DCC	<i>Dittmer Control Center</i>
DOE	<i>Department of Energy</i> - A Department established in 1977 by the Department of Energy Organization Act to consolidate the major Federal energy functions into one cabinet-level department that would formulate a comprehensive, balanced national energy policy. Responsible for regulatory, research, and marketing programs related to energy production and use. BPA is an agency of DOE. For more information: http://www.doe.gov
DUF₆	<i>Depleted Uranium Hexafluoride</i> - Highly toxic, radioactive, corrosive, colorless crystals; soluble in carbon tetrachloride, fluorocarbons, and liquid halogens; it reacts vigorously with alcohol, water, ether, and most metals, and it sublimates; used to separate uranium isotopes in the gaseous-diffusion process.
DWDM	<i>Dense Wave Division Multiplexing</i> -An optical technology used to increase bandwidth over existing fiber optic backbones.
EBBA	<i>Enhanced BPA BA</i> - A concept that has been developed to begin the discussion with customers on the development of the BPA long-term balancing reserve strategy.
eGIS	<i>Enterprise Geographic Information System</i>
ELR	<i>Engineering Line Rating</i>

- EP** *Emergency Preparedness*
- EPA** *Environmental Protection Agency* - The Federal agency created in 1970 to permit coordinated and effective governmental action for protecting the environment by the systematic abatement and control of pollution by integrating research, monitoring, standard setting, and enforcement activities. For more information: <http://www.epa.gov>
- EPRI** *Electric Power Research Institute* - A nationwide research organization sponsored by 680 utilities and dedicated to discovering, developing, and delivering new technologies for electric power generation and transmission and for demand-side management.
- ERM** *Enterprise Risk Management* - Strategic business discipline that supports the achievement of an organization's objectives by addressing the full spectrum of its risks and managing the combined impact of those risks as an interrelated risk portfolio. ERM provides a disciplined process for managing risk and seeks to embed this discipline in existing business processes.
- ESA** *Endangered Species Act* - A 1973 Federal law, amended in 1978 and 1982, to protect troubled species from extinction. The National Marine Fisheries Service and U.S. Fish and Wildlife Service decide whether to list species as threatened or endangered. Federal agencies must avoid jeopardy to and aid the recovery of listed species. Similar responsibilities apply to non-Federal entities.
- FCRPS** *Federal Columbia River Power System* - The transmission system constructed and operated by BPA and the hydro-electric dams constructed and operated by the U.S. Army Corps of Engineers and the Bureau of Reclamation in the Northwest. Each entity is separately managed and financed, but the facilities are operated as an integrated power system.
- FCRTS** *Federal Columbia River Transmission System* - The electric transmission system in the Pacific Northwest built and operated by BPA. Often referred to as the Federal transmission grid, or the BPA grid.
- FEGLI** *Federal Employees Group Life Insurance Program*
- FEHB** *Federal Employees Health Benefits Program*
- FEOSH** *Federal Employee Occupational Safety and Health Program*
- FERC** *Federal Energy Regulatory Commission* - The Federal agency that reviews hydroelectric projects and applications for operating licenses, and regulates interstate aspects of electric power and natural gas industries. The agency to which BPA submits its proposed power rate adjustments for approval. Formerly Federal Energy Administration.
- FERS** *Federal Employee Retirement System*
- FMO** *Facilities Management Officer*

- FTE** *Full Time Equivalent* - A full-time-equivalent staff-year, which is derived by dividing the number of paid straight-time hours accumulated during a period of time by 2,080 (26 annual pay periods 80 hours per period). This differs from the 2,087 hours used for payroll computations. FTE is a concept for managing the size of a workforce under which limitations are placed on the cumulative number of hours that can be paid during a given period to various categories of employees, as contrasted with concepts which place limitations on the maximum size of the workforce.
- G&A** *General and Administrative*
- GHG** *Green House Gas* - Gases, including carbon dioxide (CO₂), methane (CH₄), nitrogen oxides (NO_x), nitrous oxide (NO₂), and water vapor (H₂O) that contributes to the greenhouse effect.
- GI** *Generation Interconnection* - Provides services for interconnection to the Federal Columbia River Transmission System. BPA interconnection procedures adhere to the requirements of its Open Access Transmission Tariff.
- GTA** *General Transfer Agreement* - Agreement between one utility and another wherein service is provided to a customer of the first utility which happens to be geographically located within the control area of the second utility.
- HCM** *Human Capital Management*
- HR** *Human Resources*
- HRT** *Hatchery Review Team*
- HSRG** *Hatchery Scientific Review Group*- An independent scientific review panel responsible for reviewing state, tribal and federal hatchery programs in Puget Sound and Coastal Washington, and in the Columbia River Basin.
- FIGLM** *Information Governance and Lifecycle Management*
- IH** *Industrial Hygiene* - The art and science dedicated to the anticipation, recognition, evaluation, communication and control of environmental stressors in, or arising from, the workplace that may result in injury, illness, impairment, or affect the well being of workers and members of the community.
- IPPI** *Integrated Process & Process Improvement*
- IPR** *Integrated Program Review – Finance public process occurring every two years, prior to the upcoming rate case.*
- IRC** *Investment Recovery Center* - Coordinates and manages the disposal of all BPA-owned equipment, including inventory, in compliance with Federal Law concerning the disposal of federally owned assets.

- IVM** *Integrated Vegetation Management* - is a strategy to cost effectively control vegetation with the most benign overall long-term effect on public health and safety and the ecosystem. IVM tries to maximize favorable effects and minimize potential negative effects.
- KW** *Kilowatts* - An electrical unit of power; one kilowatt equals 1,000 watts.
- LIDAR** *Light Detection and Ranging* - is an optical remote sensing technology that can measure the distance to, or other properties of a target by illuminating the target with light, often using pulses from a laser.
- LRP** *Long Range Plan*
- LSRCP** *The Lower Snake River Compensation Plan* - A series of 13 fish hatcheries on the Lower Snake to mitigate the damage done to fish by the construction of Lower Monumental, Little Goose, Lower Granite, and Ice Harbor dams. Authorized by Congress in the mid-1970s, constructed by the U.S. Army Corps of Engineers, operated and maintained by the U.S. Fish and Wildlife Service. Expenses are repaid to the U.S. Treasury by BPA from power sales revenues, except one hatchery with shared funding.
- MACC** *Market Assessment and Coordination Committee*
- MCC** *Munro Control Center*
- MOA** *Memorandum of Agreement*
- MOU** *Memorandum of Understanding*
- MW** *Megawatts* - The electrical unit of power which is equal to 1,000 kilowatts, or 1,000,000 watts.
- NAESB** *North American Energy Standards Board* - serves as an industry forum for the development and promotion of standards which will lead to a seamless marketplace for wholesale and retail natural gas and electricity, as recognized by its customers, business community, participants, and regulatory entities.
- NEIL** *Nuclear Electric Insurance Limited* - Mutual insurance company established to provide insurance coverage for replacement power costs resulting from an accidental outage at a member's nuclear site, and excess property damage and decontamination liability.
- NEPA** *National Environmental Policy Act* - A 1969 Federal law that requires evaluation of the environmental impact of Federally funded projects and programs. Generally requires an environmental assessment and/or an environmental impact statement be submitted to the Federal government before a project can begin.

- NERC** *North American Reliability Corporation* - A council consisting of nine Regional Reliability Councils/Corporations, encompassing virtually all of the power systems in the U.S. and Canada. Formed by the electric utility industry in 1968 and incorporated in 1975 to promote reliable and adequate supplies of bulk electric power.
- NOS** *Network Open Season* - Initiative to manage and respond to long-term firm transmission requests on the BPA network.
- NRC** *Nuclear Regulatory Commission* - The Federal agency that regulates, inspects, and oversees all activities involved with nuclear power plant generation to assure the safety of U.S. nuclear power plants. For more information: <http://www.nrc.gov>
- NWPCC** *Northwest Power and Conservation Council* - An eight-member council, established by the Pacific Northwest Electric Power Planning and Conservation Act. Comprised of two voting members from the four Northwestern states: Washington, Oregon, Idaho, and Montana. Helps guide BPA and the region with planning for conservation and generation resources and for protection, mitigation, and enhancement of fish and wildlife in the Columbia River Basin.
- O&M** *Operations and Maintenance*
- OASIS** *Open Access Same-time Information System* - Real-time information-sharing system that enables all buyers and sellers of electricity to access the transmission costs for all other buyers and sellers, to eliminate unfair advantages between utility transmission owners and their affiliates; a website used to communicate with customers, provide transmission system information, process requests for transmission service, and post SOC requirements.
- OATT** *Open Access Transmission Tariff* - Tariff for use of high-voltage transmission lines required by FERC under its Order 888. Designed to facilitate open, nondiscriminatory access to all transmission facilities by all power providers; terms and conditions by which BPA provides nondiscriminatory transmission service that is similar to the Federal Energy Regulatory Commission's pro forma tariff mandated for FERC jurisdictional utilities.
- OFS** *Optical Fiber Management System* - Looks for and monitors breaks in existing fiber networks, mobilizing maintenance personnel within minutes.
- OGC** *Office of General Counsel* - General Counsel provides legal expertise, which supports Bonneville Power Administration (BPA) programs through legal advice and representation, including but not limited to the general areas of transmission, natural resources, power, lands, federal resources and treaties, generation and finance, personnel, and ratemaking.
- OMET** *Operational Multi-gigabyte Ethernet Transport* - Next generation communication system for controls equipment requiring Ethernet.

ONMS	<i>Optical Management System</i> - Looks for and monitors breaks in existing fiber networks, mobilizing maintenance personnel within minutes.
OSCO	<i>Office of Security and Continuity of Operations</i>
PCB	<i>Polychlorinated Biphenyl</i> - Oily, persistent substance formerly manufactured for use in electrical equipment, primarily as a dielectric in capacitors. Banned from use in the manufacture of equipment in 1979 after research showed that PCBs cause skin disease and liver damage, and are a suspected carcinogen.
RAS	<i>Reliability Assessment Subcommittee</i>
ROW	<i>Right-of-Way</i> - An easement for a certain purpose over the land of another, such as the strip of land used for a road, electric transmission line, ditch, or pipeline. BPA usually acquires easements for its transmission lines, roads, and other facilities such as guys and anchors.
SaaS	<i>Software as a Service</i> - is a software delivery model in which software and associated data are centrally hosted on the cloud. SaaS is typically accessed by users using a thin client via a web browser.
SCADA	<i>Supervisory Control and Data Acquisition</i> - The centralized computer system that includes transmission of numerical quantities and alarms from substations to a control center.
SER	<i>Secure and Emergency Response</i>
SOY	<i>Start-of-Year Forecast</i>
SPCM	<i>System Protection & Control</i> - responsible for testing, checking, maintaining, and adjusting meters, relays, controls, and other equipment in BPA substations. SPCM is the technical expert on obsolete equipment no longer supported by the manufacturer, but still on BPA's system.
STAR	<i>Sustain Transmission that is Available and Reliable</i> - A long-term approach to optimizing transmission availability.
TCMS	<i>Transmission Curtailment Management Service</i> - A service BPA will provide to customers with a qualifying resource when a transmission curtailment occurs between such resource and the customer load.
TCRM	<i>Transacting and Credit Risk Management</i>
TE&ST	<i>Technical Evaluation and System Testing</i>
TI	<i>Technology Innovation</i> - Uses a cross agency Council of executives and technologists to guide its research and development efforts.
TLM	<i>Transmission Line Maintenance</i>
TPIP	<i>Transmission Process Improvement Process</i>

- TPP** *Third Power Plant (Grand Coulee)* - 3,900 mW generating station located at Grand Coulee Dam
- VBARS** *Versioned Billing Determinants and Rate System*
- VDI** *Virtual Desktop Infrastructure* - Sometimes referred to as virtual desktop interface, is the server computing model enabling desktop virtualization, encompassing the hardware and software systems required to support the virtualized environment.
- WECC** *Western Electricity Coordinating Council* - 2002 successor to the Western Systems Coordinating Council as the organization responsible for coordinating and promoting bulk electric system reliability of transmission operators within the western interconnection. It was formed through the merger of the WSCC, the Western Regional Transmission Association and the Southwest Regional Transmission Association. It provides a forum for resolving transmission access disputes, and provides an environment for coordinating the operating and planning activities of its members. For more information: <http://www.wecc.biz/About/Pages/default.aspx>
- WIES** *Western Interconnected Electric System*
- WISP** *Western Interconnection Synchrophaser System* - Synchronously-operated interconnected electric transmission systems located in the Western United States; Baja California, Mexico; and Alberta and British Columbia, Canada.
- WREGIS** *Western Renewable Energy Generation Information System* - Registry and tracking program intended to facilitate renewables policy and resource development.

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