



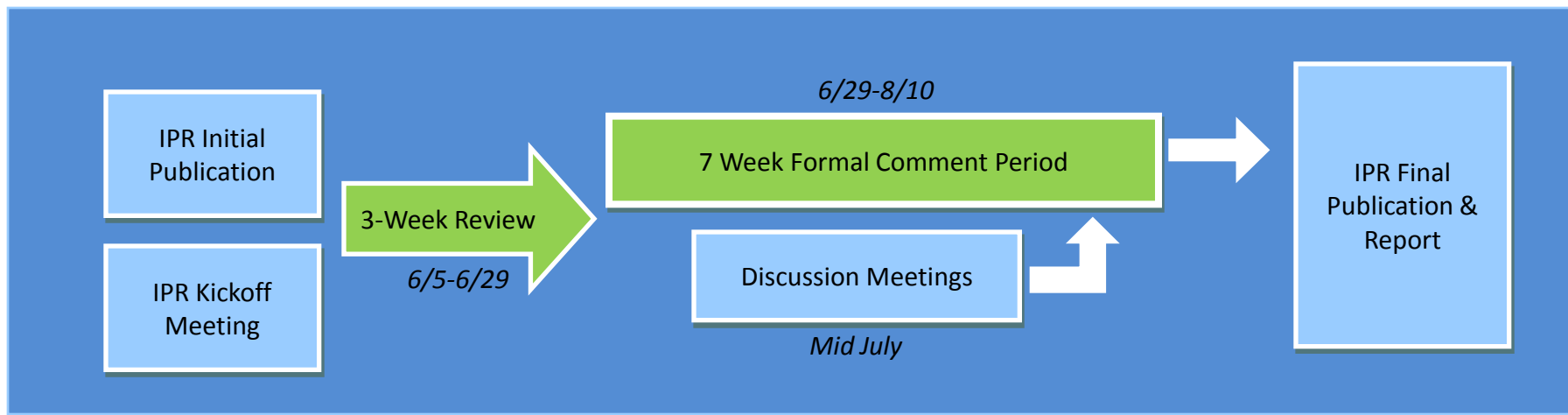
Integrated Program Review

June 5, 2012



Introduction

- Today's meeting will focus on major drivers for Power, Transmission and Agency Services costs.
- The Initial IPR Publication features cost estimates, drivers, goals, risks, and statistics as well as comparisons to previous IPR costs.
- Proposed IPR levels reflect BPA's current thinking, however they will benefit from further review and discussion by participants.



Lessons Learned

BPA performed a comprehensive process review following the 2010 IPR.

As a result of this review; the 2012 IPR includes the following new approaches:

- A General Manager's Meeting.
- An opportunity to provide input in technical workshops and proposed IPR levels.
- Information has been consolidated into the Initial IPR Publication.
- Participants can request additional information or meetings on specific program areas.
- Meetings will be held based on participant requests.



Best Practices

BPA is currently on the road to implementing best practices.

In preparation for the 2012 IPR, Finance benchmarked budget development best practices.

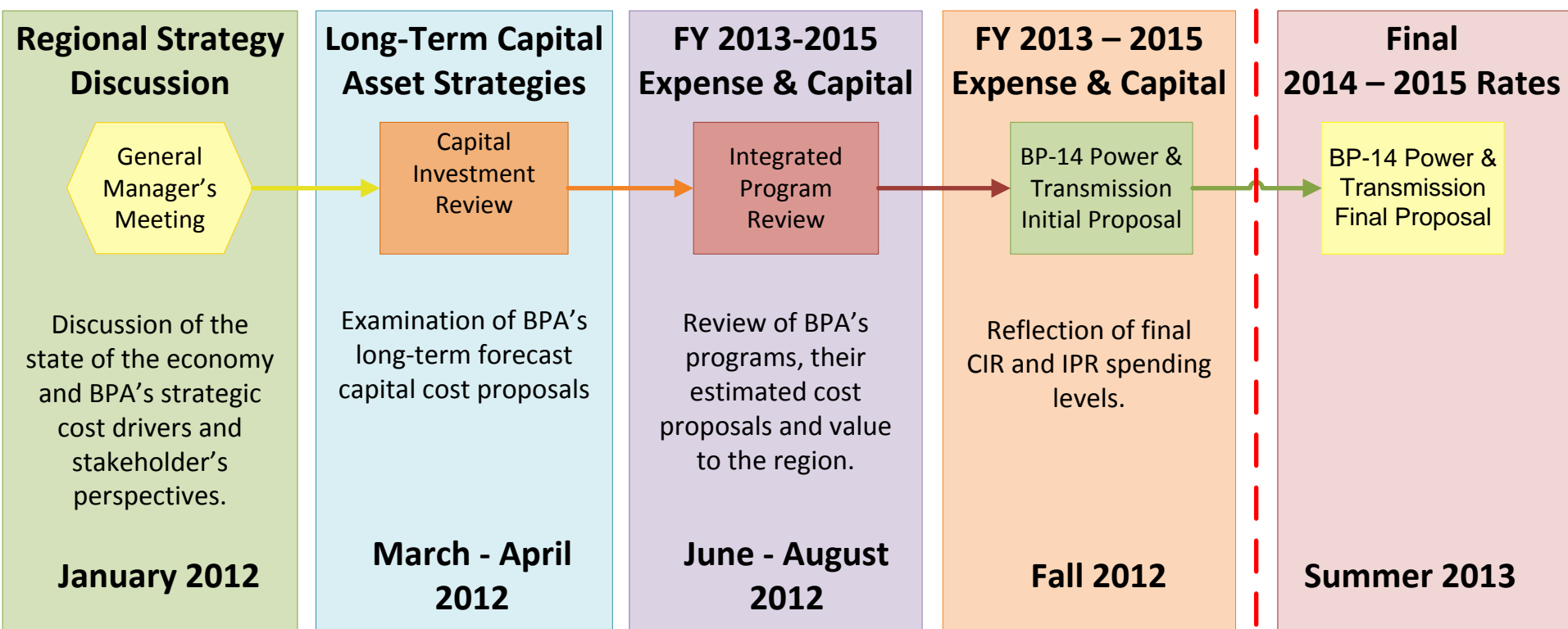
Finance developed expense cost targets based on 2012 start of year levels escalated for inflation.

- Each program is expected to either meet those cost targets or provide strong justification for funding needs beyond targeted levels.
- Justified levels above the cost targets are shown as proposed IPR levels.
- Capital targets reflect base levels discussed in the 2012 CIR process.
- Cost targets generally carry forward 2010 IPR efficiencies by using the 2012 start of year levels as the base.



2012 Public Involvement

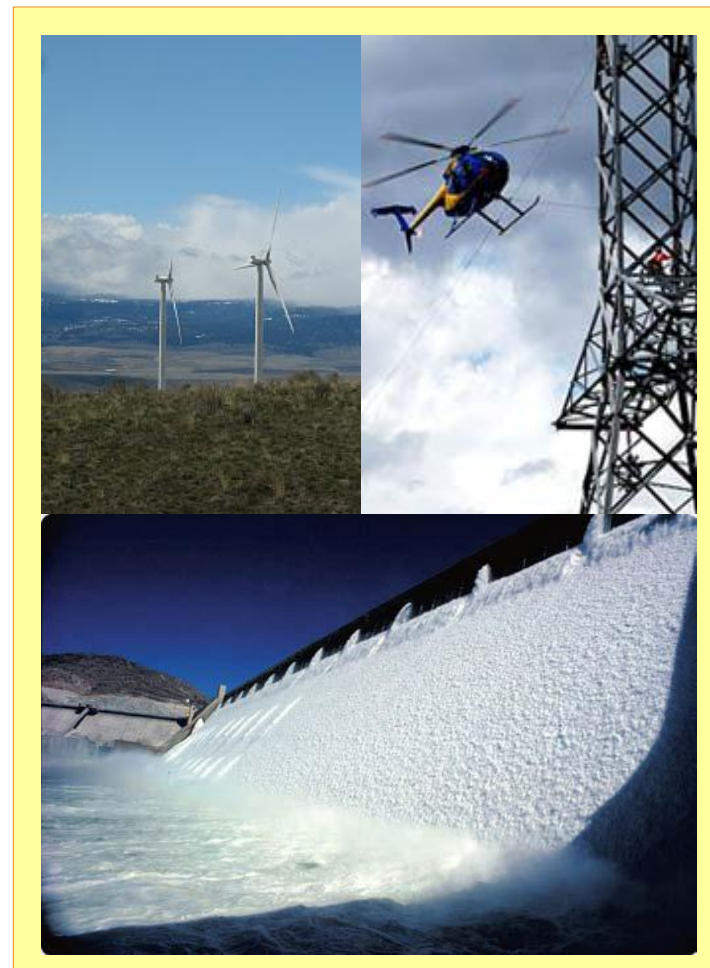
Stakeholder feedback will be taken into consideration, in conjunction with comments during the CIR, to establish both the capital and expense spending levels for FY 2013-15.



Key Agency Accomplishments

Since the last IPR, some major accomplishments:

- Positive net revenues in FY 2011 of \$82 million.
- Implemented Regional Dialogue contracts, tiered rates.
- Launched new automated systems.
- Settled 30 years of differences with utilities.
- Integrated 3,500 MW of wind into the BPA system through end of FY 2011 (*4711 MW through May 2012*).
- Continued service to direct-service industries.
- Invested more than \$1 billion in infrastructure.
- Energized McNary-John Day Line, ahead of schedule and under budget.
- Upgraded AC intertie to California.
- Achieved more than 100 MW in energy efficiency savings.
- Invented tools that benefit BPA and the industry.
- Collaborated with the region to boost salmon returns.



Agency Challenges

BPA and the region are currently faced with many challenges as we approach the next rate setting process.

Some of these challenges include:

- A regional economy that has yet to fully recover.
- Volatility of the net secondary sales.
- The concentration of renewable energy growth.
- Managing systems to meet shifting business needs.
- Uncertainty of future court actions.
- Evolving reliability standards.



Power



Power Overview

- FY 2011 ended a four year dry-spell where the region experienced below average precipitation and runoff. The forecast for runoff in 2012 is also above average. Despite higher stream flows, Power Services' financial position has not strengthened, due to low market prices for natural gas and consequently low market prices for secondary sales.
- Since the last IPR, Power Services has successfully managed costs within its direct control, such as internal operating costs. These costs came in under budget in FY 2011 and are forecast to be under budget again in FY 2012. Power Services is proposing to increase internal operating costs at an assumed level of inflation consistent with the IPR cost targets through 2015.
- Through diligent cost management, Power Services managed total expenses to levels below the rate case for FY 2010 and FY 2011.
- Some of the programs that are proposing increases for FY 2014-15 compared to spending levels in this rate period are:
 - Columbia Generating Station
 - Bureau of Reclamation
 - Corps of Engineers
 - Fish & Wildlife

Power

Recent Rate Changes

Rate Period	Rate Change	Main Drivers
WP-07	3% Decrease	Cost Management via Power Function Review and Flexible PF Rate Program (liquidity)
WP-07S	1% Decrease	Re-start of the REP at a lower cost and Availability of the Treasury Facility (May 2008)
WP-10	7% Increase	Funding for improved safety and reliability at CGS Lower net secondary revenue credit
BP-12	7.8% Increase	Increased costs of maintaining FCRPS and operating CGS reliably and safely Cost of protecting salmon and steelhead in the BiOp and the Fish Accords

Power

FY 2014-15 Rate Drivers

There are three main drivers to power rates:

- Net Secondary Revenue Credit, which averaged \$415 million in FY 2012-2013 power rates, is likely to be significantly lower.
- Program Expenses – the subject of this IPR process.
- Cost of Risk – including Planned Net Revenue for Risk and the probabilities of a Cost Recovery Adjustment Clause.



Power

Rate Drivers

The level of net secondary revenue is perhaps the single most significant driver likely to affect a power rate increase in FY 2014-15.

- Current estimate of net secondary revenue is \$302 million, based on a gas price forecast of \$3.97/MMBtu in FY 2014 and \$4.35/MMBtu in FY 2015.
- \$302M is \$114 million below the FY 2012-2013 average used in setting BP-12 power rates – and on its own would cause an 8% increase in power rates relative to FY 2012 - 2013 rates.
- As always, there is uncertainty around this estimate, which varies between -\$23 million and \$605 million.^{1/}
- If gas prices of about \$2.50/MMBtu persist, then net secondary revenue could be as low as \$220 million, which alone would cause a 14% increase in power rates.

1/ There is a 5% probability of higher revenues, and another 5% probability of lower revenues, outside of this range.

Power

Rate Drivers

Program expenses established in the IPR process:

- In managing program expenses, our objective is to identify the appropriate balance between near-term rate effects and sustaining the long-term value of the FCRPS generating assets, while also meeting our statutory obligations.
- Proposed IPR expenses alone result in a 6% rate increase relative to current rates.



June 5, 2012

Power

Rate Drivers

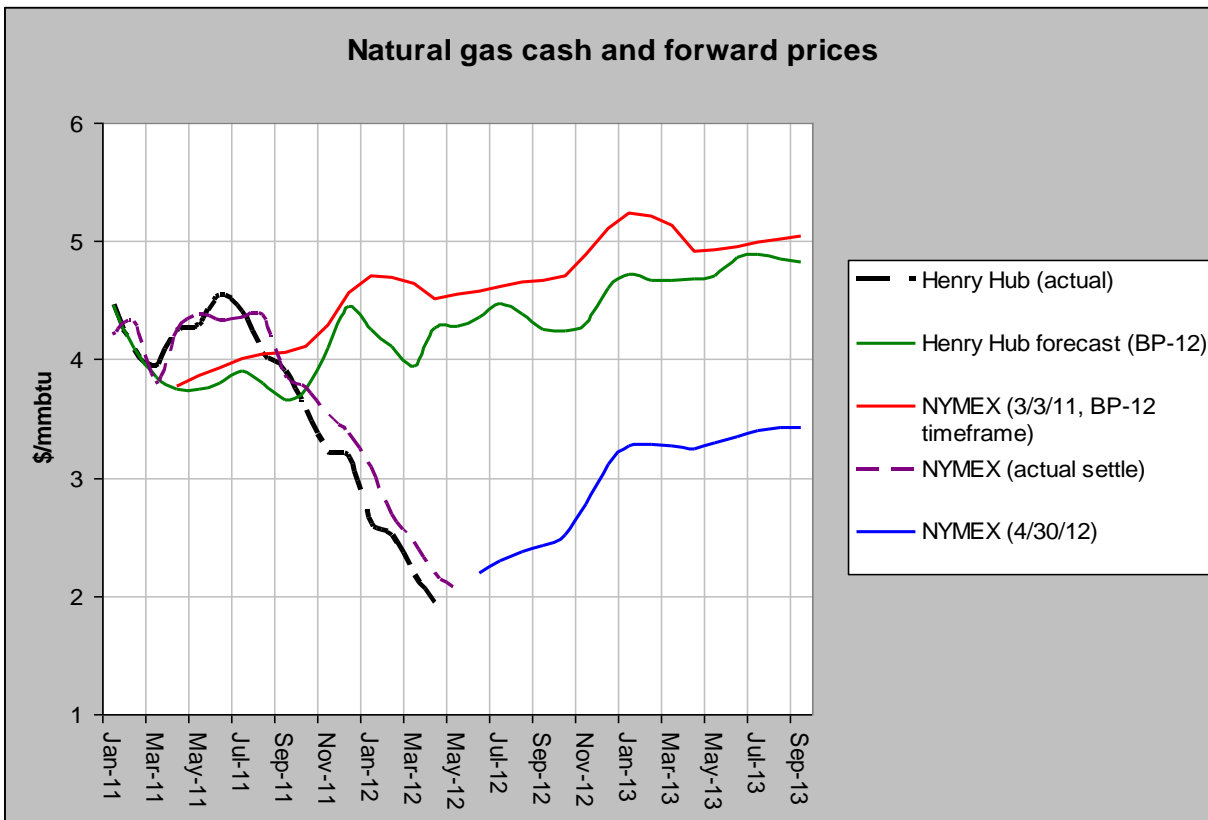
Cost of Risk:

- The unpredictability of hydro conditions and market prices have long been the most significant risk factors that affect rate levels and volatility.
- In setting power rates, when Treasury Payment Probability (TPP) is too low, BPA traditionally uses a Cost Recovery Adjustment Clause (CRAC) or Planned Net Revenue for Risk (PNRR), or a balance of the two.
- Gas prices, and thus electricity prices, are so low now that hydro variability has a much lower impact on the risk that power rates must cover. As a result, the TPP for FY 2014-15 is likely to be quite high, barring a disastrous FY 2013.
- Now that Power Services has access to the Treasury Facility for TPP support, the CRAC is also used to generate revenue to repay any use of the Treasury Facility.

Power

Driver: Natural Gas Fundamentals and Net Secondary Revenue

Natural gas fundamentals are bearish in the short term



- Since the BP-12 rate case, natural gas prices have fallen significantly.
- Shale gas boom is a game changer for the industry.
- The recent historically warm winter is creating record levels of gas storage.
- Production also remains high and there are limited short-term demand opportunities.
- All of these factors contribute to lower prices as well as lower price forecasts.

1) NYMEX settle is price at expiration

2) BP-12 gas forecast vintage approximately March-April 2011

Power

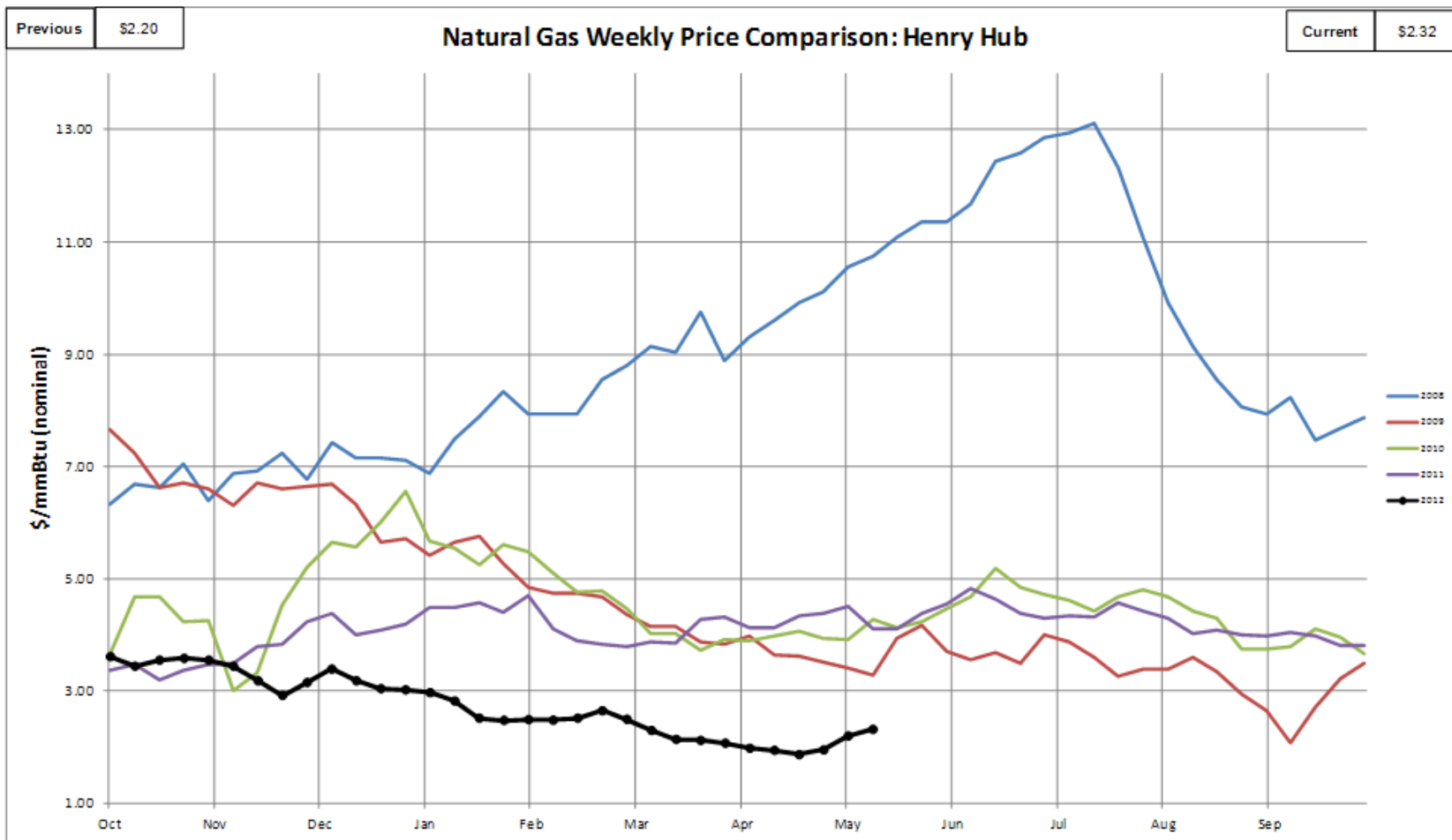
Uncertain Outlook for Natural Gas

Summary:

- Current prices are too low in terms of fundamentals around the cost of production.
- It is uncertain when the market will turn, especially considering the high storage levels that could take a year or more to work down.
- As a result, high prices (\$6+) are unlikely any time soon.
- In the long term, economic recovery and sustained industrial investment should lead to higher prices and higher volatility in the future, given past market cycles.

Power

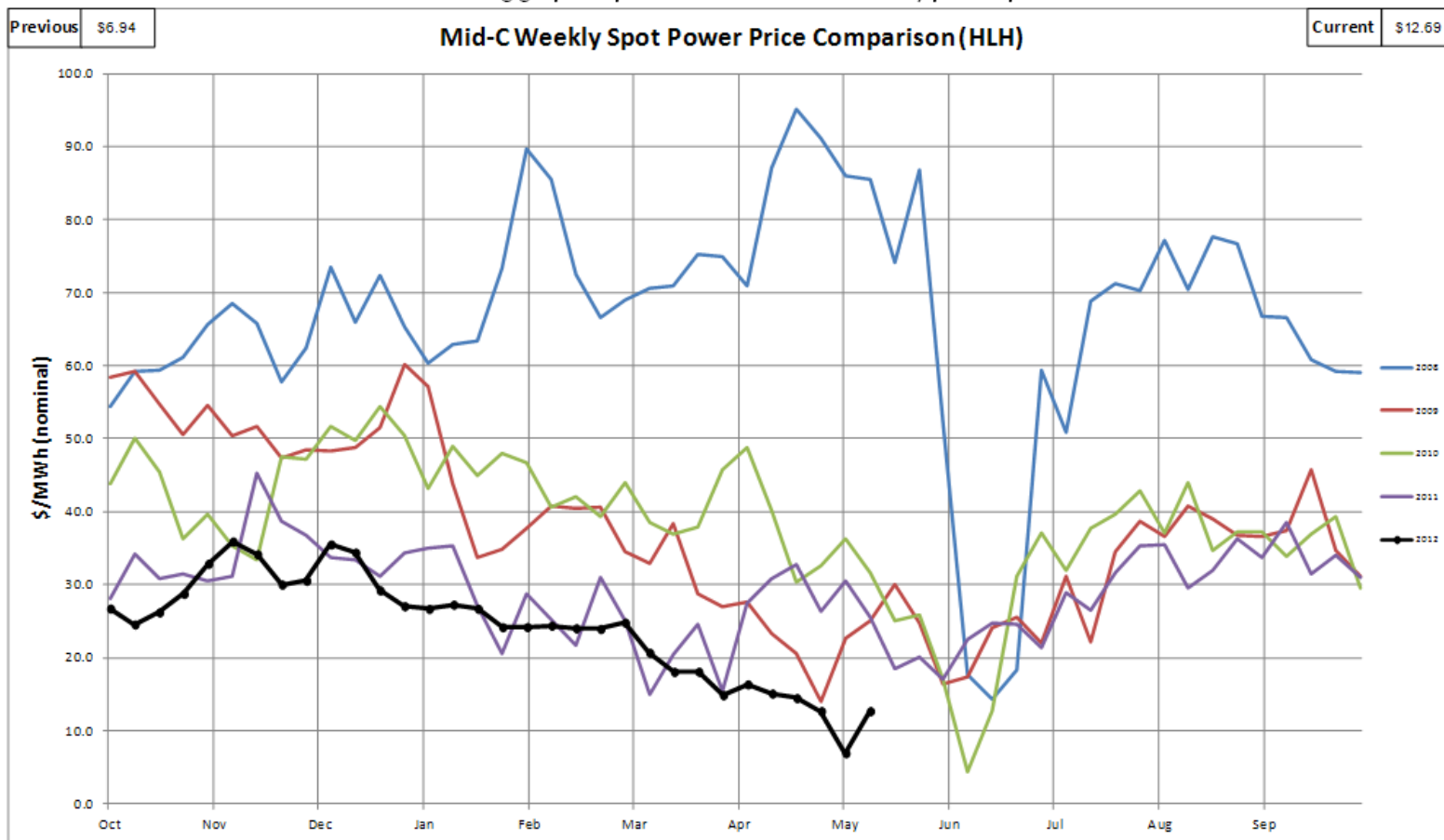
Historic Gas Prices



Power

Historical Heavy Load Hour Prices Mid-Columbia

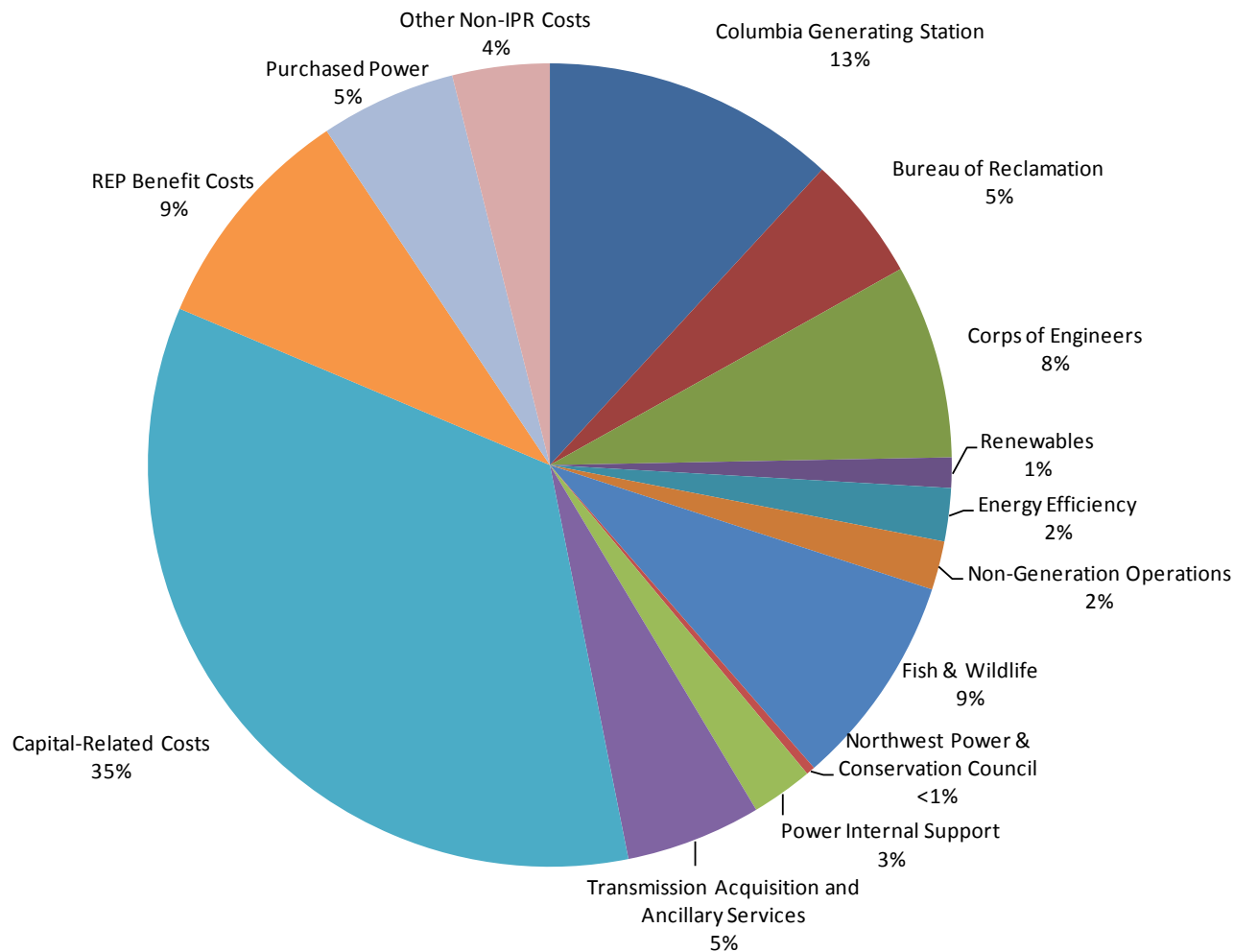
The following graph depicts Mid-Columbia next-day power prices.



Updated: May 11, 2012

Power

Driver: Potential Power Revenue Requirement



Note: For FY 2014 - 15 the two-year annual average total revenue requirement (before credits) is \$3.025 billion. Total revenue credits are roughly \$0.85 billion, which includes secondary sales (includes slice value of secondary), generation input revenues, the 4(h)(10)(C) credit, and DSI revenues.

Power

Driver: The Cost of Risk

- Planned Net Revenue for Risk (PNRR) is unlikely to be included when setting FY 2014-15 power rates – but it depends on the financial results of FY 2013. The current forecast of net revenue for FY 13 is -\$80M, which results in a probability of a Cost Recovery Adjustment Clause (CRAC) in FY 2014 of 36%.
- If net revenue in FY 2013 exceeds -\$410 million, then no PNRR would be needed, but there would be a probability of a CRAC occurring in FY 2014 of 97%.
- These results are different if low gas prices persist – then the PNRR threshold is -\$562 million and a CRAC probability of 100% for FY 2014. This result is driven by the fact that under the low gas assumption uncertainty is much less (high TPP), but the use of the Treasury Facility is increased, which increases the probability of a CRAC to generate revenue to repay the Treasury Facility.

Power

Rate Estimates for FY 2014-15

Forecast Assumptions FY 2014-15 include:

- 2012 IPR Spending Levels – Target and Proposed
 - Capital spending and associated expenses are updated to the levels proposed in the Capital in Review process and reflect revised interest rates.
 - Sources of capital funding are not modeled.
- Revised gas price forecast and updated forecast of net secondary revenue and augmentation costs.
 - Updated electricity market price forecast incorporates:
 - Current gas price forecast
 - A low gas price scenario
 - Current approach to modeling risk and other variables when forecasting electricity prices
- No PNRR is included at this point.

Power

Rate Driver: Summary

IPR Proposed and Target Scenario Cost Deltas from BP-12

	(Delta in \$ Million)	Rate %			Proposed (Delta in \$)	Rate %			
IPR Costs:									
Columbia Generating Station:	14	1%			29	1%			
Bureau of Reclamation:	1	<1%			35	2%			
Corps of Engineers:	5	<1%			22	1%			
Renewables:	1	<1%			2	<1%			
Energy Efficiency:	1	<1%			1	<1%			
Non-Generation Operations:	2	<1%			4	<1%			
Fish & Wildlife:	18	1%			19	1%			
Northwest Power & Conservation Council:	0	<1%			0	<1%			
Power Internal Support:	2	<1%			5	<1%			
Total Rate Effect:	44	2%			117	6%			
Non-IPR Costs: 1/	33	2%			33	2%			
Revenues and Costs Affected by Gas Price:									
	Target Current Gas	Rate %	Target Low Gas	Rate %	Proposed Current Gas	Rate %	Proposed Low Gas	Rate %	
Net Secondary Revenue: 2/	114	8%	196	14%	114	8%	196	14%	
IP Rate Revenue:	-9	<-1%	-14	-1%	-13	-1%	-18	-1%	
Other Revenue Credits: 3/	-8	<-1%	-3	<-1%	-8	<-1%	-3	<-1%	
Purchased Power:	20	1%	5	<1%	20	1%	5	<1%	
Residential Exchange Program:	-1	<-1%	-2	<-1%	-1	<-1%	-2	<-1%	
Irrigation Rate Discount and Low Density Discount:	6	<1%	8	<1%	8	<1%	10	1%	
	122	8%	190	13%	120	8%	188	13%	
Total Rate Effect:		12%		17%		16%		21%	

1/ Non-IPR costs include transmission expenses and capital-related costs.

2/ Net Secondary Revenue after Slice has a larger per dollar rate impact than the other revenue and expense categories, which are before Slice amounts.

3/ Other revenue credits include such things as 4(h)10(c) credits, generation input revenues, reimburseable energy efficiency revenue, and green tags.

Power

Potential Levers

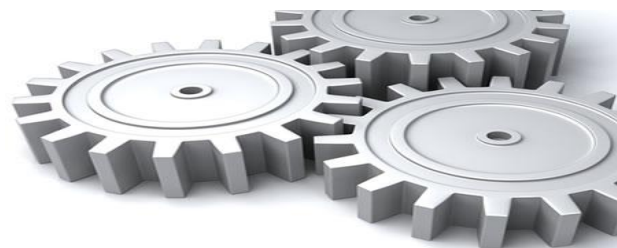
Your recommendations.

CGS Debt extension – NRC recently approved EN’s request for 20-year license extension, to December 2043. EN Executive Board approval would be required for extending debt through term of extended license – this action could reduce capital-related costs by as much as \$85 million per year in the FY 2014-15 rate period, reducing power rates by about 4 percent.

The recent Uranium tails arrangement with TVA and the U.S. Enrichment Corporation should save ratepayers about \$20M per year over the next four years, reducing power rates by about 1 percent.

CGS Decommissioning Fund realignment can move forward as well now that the license renewal was approved. It results in a savings of \$9.6M in FY 2014 and \$12.9M in FY 2015.

It is possible that BPA could extend the debt for Cowlitz Falls by 10 years to match the term of the agreement with Lewis County PUD. Savings would be \$4 million per year (\$8 million for the rate period).



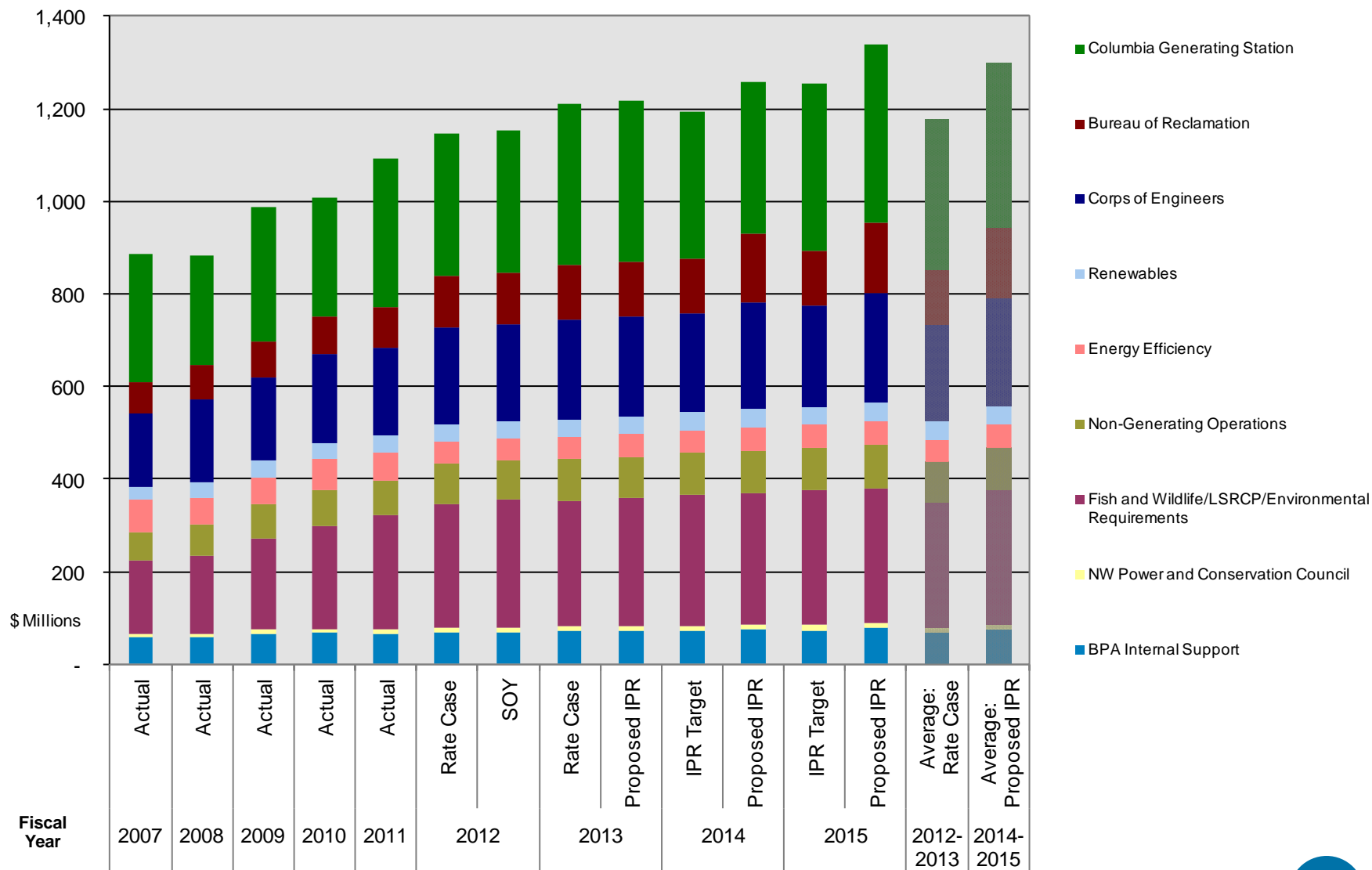
Power

IPR Program Expenses



Power

Power Services Expense Summary



Power

Columbia Generating Station

Proposed spending levels for the Columbia Generating Station (CGS) are based on levels identified in Energy Northwest’s Long Range Plan (LRP) intended to address emerging equipment reliability issues and equipment obsolescence.

Drivers for **proposing an increase from the cost targets** are:

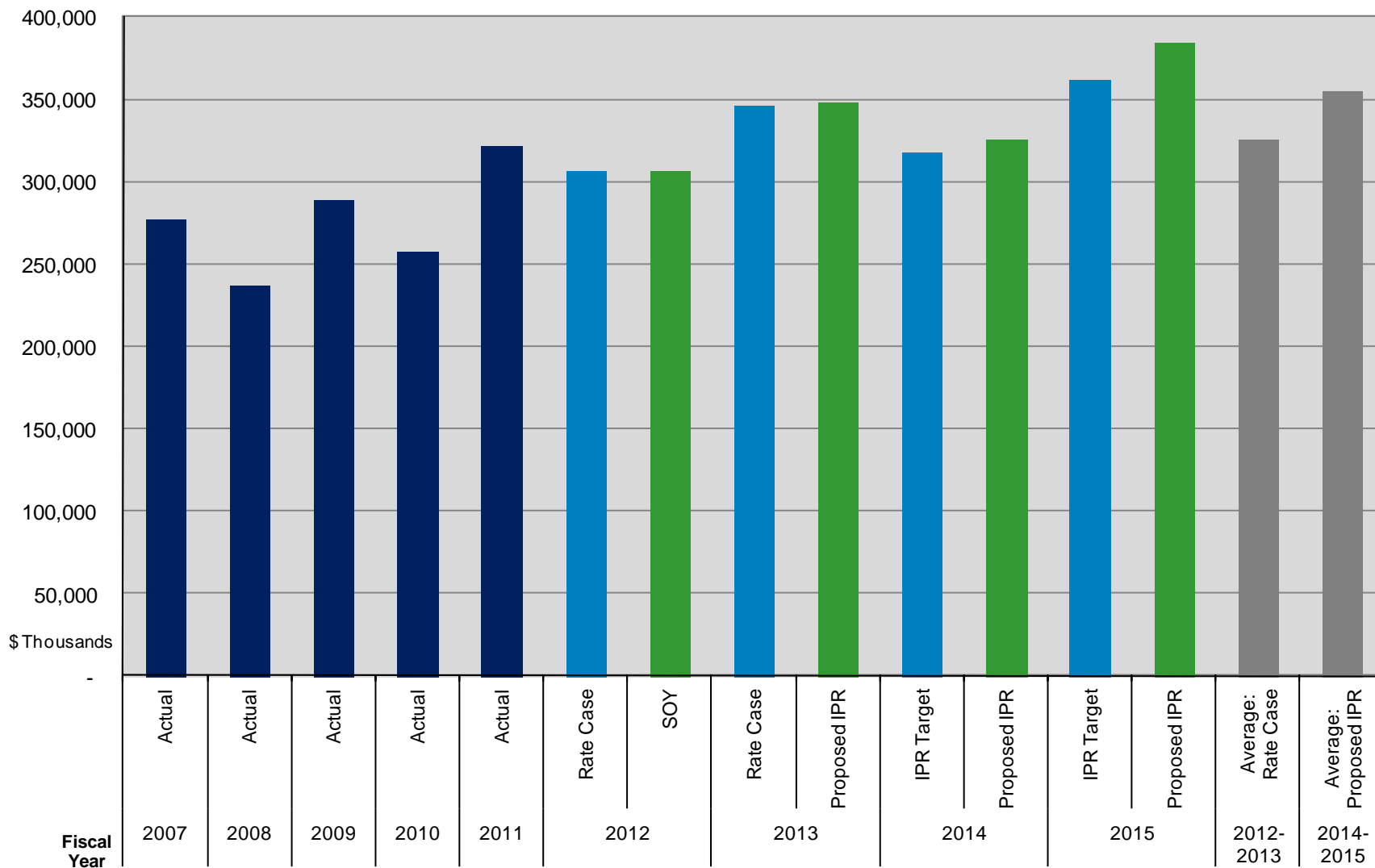
- Escalation of regulatory fees, labor, contracts and other costs assumed to be 3.95% (vs. 1.88% used in target).
- Fuel costs included in proposed spending levels are based on fuel purchases per contracts/forecasts and not by escalating previous fuel purchases.
- Increased employee health and benefits costs; increased generation taxes; increased spares program funding level; higher premiums for Nuclear Electric Insurance Limited (NEIL).

	FY 2010		FY 2011		FY 2012		FY 2013		FY 2014		FY 2015	
	Rate Case	Actuals	Rate Case	Actuals	Rate Case	Forecast	Target	Proposed	Target	Proposed	Target	Proposed
WP-10	\$257,811	\$256,940	\$324,882	\$322,212								
BP-12/2010 IPR					\$306,366	\$295,432		\$345,945		\$325,424		\$384,350
2012 IPR							\$344,429	\$347,829	\$317,860	\$326,136	\$361,904	\$384,396

Risks of operating at the cost target include long-term reliability may be impacted as projects would be deferred or cancelled, increasing probability of plant shutdowns.

Power

Columbia Generating Station



Power

Corps of Engineers

Proposed costs for the Corps of Engineers (Corps) are consistent with the 5-year O&M budget plan presented in the 2010 IPR and address aging infrastructure and increased routine and non-routine maintenance requirements.

- Corps O&M budgets are developed through a rigorous baseline budgeting process every 2 years to coincide with BPA’s rate case. The extensive bottoms up approach determines the minimum funding required to meet operating reliability and performance requirements with no contingencies (budgets are re-evaluated annually to ensure funding is applied to highest priority areas of the program). The FY 2014-15 budget development confirmed proposed funding requirements as presented in the 2010 IPR.
- Despite the recent investments in the FCRPS, the average hydroAMP rating for all equipment continues to decline; there is a continued risk of significant forced outages and loss of hydro generating capacity.
 - Since last IPR, there have been multiple forced outages of John Day turbines (and Lower Granite) due to blade linkage/pin failures, and in Bonneville Powerhouse 2 (generator problems).
- As identified in last IPR, costs continue to increase associated with non-routine extraordinary maintenance, cultural resource mitigation, WECC/NERC compliance, cyber and physical security, and labor. Corps wages were frozen in November 2010, but when the freeze is lifted, at least the Trades and Crafts (T&C) employees’ wages (~60% of Corps’ staff) will be adjusted to regional prevailing wage levels (Reclamation T&C employees have continued to get raises during this period).

Risks of operating at the cost target include:

- Potential for lower completion of required maintenance and deferral of non-routine maintenance work activities, resulting in potential for more forced outages (e.g. blade linkage failures at John Day and Lower Snake plants and Bonneville PH 2 generators) and lower system availability.
- Potential for violations due to inability to meet WECC/NERC reliability standards.

	FY 2010		FY 2011		FY 2012		FY 2013		FY 2014		FY 2015	
	Rate Case	Actuals	Rate Case	Actuals	Rate Case	Forecast	Target	Proposed	Target	Proposed	Target	Proposed
WP-10	\$191,060	\$192,279	\$192,433	\$190,835								
BP-12/2010 IPR					\$208,700	\$207,175		\$215,700		\$231,187		\$237,378
2012 IPR							\$215,700	\$215,700	\$215,170	\$231,187	\$219,218	\$237,378

Power

Bureau of Reclamation

The Bureau of Reclamation (Reclamation) is *proposing an increase* from the 2010 IPR primarily due to:

- Staffing shortfalls for operations and routine and non-routine maintenance at Grand Coulee (about \$9.5M/yr).
- Increased costs for the Grand Coulee Third Power Plant overhaul (~\$11.7M/yr).
- Increased newly identified non-routine extraordinary maintenance (~\$9.4M/yr mostly at Grand Coulee).

	FY2014	FY2015
Staffing Increase	\$ 9,334,000	\$ 9,655,000
Increased TPP Overhaul Costs	\$ 13,686,000	\$ 9,688,000
Newly Identified Non-routine Maint.	\$ 8,363,000	\$ 10,529,000

- Similar to the Corps’ O&M budgets, Reclamation’s budgets are developed through a rigorous baseline budgeting process every 2 years to coincide with BPA’s rate case, and budgets are re-evaluated annually to ensure funding is applied to highest priority areas of program. Additionally, information pertaining to recommended staffing requirements for Grand Coulee (provided by MWH Consulting) was incorporated into this year’s budget development process.
- As identified in last IPR, costs continue to increase associated with non-routine extraordinary maintenance, cultural resource mitigation, WECC/NERC compliance, cyber and physical security, and labor. FCRPS trades and crafts employees (~60% of Reclamation’s staff) have received raises averaging between 4.6% (FY 2009) to 3.0% (FY 2011), with a 3.5% average raise for FY 2012 and 13, significantly higher than cost target increases.

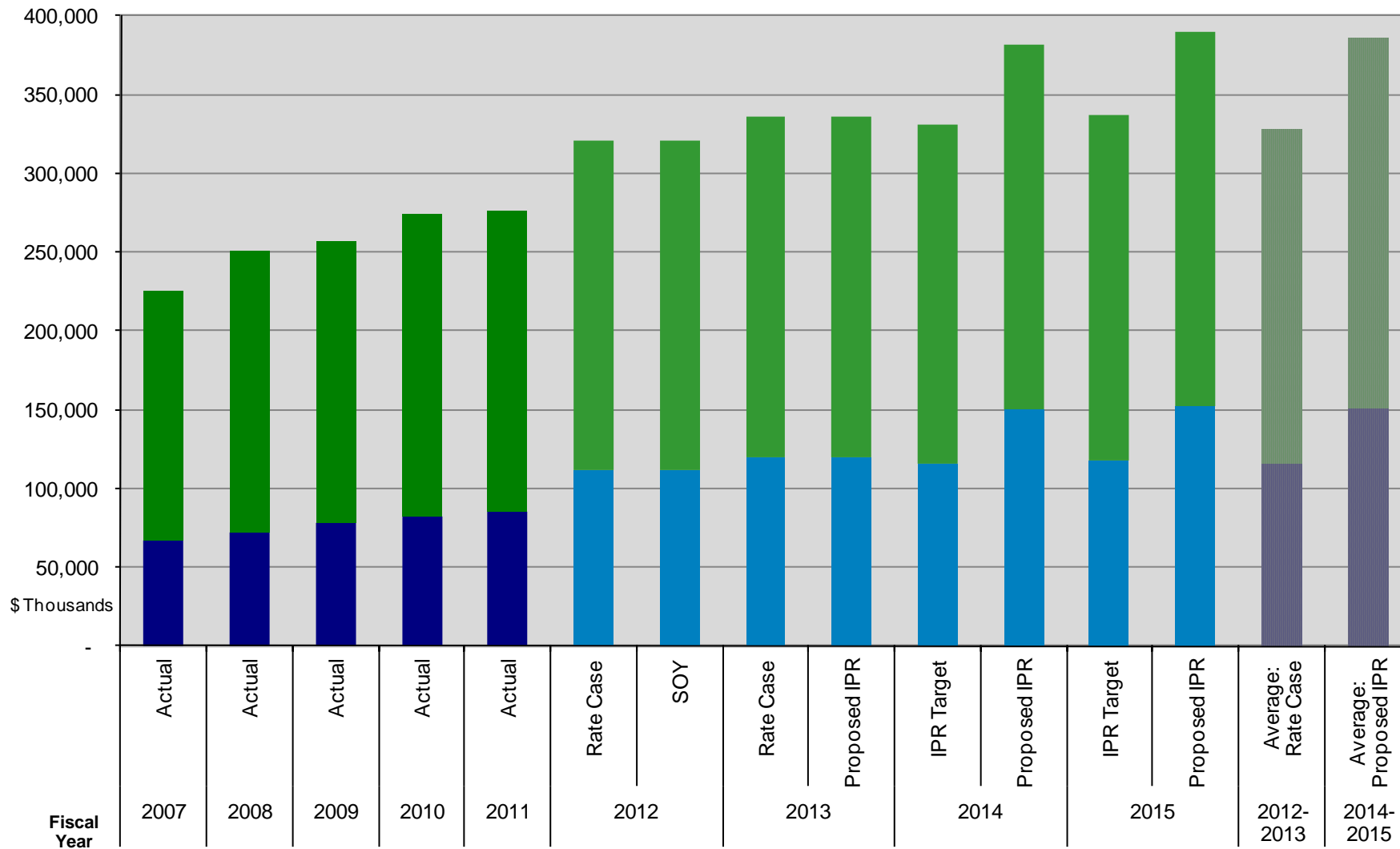
Similar to the Corps, *risks of operating at the cost target* include:

- Potential for lower completion of required maintenance and deferral of non-routine maintenance work activities, resulting in potential for more forced outages and lower system availability.
- Potential for violations due to inability to meet WECC/NERC reliability standards.

	FY 2010		FY 2011		FY 2012		FY 2013		FY 2014		FY 2015	
	Rate Case	Actuals	Rate Case	Actuals	Rate Case	Forecast	Target	Proposed	Target	Proposed	Target	Proposed
WP-10	\$87,318	\$82,125	\$96,110	\$85,488								
BP-12/2010 IPR					\$111,972	\$111,972		\$119,891		\$118,972		\$123,246
2012 IPR							\$119,891	\$119,891	\$115,443	\$150,101	\$117,615	\$152,533

Power

Bureau of Reclamation and Corps of Engineers



■ Bureau of Reclamation

■ Corps of Engineers

Power

Fish and Wildlife

The spending level estimates included for BPA’s Fish and Wildlife Program reflect fulfilling the agency’s obligations and commitments under the FCRPS and other biological opinions, the Northwest Power Act, the Columbia Basin Fish Accords, wildlife settlements, and other agreements.

There is no additional *risk or impact of operating at cost targets* for the Program because the cost target and proposed spending levels are the same. However, the LSRCP has two items that would not be funded if spending levels are held to the target level:

- Deferred maintenance (including energy conservation and preventative maintenance)
- Activities to meet Best Management Practices

However, the Fish and Wildlife Program proposed spending levels are lower than projected spending needed to meet all existing commitments, in part because of lower spending in previous rate periods has shifted spending into future rate periods. There is a risk that commitments could exceed the proposed spending level in a given year due to this shape of spending, even if overall costs across multiple years remain the same.

	FY 2010		FY 2011		FY 2012		FY 2013		FY 2014		FY 2015	
	Rate Case	Actuals	Rate Case	Actuals	Rate Case	Forecast	Target	Proposed	Target	Proposed	Target	Proposed
WP-10	\$238,900	\$223,090	\$260,780	\$245,609								
BP-12/2010 IPR					\$266,525	\$275,052		\$271,589		\$281,708		\$288,811
2012 IPR							\$271,589	\$276,130	\$284,005	\$284,970	\$290,569	\$291,970

Power

Energy Efficiency

Proposed costs for the Energy Efficiency program are based on achieving public power’s share of the conservation savings targets set in the Council’s 6th Power Plan and include funding for the following:

- Program infrastructure support
- Research, data collection, and evaluation of non-programmatic savings
- Northwest Energy Efficiency Alliance (NEEA) funding
- Low income and tribal grants for improving energy efficiency
- Reimbursable conservation program with other federal agencies (rate neutral)
- Costs associated with legacy conservation projects

	FY 2010		FY 2011		FY 2012		FY 2013		FY 2014		FY 2015	
	Rate Case	Actuals	Rate Case	Actuals	Rate Case	Forecast	Target	Proposed	Target	Proposed	Target	Proposed
WP-10	\$83,988	\$66,870	\$85,122	\$59,476								
BP-12/2010 IPR					\$46,950	\$41,024		\$47,850		\$49,400		\$49,400
2012 IPR							\$47,850	\$47,850	\$48,409	\$48,408	\$49,321	\$49,320

There is no additional **risk of operating at the cost targets**, because the Energy Efficiency program is not proposing an increase from the cost targets. However, if the cost to acquire conservation savings increases, BPA’s ability to meet the Council’s target while staying within spending levels, would be at risk.

Power

Non-Generation Operations

Proposed costs for Power’s Non-Generation Operations program provide for Power to meet its mission and includes employee salaries, employee benefits, awards, service contracts, supplemental labor, and Agency Services costs associated with supporting Power’s programs (both direct charge and allocated).

For FY 2012, Power Services’ staffing levels are being maintained at nearly 5% below the allocated level reflected in the 2010 IPR.

Power Services Only	FY 2010		FY 2011		FY 2012		FY 2013		FY 2014		FY 2015	
	Rate Case	Actuals	Rate Case	Actuals	Rate Case	Forecast	Target	Proposed	Target	Proposed	Target	Proposed
WP-10	\$55,648	\$49,135	\$56,971	\$50,344								
BP-12/2010 IPR					\$55,249	\$53,646		\$55,508		\$58,258		\$58,981
2012 IPR							\$55,508	\$55,508	\$57,474	\$57,485	\$58,908	\$58,926

Agency Services Only	FY 2010		FY 2011		FY 2012		FY 2013		FY 2014		FY 2015	
	Rate Case	Actuals	Rate Case	Actuals	Rate Case	Forecast	Target	Proposed	Target	Proposed	Target	Proposed
WP-10	\$31,548	\$26,489	\$32,269	\$24,792								
BP-12/2010 IPR					\$33,211	\$32,243		\$34,442		\$37,020		\$37,742
2012 IPR							\$34,442	\$34,602	\$32,914	\$34,567	\$34,052	\$35,983

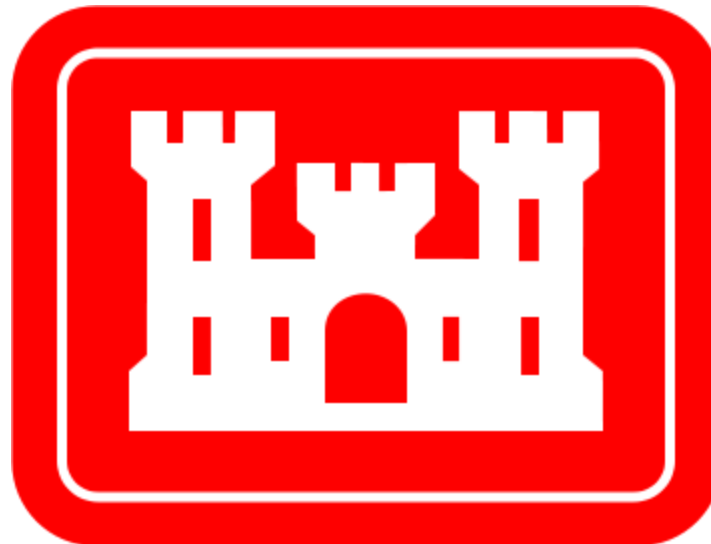
Combined Total	FY 2010		FY 2011		FY 2012		FY 2013		FY 2014		FY 2015	
	Rate Case	Actuals	Rate Case	Actuals	Rate Case	Forecast	Target	Proposed	Target	Proposed	Target	Proposed
WP-10	\$87,196	\$75,623	\$89,240	\$75,137								
BP-12/2010 IPR					\$88,460	\$85,889		\$89,950		\$95,277		\$96,723
2012 IPR							\$89,950	\$90,110	\$90,388	\$92,052	\$92,960	\$94,908

There is no additional *risk or impact of operating at the cost targets* for Power Services because it is not proposing an increase from the target. However, there would be cuts to several Agency Services organizations (most notably Legal and Environment) that would reduce the support received from those organizations and increase the overall risk to Power’s programs.

Power

Program Overview

Corps of Engineers



Power

Program Overview

Bureau of Reclamation



Power

Program Overview

Energy Northwest: Columbia Generating Station



Power *Program Overview*

Fish and Wildlife



Power

Fish and Wildlife

BPA's Fish and Wildlife Program (the Program):

- Implements hundreds of programs each year to mitigate the impacts of the FCRPS dams.
- Satisfies obligations under the Northwest Power Act, the Endangered Species Act, and trust and treaty responsibilities to affected Indian tribes.
- 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.
- Resident fish and wildlife mitigation.
- Research and monitoring.

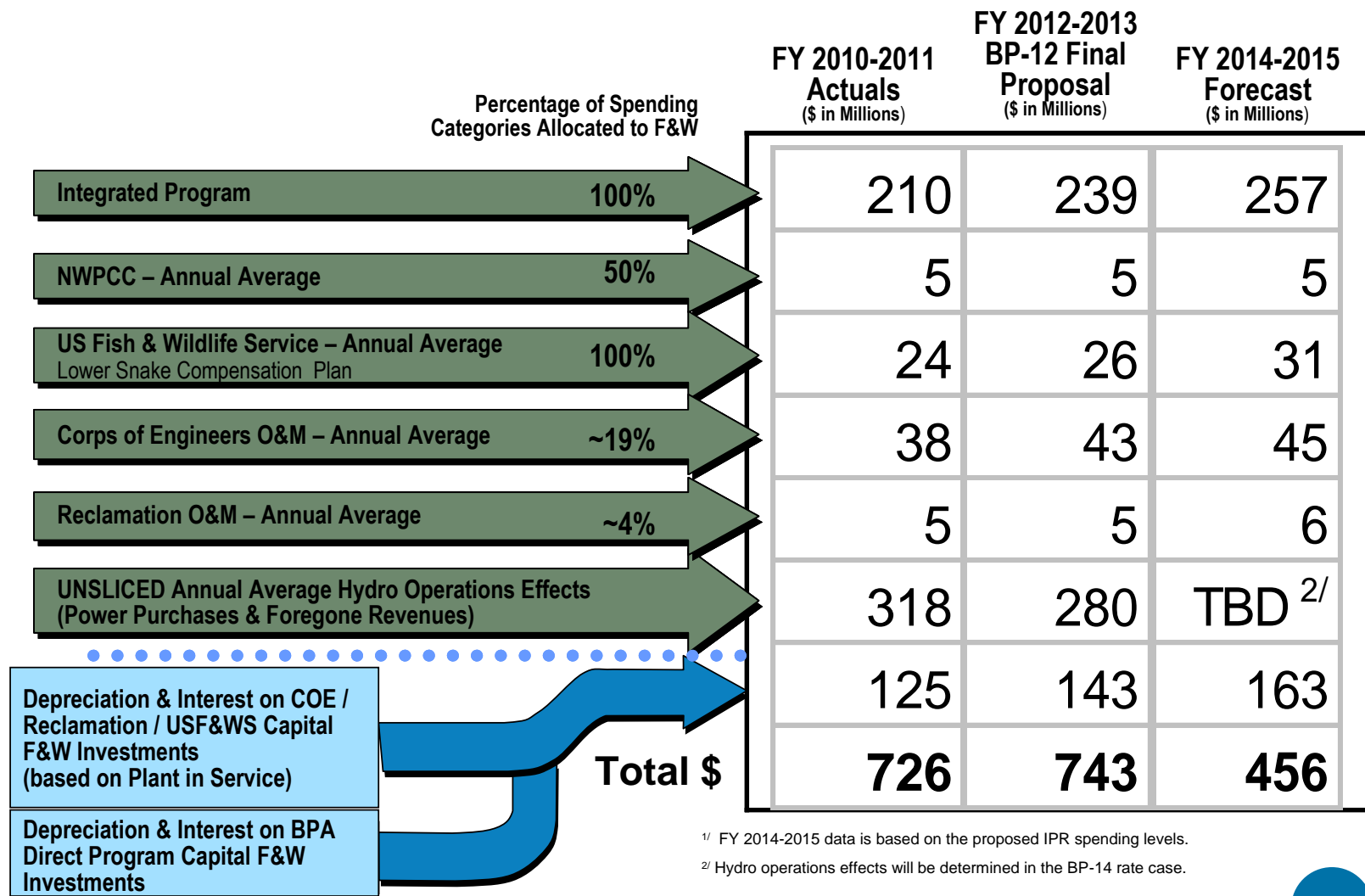


BPA funds the Lower Snake River Compensation Plan (LSRCP) which is a program that operates and maintains a network of 11 hatcheries and 18 satellite facilities to mitigate for losses of salmon and steelhead from the construction and operation of the four lower Snake River dams. This program includes expenses for operations, evaluations, and non-recurring maintenance.

Power

Fish and Wildlife

Total Annual Average Cost of BPA Fish & Wildlife Actions ^{1/}



^{1/} FY 2014-2015 data is based on the proposed IPR spending levels.

^{2/} Hydro operations effects will be determined in the BP-14 rate case.

Power

Fish and Wildlife



The Program's *near-term goals* and *long-term objectives* are:

- Implement in an effective and timely manner, what is now a mature Fish and Wildlife Program.
- Fulfill BPA's obligations and commitments under the FCRPS and other biological opinions, the Columbia Basin Fish Accords, wildlife settlements and other agreements, and the NWPPC Program.
- Use biological performance metrics to evaluate progress.

The Lower Snake River Compensation Plan's *near-term goals* and *long-term objectives* include:

- Maintain fish production at current levels.
- Plan for future reforms to achieve Best Management Practice.
- Address high priority deferred maintenance actions.
- Continuous improvements in rearing technology that allow for increased fish production using available water.



Power

Fish and Wildlife

During the last two years the Program has *accomplished*:

- Fish abundance is up overall compared with historic averages and harvests have increased.
- Achievement of hydro performance standards (96/93% average dam survival) is progressing ahead of schedule.
- In FY2012 alone, with the help of Accord and other partners, there have been impressive habitat accomplishments:
 - Protection for over 30,000 acres of fish and wildlife habitat through land purchase or lease.
 - Improvement of over 13,000 acres of fish and wildlife habitat and 70 miles of instream habitat.
 - Protection of 8,000 acre feet/year of water due to fish screens.
 - Access to over 240 miles of fish habitat have been provided through barrier removal.
- Long-term wildlife settlements with State and Tribes have resulted in land acquisitions providing dual benefits for fish and wildlife.
- Lamprey restoration and research has been conducted through tribal partners.

Power

Fish and Wildlife

The Program currently faces the following **challenges and constraints**:

- Uncertain future for implementing the Program caused by legal challenges to FCRPS BiOp and ongoing remand.
- Spending flexibility of Accords have carried forward unspent funds to current and future rate periods.
- Uncertainties surrounding large land acquisitions.
- Spending in the Columbia River estuary has increased about \$10 million per year in order to meet biological objectives.

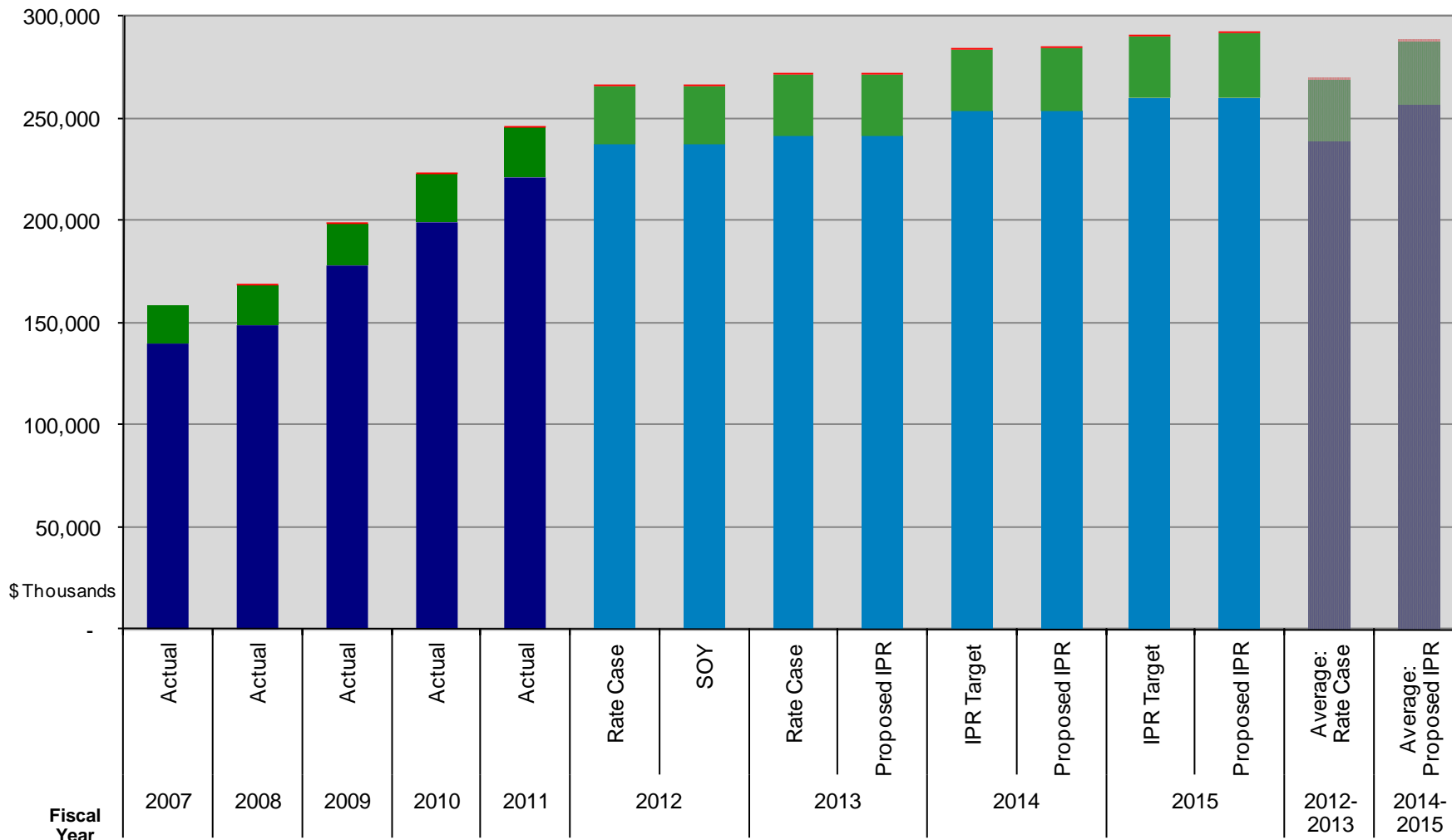


Since previous public discussions, the Program has had the following **significant changes**:

- Ongoing BiOp litigation resulted in a remand and need for an updated BiOp by January 2014. In the meantime, BPA is proceeding with full implementation.
- Accord partners are fully ramped up and have rescheduled project spending levels to current fiscal years; resulting in additional funding needs.
- Assumption of 5% (\$13 million per year) under spend in FY12-13 due to slow ramp up of program did not materialize. Therefore the FY 2012-2013 2-year total expected spending has been increased by \$13 million.

Power

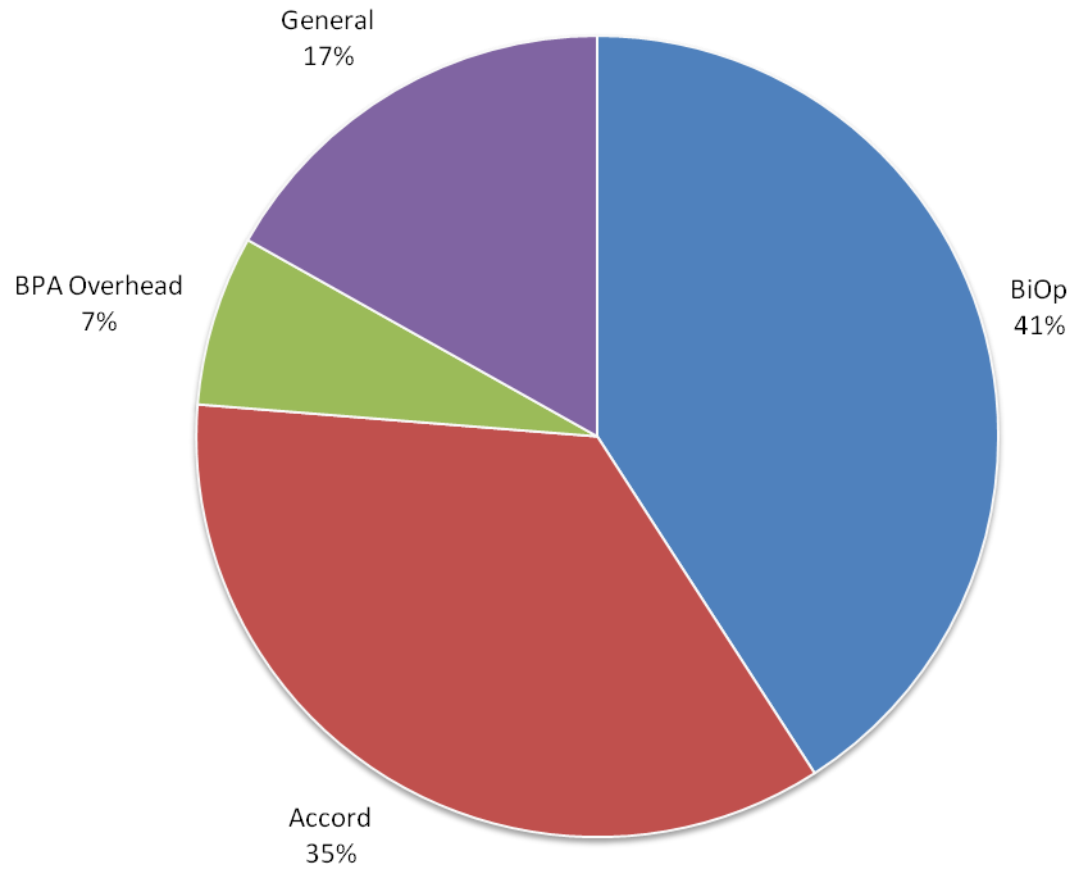
Fish and Wildlife

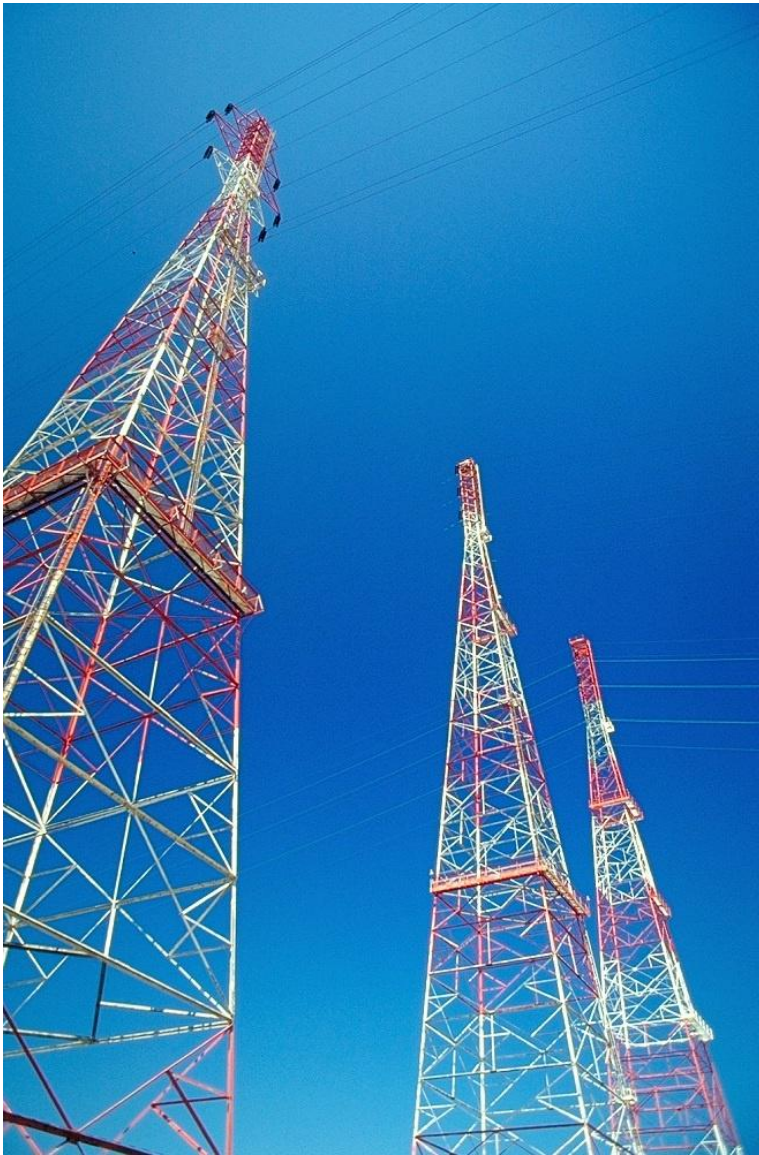


■ Fish and Wildlife ■ Lower Snake River Comp Plan (LSRCP) ■ Environmental Requirements

Power

Fish and Wildlife





Transmission

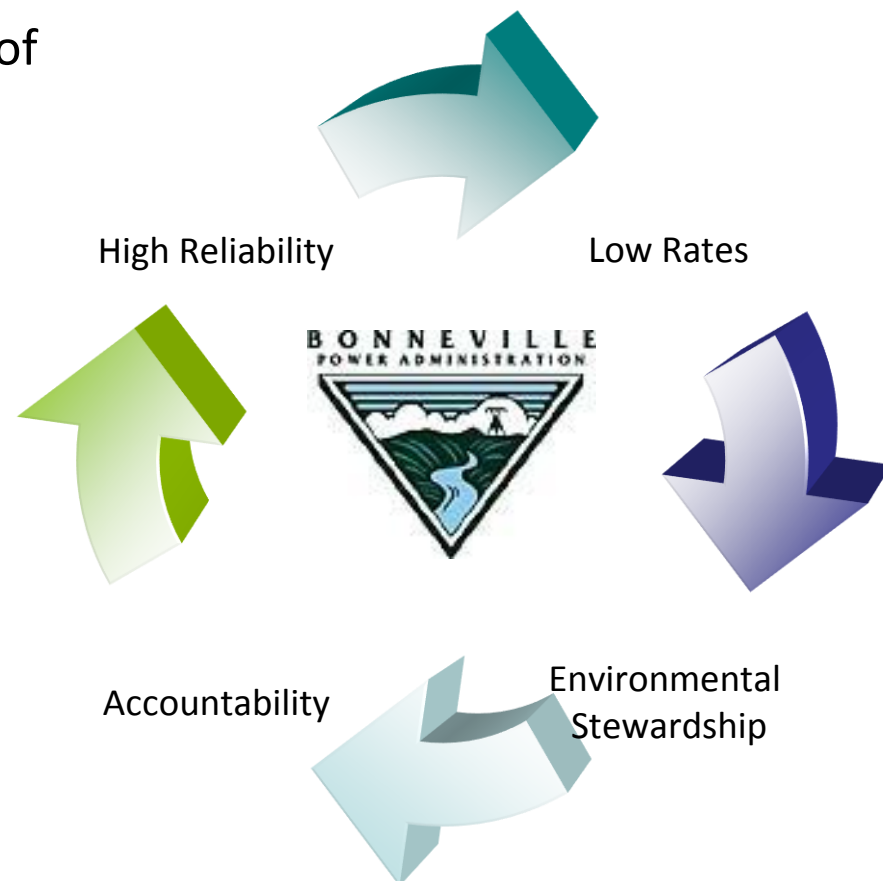
Transmission

Overview & Vision

Transmission Services (TS) will be an engine of the Northwest's economic recovery and environmental sustainability. TS's actions advance a Northwest power system that is a national leader in providing:

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

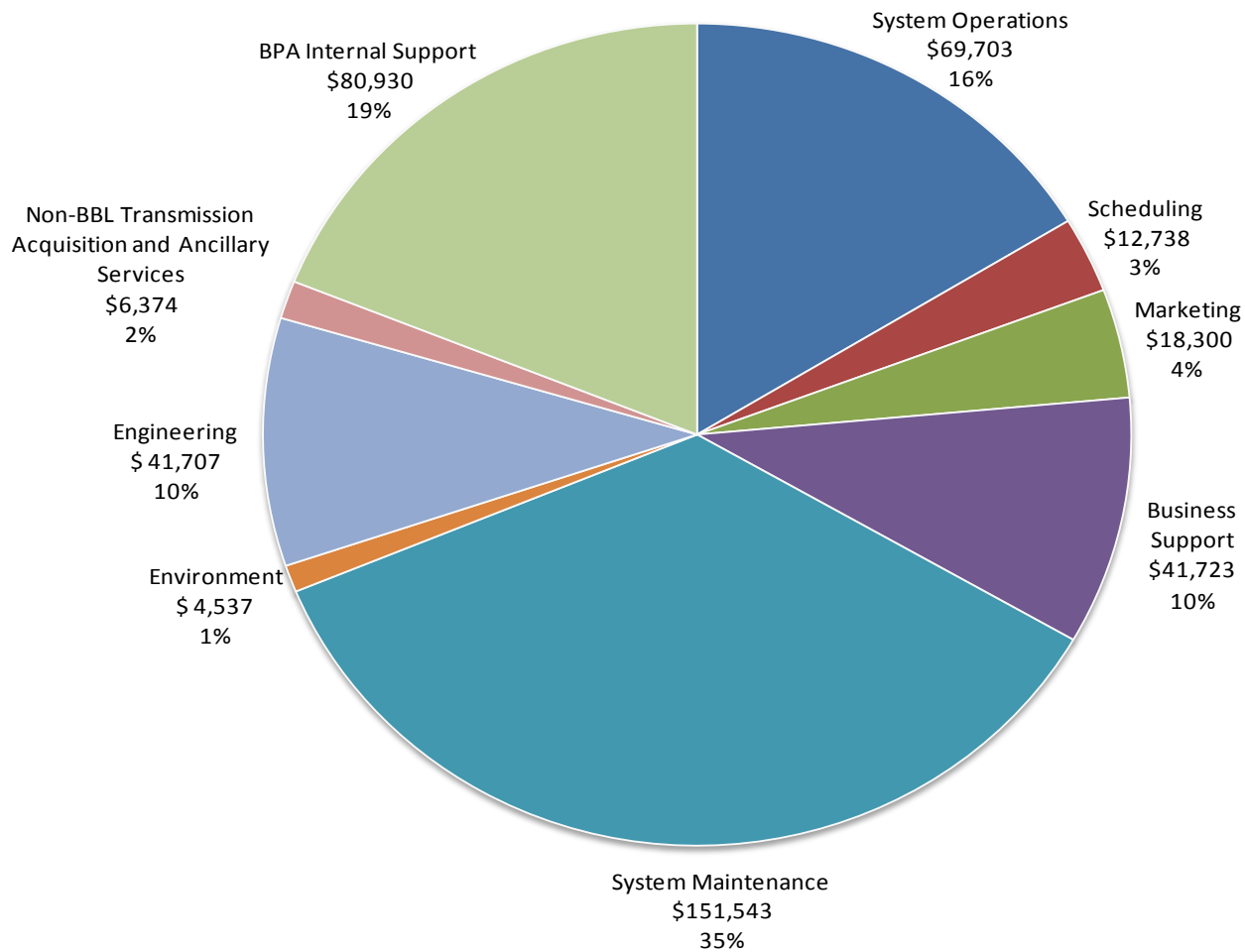
We deliver on these public responsibilities through a commercially successful business. These four characteristics define our public responsibilities.



Transmission

Expense Summary FY 2014-15 Average: Proposed IPR

FY 2014-2015 Average: Proposed IPR (\$\$\$)



Transmission

IPR Overview for FY 2014-2015

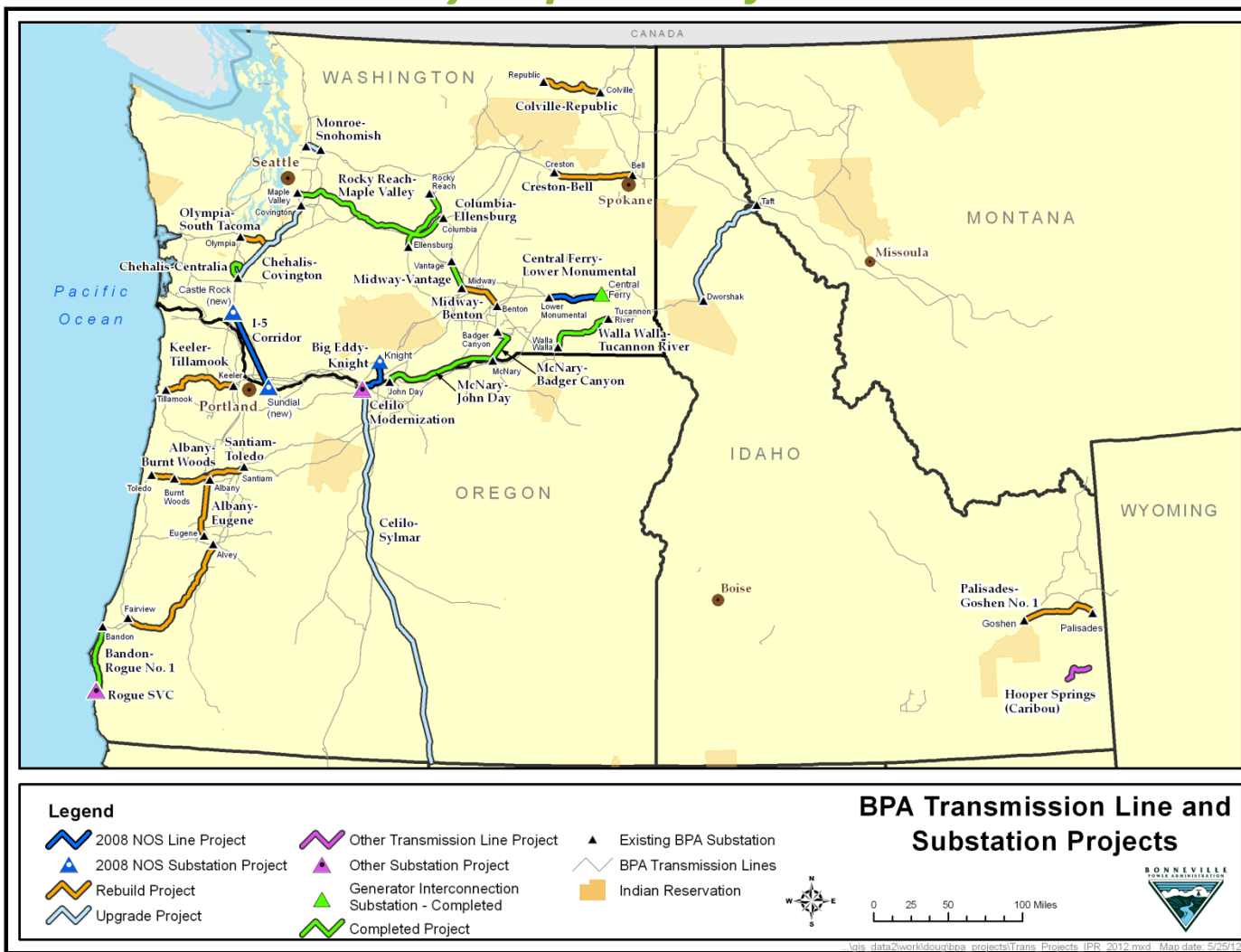
Why are costs growing?

- Investing in the existing aging infrastructure and expanding the system.
- Maintenance of a growing system, including lines, substations and communications.
- Increasing workload and costs associated with mandatory Federal Energy Regulatory Commission (FERC), North American Reliability Corporation (NERC) and Western Electricity Coordinating Council (WECC) standards including Cyber Security.
- Operational challenges of wind integration.
- Development of new systems to support new and existing business requirements.
- Implementation of Network Integration Service (NITS) Open Access Same-time Information System (OASIS).
- Reliance on contract support due to Bonneville Full-Time Equivalency (BFTE) constraint.

What trends are offsetting operating costs?

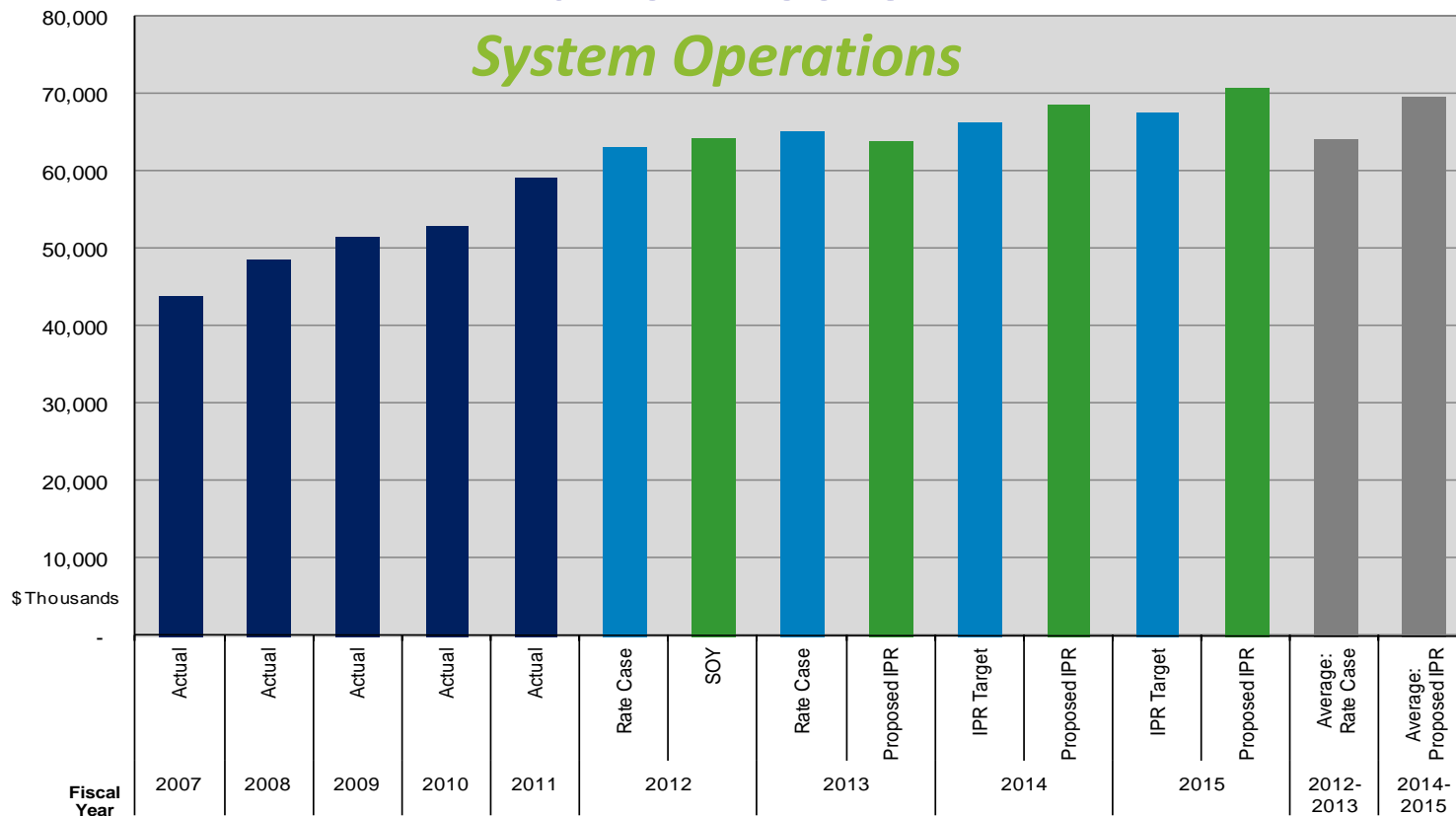
- Lower than expected debt service.
- Efficiencies from business automation and process improvements.
- Favorable short-term commodity pricing.
- New strategic sourcing agreements.

Transmission Key Capital Projects



Transmission

System Operations



(\$\$\$)	2011			2012			2013			2014			2015		
	Start of Year	Actuals	Delta	Rate Case	Start of Year	Delta	Rate Case	Proposed IPR	Delta	IPR Target	Proposed IPR	Delta	IPR Target	Proposed IPR	Delta
Information Technology	7,468	6,768	(699)	7,349	7,370	21	7,529	7,298	(230)	7,635	7,419	(216)	7,793	7,573	(220)
Power System Dispatching	12,285	11,649	(636)	12,336	12,979	643	12,748	12,748	-	13,589	13,589		13,892	14,123	231
Control Center Support	15,399	14,753	(646)	14,083	15,076	994	14,498	14,998	500	15,687	18,562	2,875	16,015	19,298	3,283
Technical Operations	7,092	4,725	(2,367)	8,385	7,401	(984)	8,623	7,197	(1,427)	6,897	6,745	(152)	7,049	6,974	(75)
Substation Operations	21,269	21,286	18	21,065	21,417	352	21,735	21,634	(101)	22,407	22,307	(100)	22,900	22,815	(85)
Total	63,513	59,182	(4,331)	63,218	64,244	1,026	65,133	63,875	(1,258)	66,215	68,622	2,407	67,650	70,783	3,134

Transmission

System Operations Drivers

Key changes found in the FY 2012-15 IPR include:

Power System Dispatching, Control Center and Technical Operations: Increased costs and workload demands associated with changing and increasingly complex mandatory standards.

- For example, compliance with NERC Critical Infrastructure Protection (CIP) 002-011 V. 5, a new and greatly expanded version of NERC's (CIP) standards.

Control Center: Introduction of new technologies with Western Interconnection Synchrophaser System (WISP) and Operational Multi-gigabyte Ethernet Transport (OMET) projects require new model of support to maintain reliability and ensure compliance with mandatory standards.

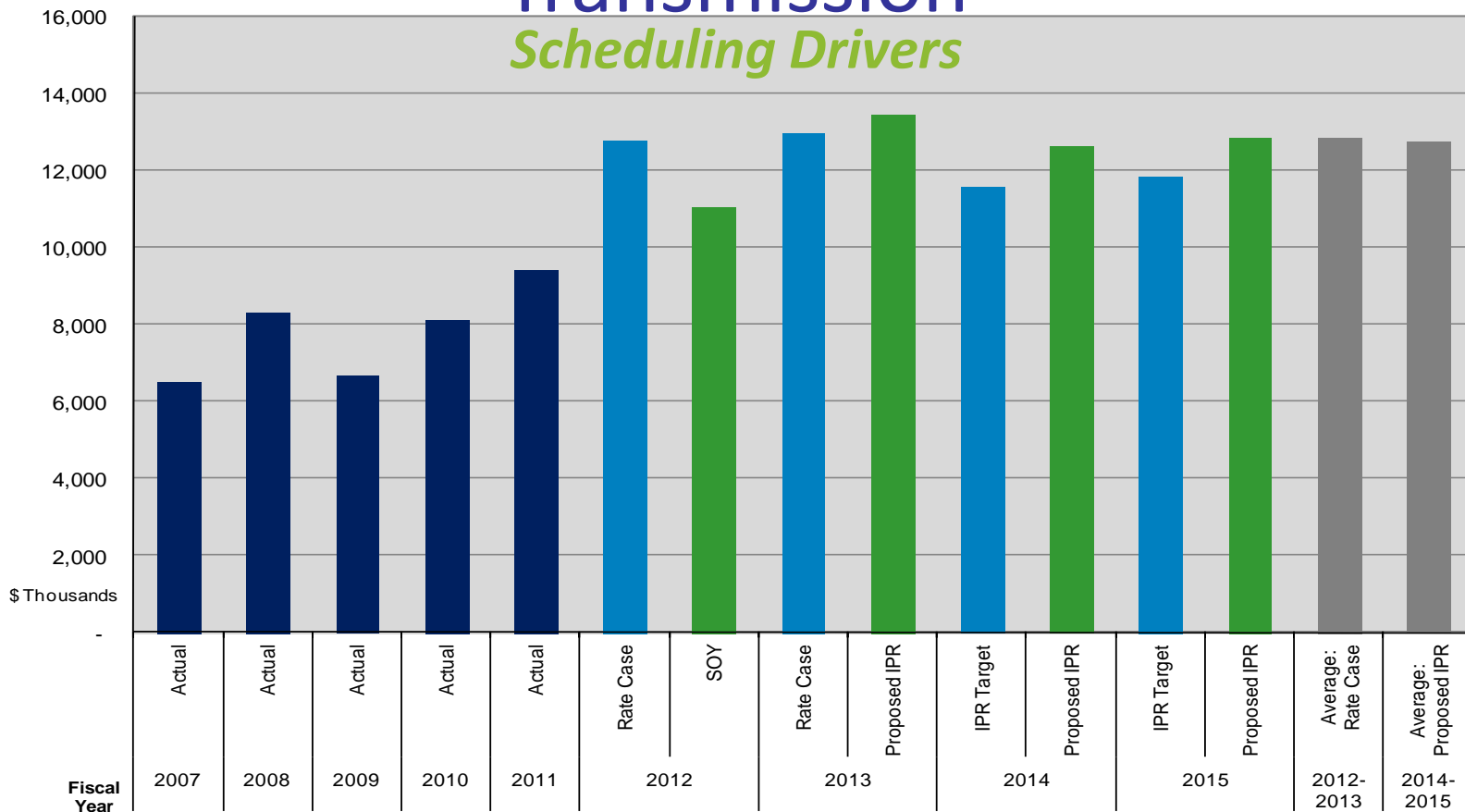
- Introduction of a Network Operations Center will require 24/7 staffing.

WISP implementation (FY 2013) will allow the Control Centers to monitor the power system in ways that have never been possible before.

Technical Operations: The Sustain Transmission that is Available and Reliable (STAR) Program will implement a long-term approach to optimize transmission availability through streamlined, cost-effective, and sustainable processes.

Transmission

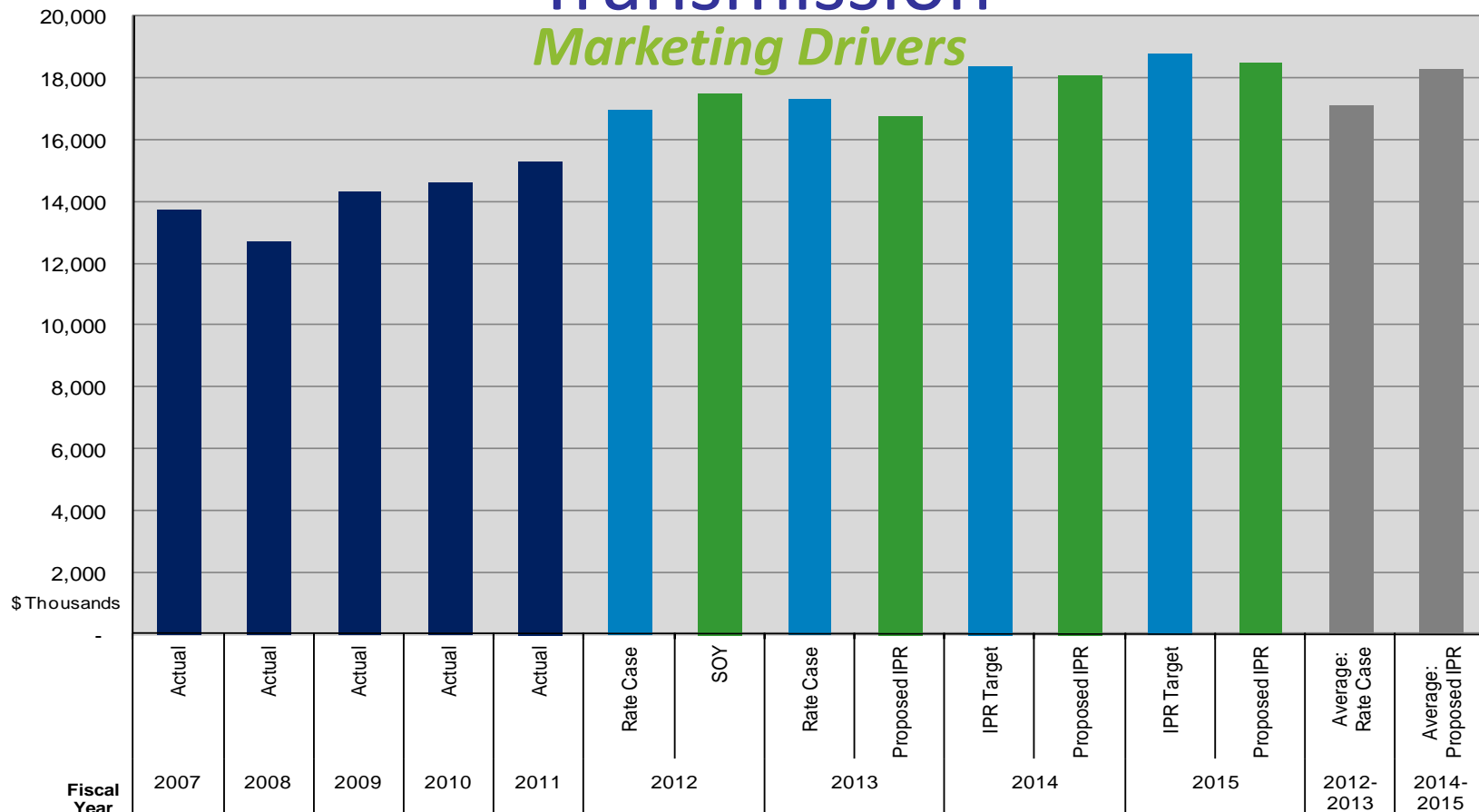
Scheduling Drivers



	2011			2012			2013			2014			2015		
	Start of Year	Actuals	Delta	Rate Case	Start of Year	Delta	Rate Case	Proposed IPR	Delta	IPR Target	Proposed IPR	Delta	IPR Target	Proposed IPR	Delta
Managing Supervision and Admin.	-	(11)	(11)	-	-	-	-	-	-	-	-	-	-	-	-
Reservations	5,586	3,850	(1,736)	1,088	5,135	4,047	1,109	1,134	25	5,372	5,697	325	5,491	5,816	325
Pre-Scheduling	229	240	11	477	234	(243)	486	486	-	246	246	-	252	252	-
Real-Time Scheduling	4,208	3,950	(258)	5,090	4,214	(876)	5,185	5,627	442	4,419	5,436	1,017	4,520	5,537	1,017
Technical Support	2,531	1,226	(1,305)	5,665	1,263	(4,402)	5,749	5,749	-	1,322	1,007	(315)	1,352	1,031	(321)
After-the-Fact Scheduling	293	156	(137)	453	213	(240)	462	462	-	224	224	-	229	229	-
Total	12,847	9,412	(3,435)	12,772	11,058	(1,714)	12,991	13,458	467	11,583	12,611	1,027	11,843	12,865	1,021

Transmission

Marketing Drivers



	2011			2012			2013			2014			2015		
	Start of Year	Actuals	Delta	Rate Case	Start of Year	Delta	Rate Case	Proposed IPR	Delta	IPR Target	Proposed IPR	Delta	IPR Target	Proposed IPR	Delta
Transmission Finance	296	270	(26)	303	303		310	-	(310)	318	-	(318)	326	-	(326)
Contract Management	4,623	4,058	(565)	4,479	4,735	256	4,572	4,484	(88)	4,951	5,291	340	5,071	5,405	334
Customer Support Services (Trans. Billing)	2,424	2,226	(198)	2,333	2,400	67	2,382	2,801	419	2,500	2,858	357	2,564	2,930	366
Business Strategy and Assessment	6,170	6,426	256	6,553	7,214	661	6,670	6,140	(529)	7,613	6,955	(658)	7,775	7,103	(671)
Transmission Sales	2,467	2,319	(149)	3,301	2,855	(446)	3,362	3,362	-	2,994	2,994	-	3,062	3,062	-
Internal Operations	-	2	2	-	-	-	-	-	-	-	-	-	-	-	-
Total	15,980	15,301	(679)	16,969	17,507	538	17,296	16,788	(508)	18,377	18,098	(279)	18,798	18,501	(297)

Transmission

Scheduling & Marketing Drivers

Key changes for the FY 2012-15 IPR include:

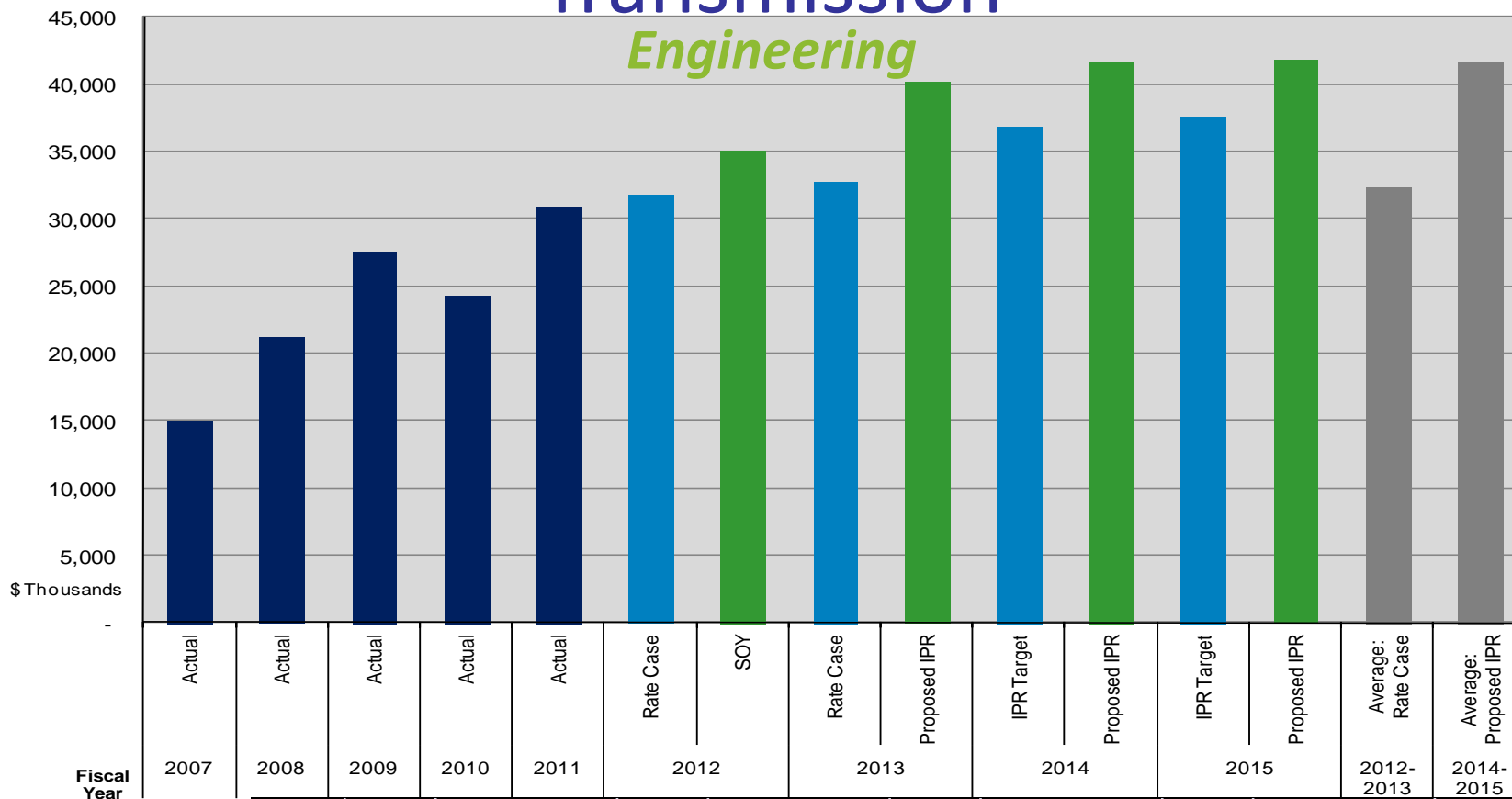
Real-time scheduling function permanently staffed in two locations to provide 24x7 continuity of the transmission scheduling operation from the Alternative Scheduling Center and Dittmer, and back up the Dittmer scheduling.

Complex system automation projects associated with tariff compliance.

Implementation of Network Integration Transmission Service (NITS) on OASIS that meets NAESB and tariff requirements and customers' needs.

Marketing Business Strategy & Assessment: Network planning and redispatch for NT load service, given the diversity of resources, including wind.

Transmission Engineering



	2011			2012			2013			2014			2015		
	Start of Year	Actuals	Delta	Rate Case	Start of Year	Delta	Rate Case	Proposed IPR	Delta	IPR Target	Proposed IPR	Delta	IPR Target	Proposed IPR	Delta
Research and Development	6,604	6,656	52	7,583	7,517	(66)	8,000	7,991	(9)	7,785	7,785	-	7,943	7,943	-
TSD Planning and Analysis	12,110	10,801	(1,309)	11,531	12,767	1,235	11,895	15,880	3,985	13,013	14,013	1,000	13,289	13,289	-
Capital to Expense Transfers	4,000	3,826	(174)	4,032	4,000	(32)	4,072	4,072	-	4,124	4,124	-	4,202	4,202	-
Regulatory Costs	7,551	8,403	852	6,858	8,476	1,618	7,008	10,091	3,083	8,867	12,015	3,148	9,049	12,561	3,512
Engineering Line Rating	-	-	-	-	1,173	1,173	-	382	382	1,958	2,539	580	1,996	2,589	593
Environmental Policy and Planning	1,768	1,208	(559)	1,797	1,118	(679)	1,828	1,776	(52)	1,145	1,166	20	1,169	1,189	20
Total	32,033	30,895	(1,138)	31,800	35,050	3,250	32,803	40,192	7,389	36,893	41,642	4,748	37,648	41,773	4,125

Transmission

Engineering Drivers

Key changes for the FY 2012-15 IPR include:

- **TSD Planning and Analysis:** Funding is for a total economic evaluation across the remaining transmission asset strategies (programs) and incorporate 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 (\$1M in FY 2013 and \$1M in FY 2014).
- **Engineering Line Rating:** The entire program is new since the 2010 IPR.
- **Regulatory 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 Available Transfer Capacity (ATC) standards, are all new initiatives since the 2010 IPR process.

Transmission

Engineering Drivers

Transmission Services (TS) top five *risks* include:

Non-compliance with (current and/or future) regulatory requirements results in negative impacts to operations or penalties.

Failure to address aging infrastructure (as proposed in asset strategies) due to rate pressure concerns leads to increasing failure rates and maintenance expense requirements.

Inadequate succession planning and knowledge transfer results in skill loss and increased costs associated with dependency on supplemental labor.

Absence of an integrated long term Transmission strategy results in misalignment of environmental conditions, investment decisions, and internal capabilities.

Major (8.0+) subduction zone seismic event or major storm could result in excessive forced outage durations.

Transmission

Risks & Impacts of Operating at Cost Targets

- Significant risk of non-compliance with mandatory FERC, NERC, and WECC reliability standards.
- Increased likelihood of equipment failure and system outages due to reduced maintenance and replacements.
- Reduced capability to continue scheduling operations or rapidly recover scheduling operations in the case of major, regional disruptive event in the Portland metro area.
- Delayed implementation of improvements to the aging security infrastructure at BPA's Transmission Substations.
- Inability to implement initiatives that benefit customers.
- Increased likelihood of environmental fines or penalties.
- Limited ability to service the increasing demands for balancing services.
- Reduced effectiveness of research and development program, lost value-added opportunities.
- Inability to benefit from capital projects (i.e. Synchrophaser and OMET).

Transmission

Transmission Rate Increase over 2012 – 2013 Rate Case

<u>Expenses</u>	Change from Rate Case 12/13 to 14/15		Change from 12/13 Final Proposal to 14/15 Cost Targets		Change from 12/13 Final Proposal to 14/15 Proposed	
	\$ in Millions	% Change in Rates	\$ in Millions	% Change in Rates	\$ in Millions	% Change in Rates
1 Operations	15	1.3%	7	1%	11	1%
2 Maintenance	10	0.9%	8	1%	9	1%
3 Other	5	0.4%	4	0%	7	1%
4 Internal Operations	5	0.4%	0	0%	2	0%
5 Expense Sub-Total	35	3.0%	19	2%	29	3%
6 Capital Related Costs	70	6.0%	50	6%	50	6%
7 Use of Reserves for Rate Relief 1/	35	3.0%	35	4%	35	4%
8 Total Revenue Requirement	140	12%	104	12%	114	13%

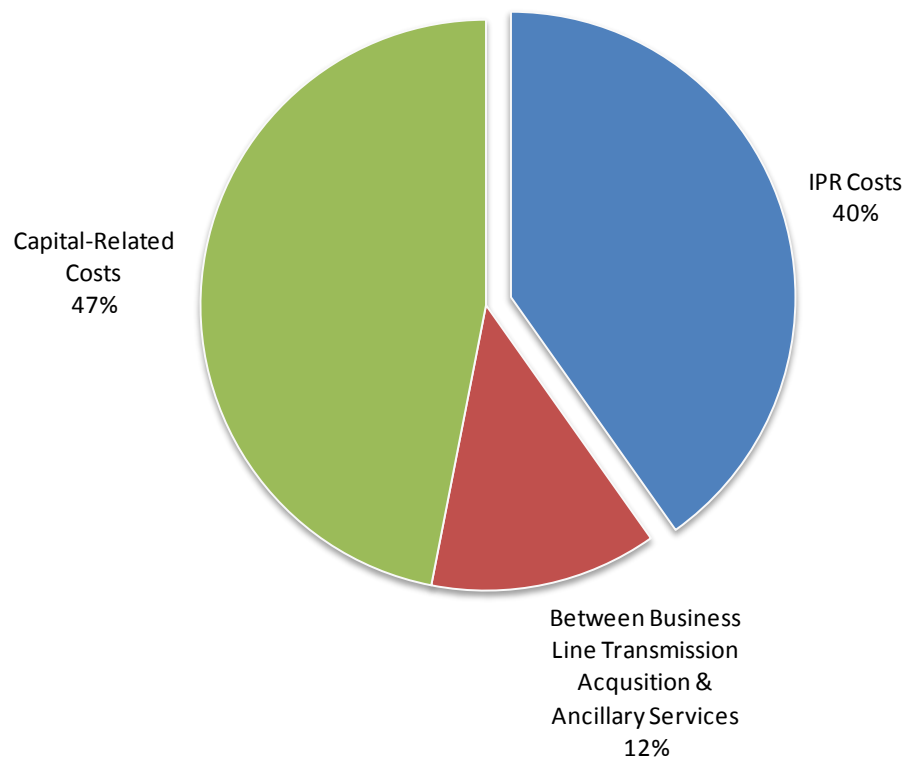
1/ Reserves were used for rate relief for FY 12-13 but use of reserved were not assumed in FY 14-15

- At the September 2010 Rate Workshop, TS projected FY 2012-2013 rates would be approximately 8% higher.
- TS was able to use reserves to offset rate impacts to customers in FY 2012-13. TS shared with customers that BPA's rate projects for FY 2014-15 could increase up to 19% if reserves were not continued to be used to hold down rates.

Transmission

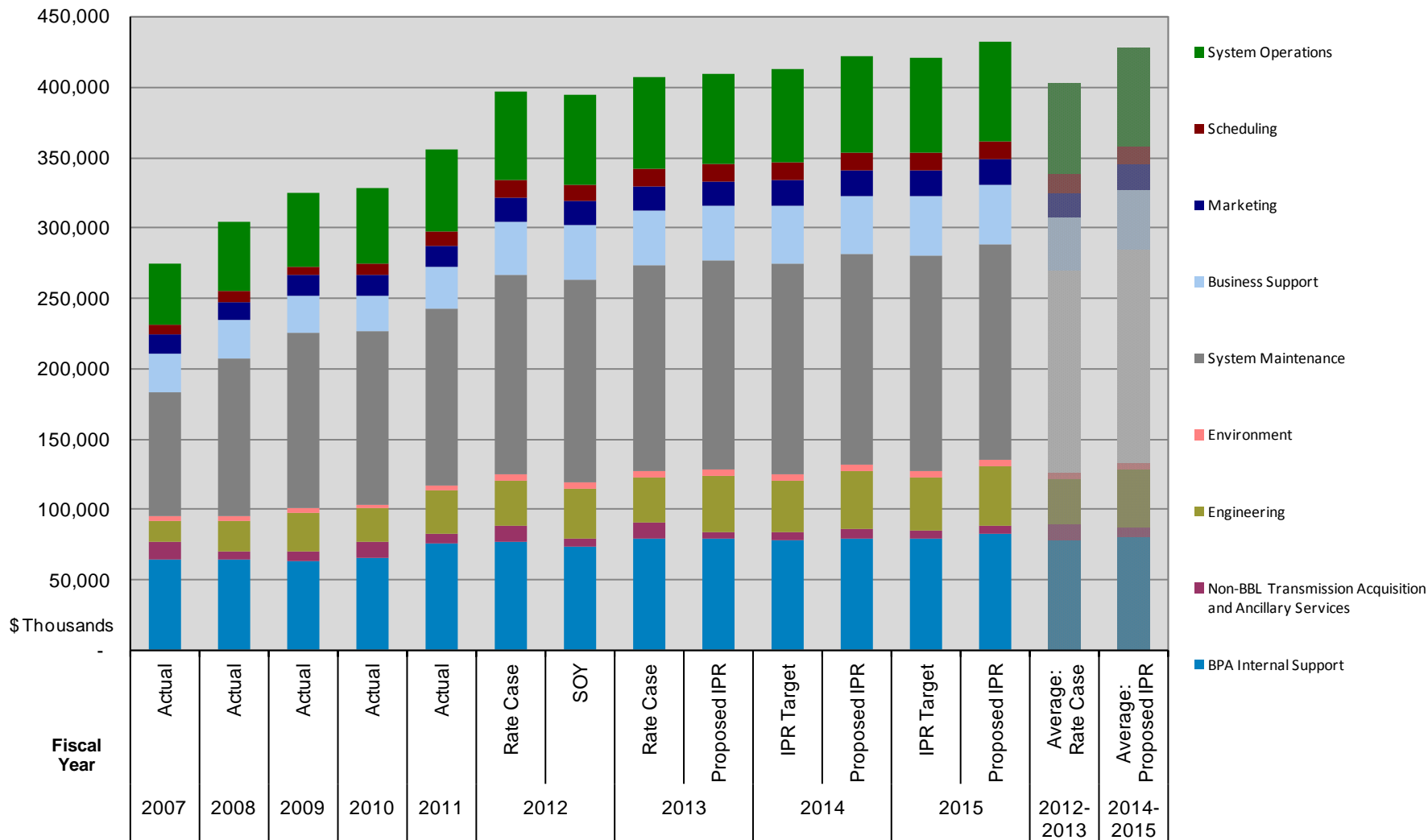
Potential Transmission Revenue Requirement

Proposed Transmission Services Expenses FY 2014-15



Transmission

Expense Summary



Note: Transmission Operations includes System Operations, scheduling, Marketing and Business Support programs. Maintenance includes System Maintenance and Environment programs

Agency Services

Overview



Agency Services is the term used to refer to all of the corporate organizations.

These costs are ultimately covered by Power and Transmission rates.

Corporate organizations either directly charge into Power and Transmission O&M programs, if there is a direct benefit to the program, or costs are shared and are charged to Power Services and Transmission Services via the Agency Services G&A and Business Support allocations.

Agency Services

Goals & Objectives

In addition to continuing the above support, Agency Services has the following *near-term goals*:

- Provide governance and support to the business units at the lowest possible cost.
- Continuously improve processes and controls while maintaining a flexible environment to accommodate evolving industry requirements.
- Support BPA initiatives to successfully integrate renewable electricity generation and mitigate for oversupply conditions.
- Improve the efficiency, and effectiveness of the federal workforce.

The cost estimates for Agency Services include the following *long-term objectives*:

- Develop a sustainable strategy for meeting long-term balancing requirements for the BPA balancing authority that honors the non-power constraints on the Federal hydrosystem and BPA's statutory obligations.
- Meet the demands of a changing energy industry by managing business operations efficiently and effectively through standardized, continuously-improved systems and processes.
- Implement succession planning strategies.
- Improve BPA's ability to recover from a disruption and ensure the agency is able to recover essential mission functions.

Agency Services

Challenges and Risks

Agency Services faces the following *challenges and constraints*:

- Rapid evolution of the energy industry and increased cost of meeting Federal requirements.
- Limited flexibility to respond to and implement new policies and requirements.
- Limited borrowing authority.
- Ensuring a continuous pipeline of skilled employees for succession planning needs.
- Market shifts in IT spending from capital to expense.
- Economic impact on availability of contract resources.

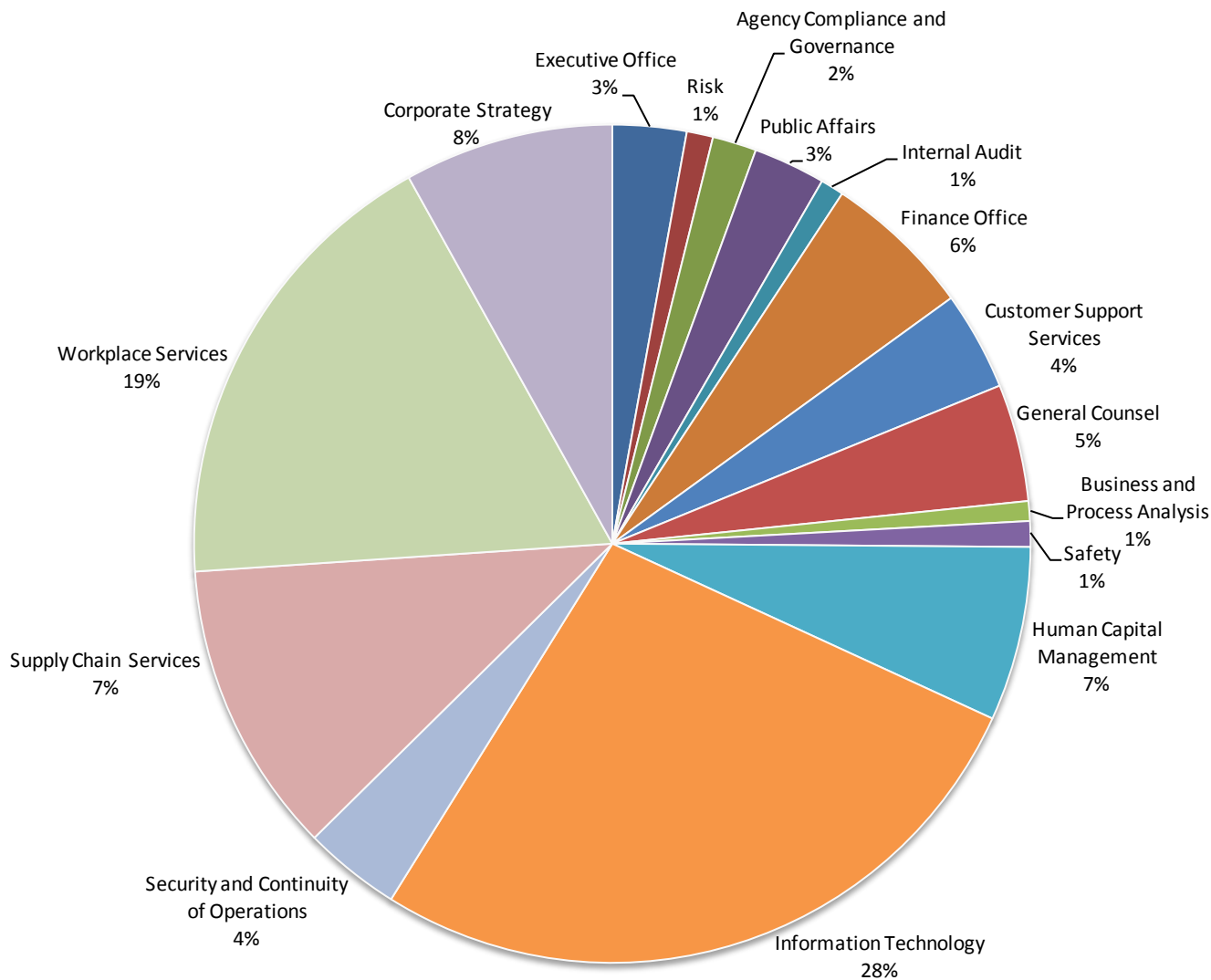
Operating at the cost target would have minimal *risks and impacts* to Agency Services since the proposed spending levels are similar to the target costs. However the following services could be impacted:

- Federal and contracted staff levels.
- Technology tools that could increase efficiency.



Agency Services

Agency Services Expense Summary



June 5, 2012

Integrated Program Review

Important Dates

FY 2013-2015 Expense & Capital

2012 Integrated Program Review

IPR Kickoff Meeting

- Publish IPR Initial Publication
- Release FY 2013-15 Expense Cost Estimates
- Open Comment Period

June 5

IPR Capital Update

Release FY 2013-15 Capital Forecasts and Debt Service Costs(includes feedback from CIR)

June 18 - 22

Debt Management

Debt Management Technical Workshop

June 19

Requests for Discussion Meetings

All requests for discussion meetings and/or additional information due

June 29

Discussion Meetings

Per customer request

July 16 - 19

Access to Capital Update

Access to Capital Technical Workshop

July 26

Comment Period

Close of IPR Public Comment Period

August 10

Final Report

Release IPR Close-Out Letter & Final Report

Fall

Integrated Program Review

Next Steps

The IPR material includes various levels of detailed information.

- This PowerPoint summary is available for a quick reference.
- A comprehensive Initial IPR Publication of the proposed expense spending levels will be available June 5th.

If you need additional information, clarification on these IPR materials, or wish to request a discussion meeting e-mail that request to 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 these 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.



Integrated Program Review

Comments can be sent to:

Participants have an opportunity to submit 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

Thank you



Integrated Program Review

Financial Disclosure

This information has been made publicly available by BPA on June 1, 2012 and contains information not reported in agency financial statements.