Building the Framework for the 2014 Integrated Program Review

January 8, 2014

2pm – 5pm

To participate by phone that does not charge long distance, please dial: 1-203-692-6740.
If you are calling long distance, please dial: 1-866-773-9742.
When prompted, enter access code: 5486124.

Introduction

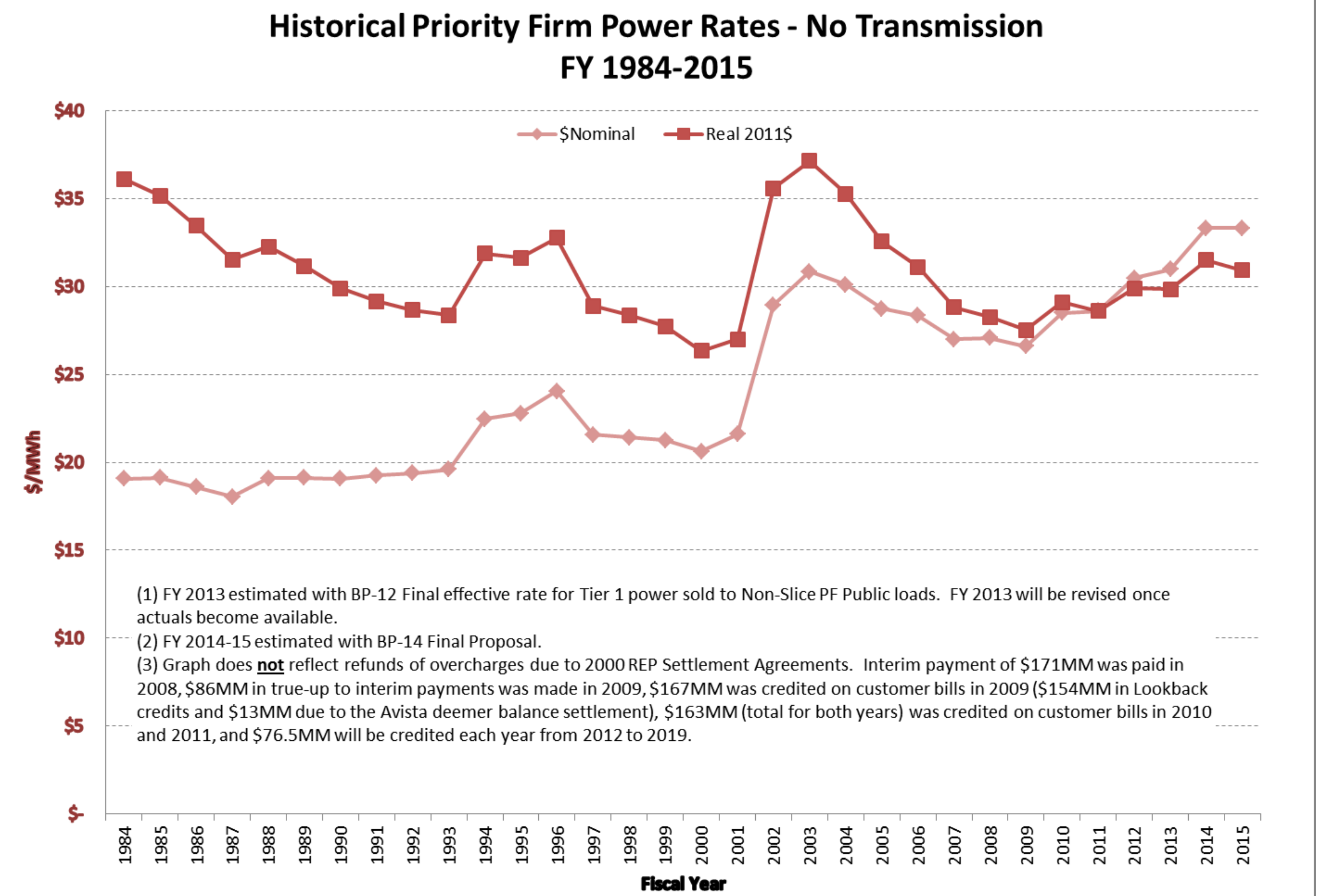
- Welcome to this year's advance discussion of the 2014 Integrated Program Review (IPR).
- We are looking forward to building on the accomplishments of our 2012 process and once again holding a high-level strategic discussion with you for an opportunity to gain your perspective before the upcoming process.
- As in previous discussions, today's topics are not about "the numbers." The 2012 IPR data is out-of-date and will change. We want to talk about the drivers.

Agenda

January 8, 2014 from 2:00 to 5:00 pm

Introduction	**Elliot Mainzer**
General Manager Panel	**~**
Strategic Rate Drivers	**Elliot Mainzer**
– Power & Generation Inputs	**Mark Gendron**
– Transmission	**Larry Bekkedahl**
– Finance	**Nancy Mitman**
Audience Dialogue	**Elliot Mainzer**
Closing Remarks	**Elliot Mainzer**
– What We Heard	
– Where We Go From Here	

Power Services



Deflators for 1984-2011 from Bureau of Economic Analysis - Table 1.1.9. Implicit Price Deflators for Gross Domestic Product; 2012-15 estimated w/ 2006-11 average.

Power Rate Components

There are three primary factors influencing FY 2016-17 Power Rates

- **A continuation of low net secondary revenues driven by:**
  - -- Low secondary sales prices due to continued depressed gas prices and oversupply.
  - -- Decreased demand due to continued slow economic growth and conservation.

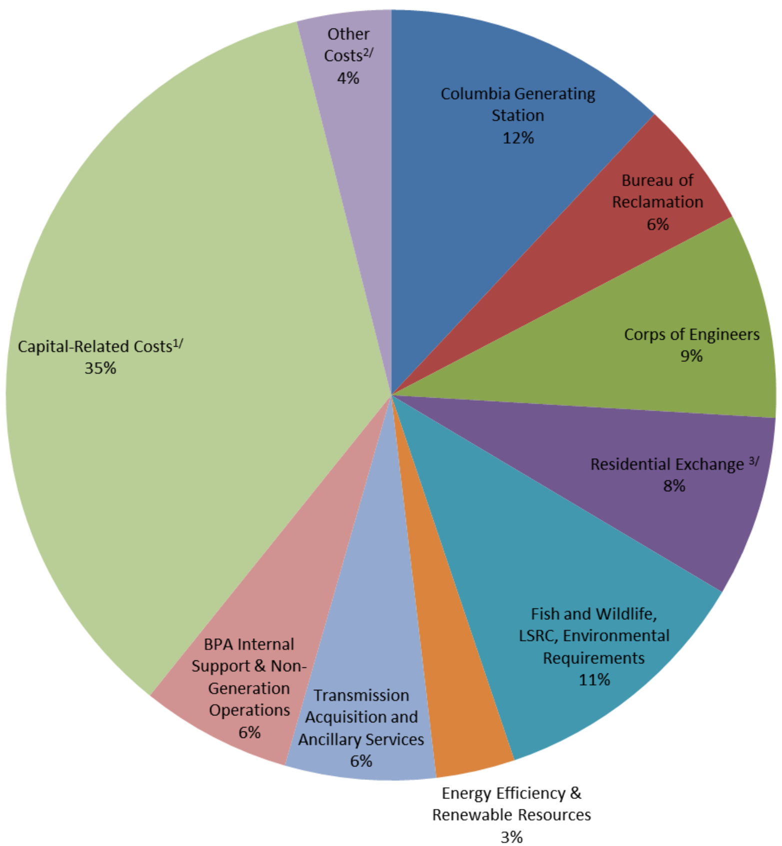
- **Steadily increasing program expenses:**
  - FY 2016-17 program increases reflect the continuation of O&M and non-routine extraordinary maintenance associated with aging FCRPS infrastructure and efforts to meet commitments such as Fish Accords and BiOp’s.

- **Increased principal and interest associated with past capital spending and debt restructuring:**
  - Past debt management actions for rate relief are the single largest contributor to a potential rate increase in 2016-17.
  - Further discussion will occur later.

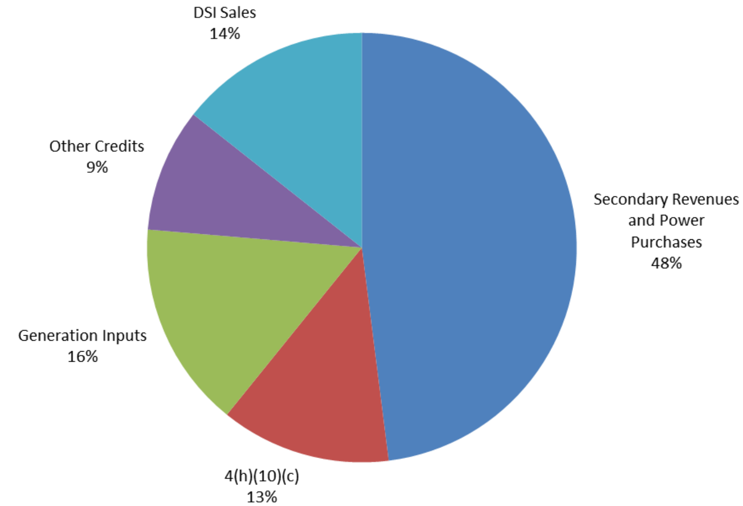
BP-14 Power Revenue Requirement & Revenue Credits

Components as a % for FY 2014-15 Final Proposal

Expenses



Revenues and Credits 4/

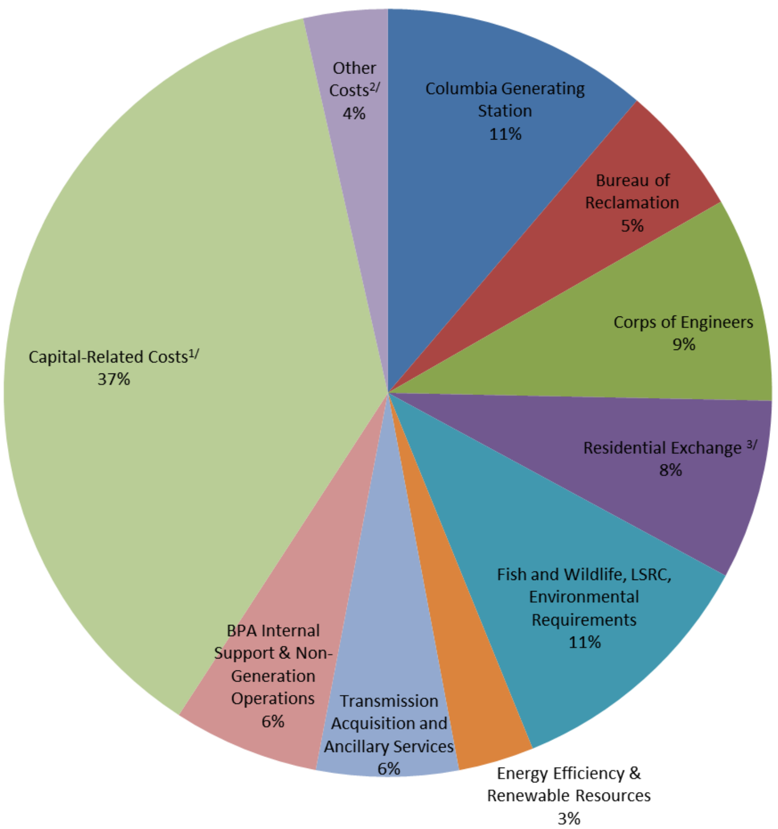


1/Includes Depreciation, Amortization, Minimum Required Net Revenues, Net Interest and Non-Federal Debt Service.
2/ Includes Irrigation and Low Density Discount, Other Operating Generation, Generation Settlements and Non-Operating Generation.
3/ Residential Exchange Program net of refund.
4/ Includes the modeled power and purchase expenses for system augmentation, balancing purchases, and secondary sales. Secondary sales include the value of slice secondary which is anticipated to be delivered directly to slice customers, rather than sold in the market by BPA.

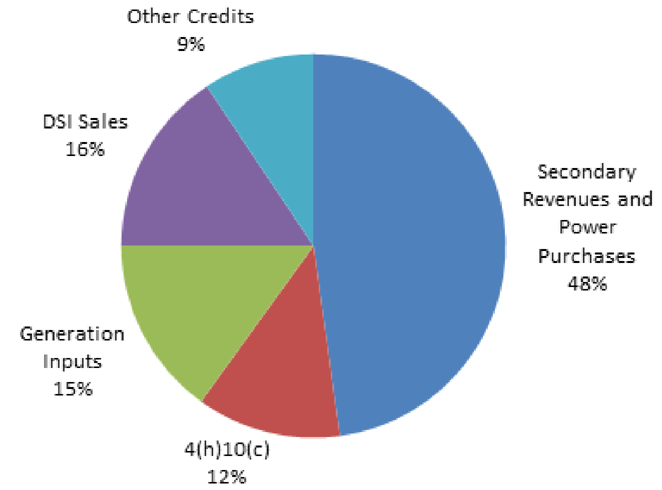
Preliminary Power Revenue Requirement & Revenue Credits

Components as a % for FY 2016-17

Expenses



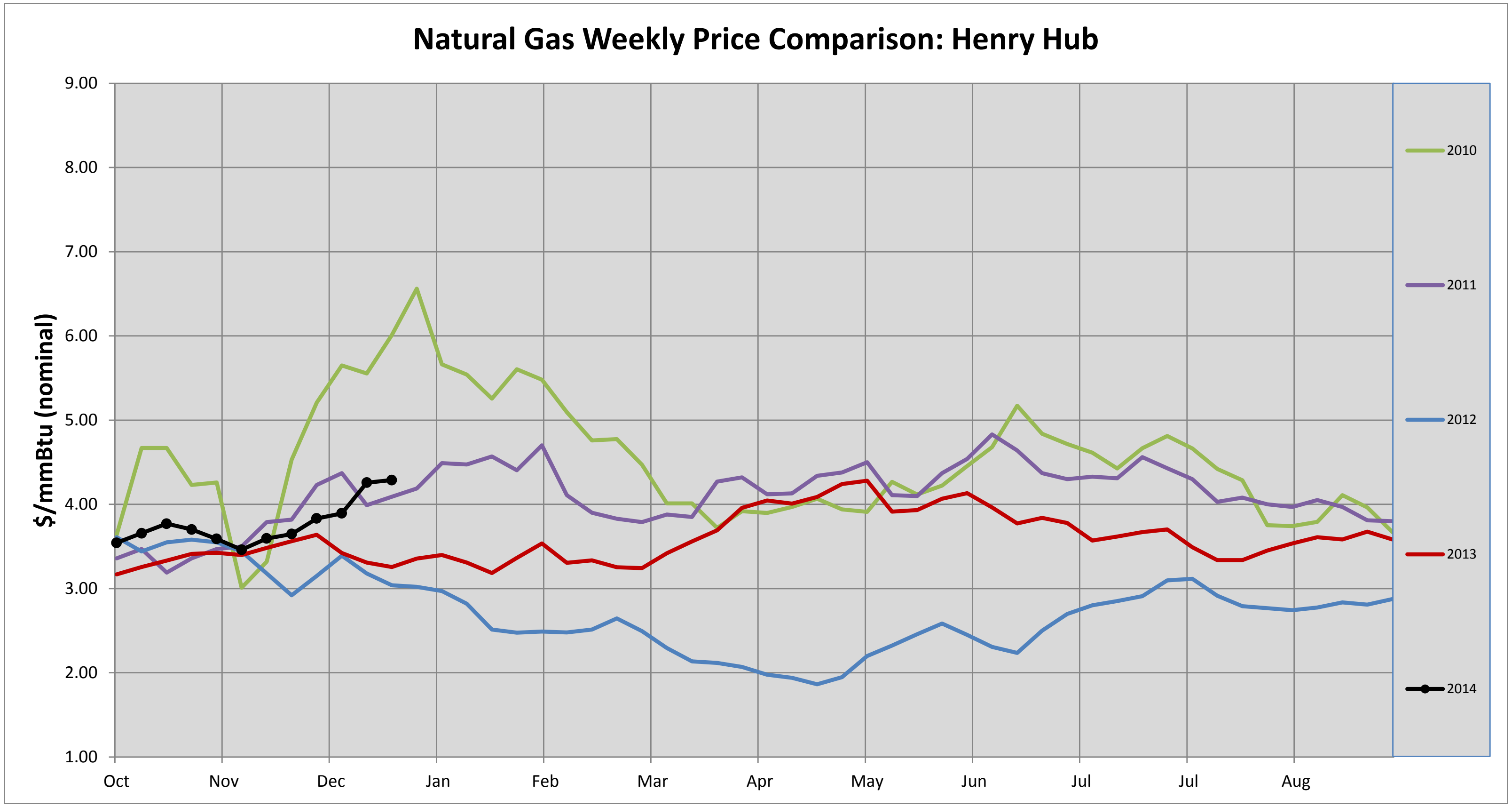
Revenues and Credits 4/



1/Includes Depreciation, Amortization, Minimum Required Net Revenues, Net Interest and Non-Federal Debt Service.
2/ Includes Irrigation and Low Density Discount, Other Operating Generation, Generation Settlements and Non-Operating Generation.
3/ Residential Exchange Program net of refund.
4/ Includes the modeled power and purchase expenses for system augmentation, balancing purchases, and secondary sales. Secondary sales include the value of slice secondary which is anticipated to be delivered directly to slice customers, rather than sold in the market by BPA.

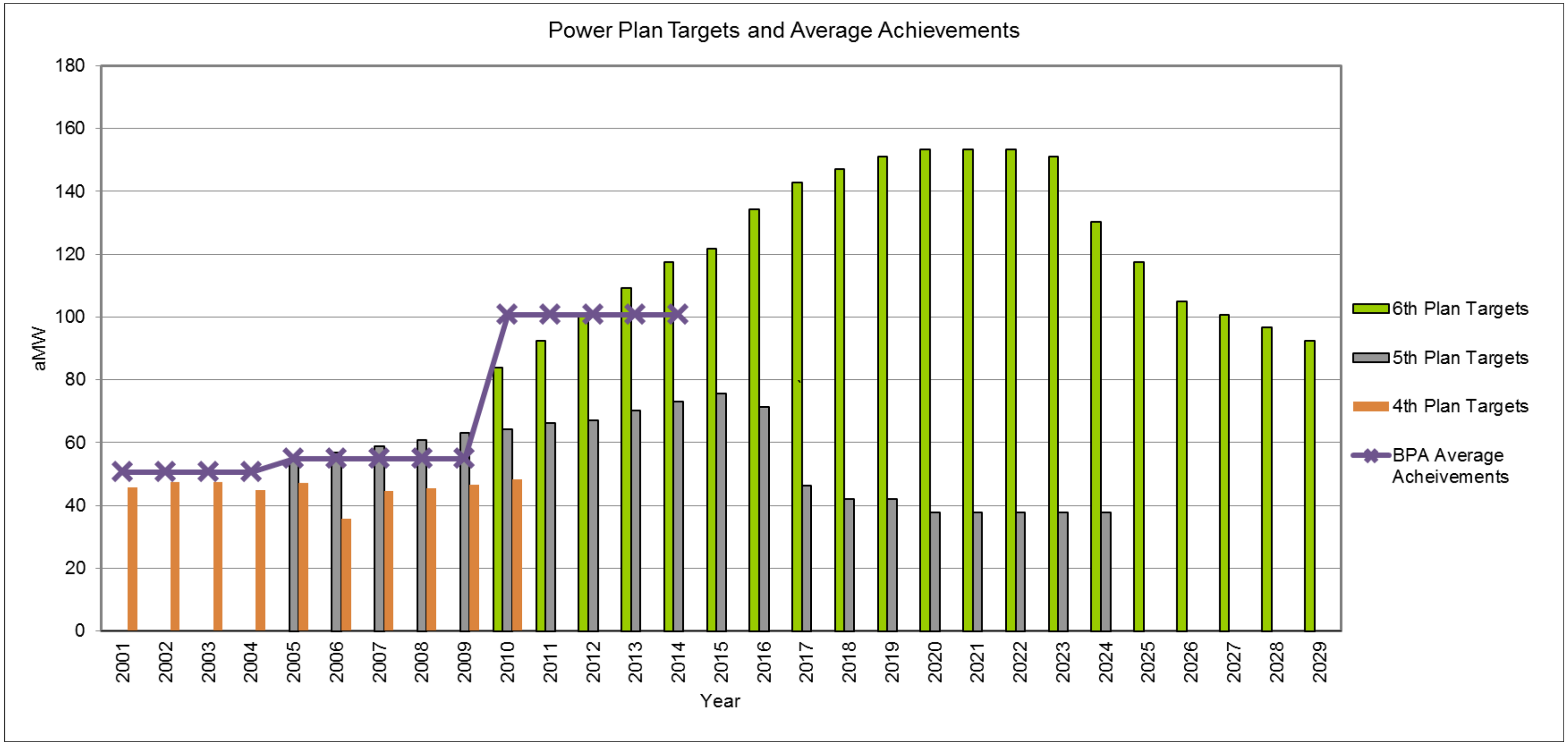
Net Secondary Revenue Uncertainty

- Due to the expected persistence of low natural gas prices, net secondary revenues are currently projected to remain relatively stable at levels forecast in the BP-14 Final Proposal.
- Net secondary revenues are the single largest source of volatility in rate setting.
- This forecast will be updated for the BP-16 Initial Proposal.



Future Energy Efficinecy Investment Uncertainty

- The Northwest Power and Conservation Council's (NWPCC) 7th Power Plan, which will update regional energy efficiency targets for FY 2015-19, may not be completed until late 2015. As a result, the upcoming 2014 IPR will end up setting spending levels for energy efficiency for the first 3 years of the 7th Power Plan, prior to the completion of the Plan.

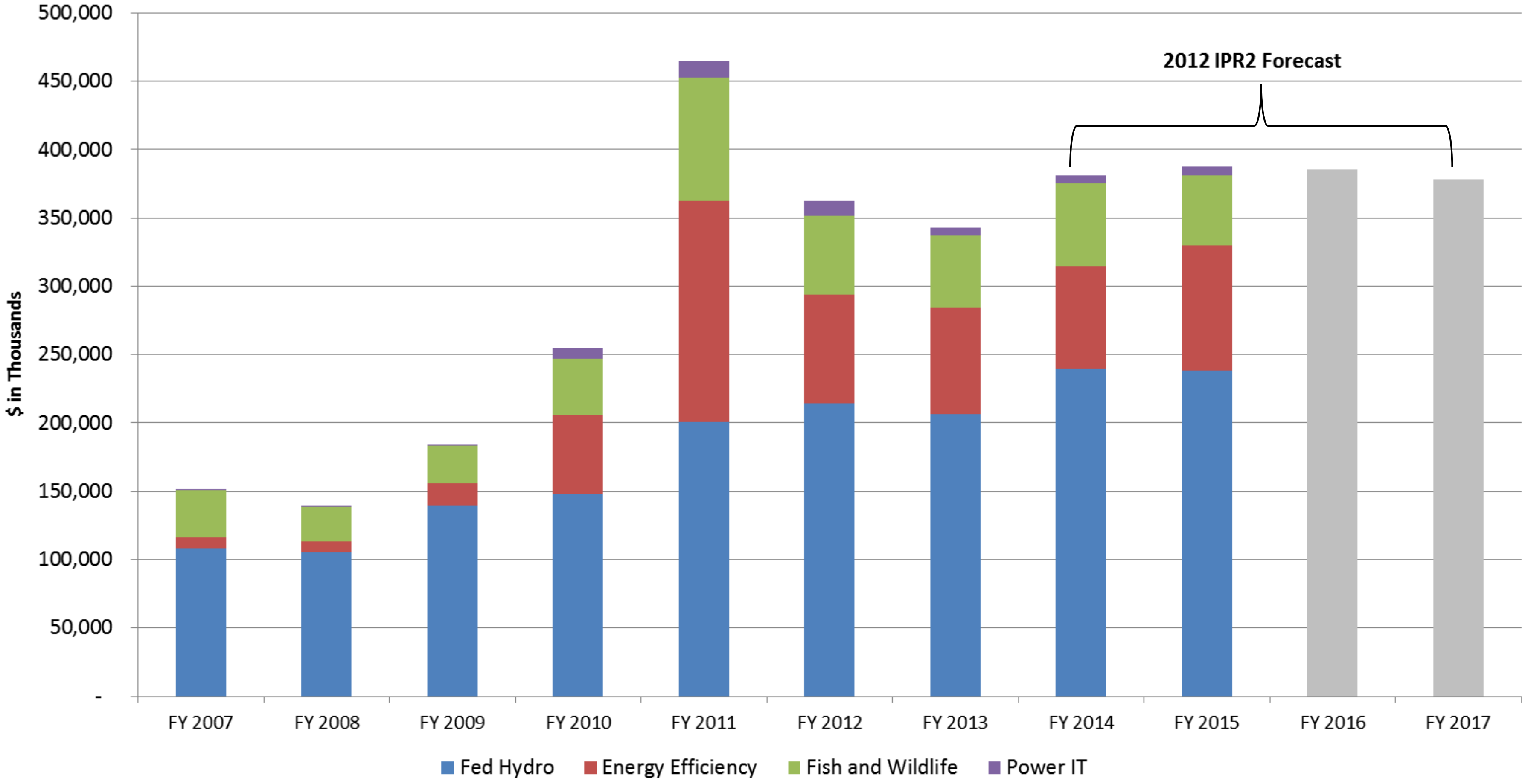


Future Fish & Wildlife Spending Uncertainty

- **BPA will continue to manage to its commitments in Fish Accords, Biological Opinions (BiOps), and other agreements.**
  - Underspending during the ramp up (2008-12) of the Fish Accords and FCRPS BiOp has increased spending pressure over the remaining period (2013-2018).
  - Inherent uncertainty of the work funded (i.e., due to weather, permitting, and/or landowner cooperation) may shift the timing of spending.

Power Capital Spending by Category

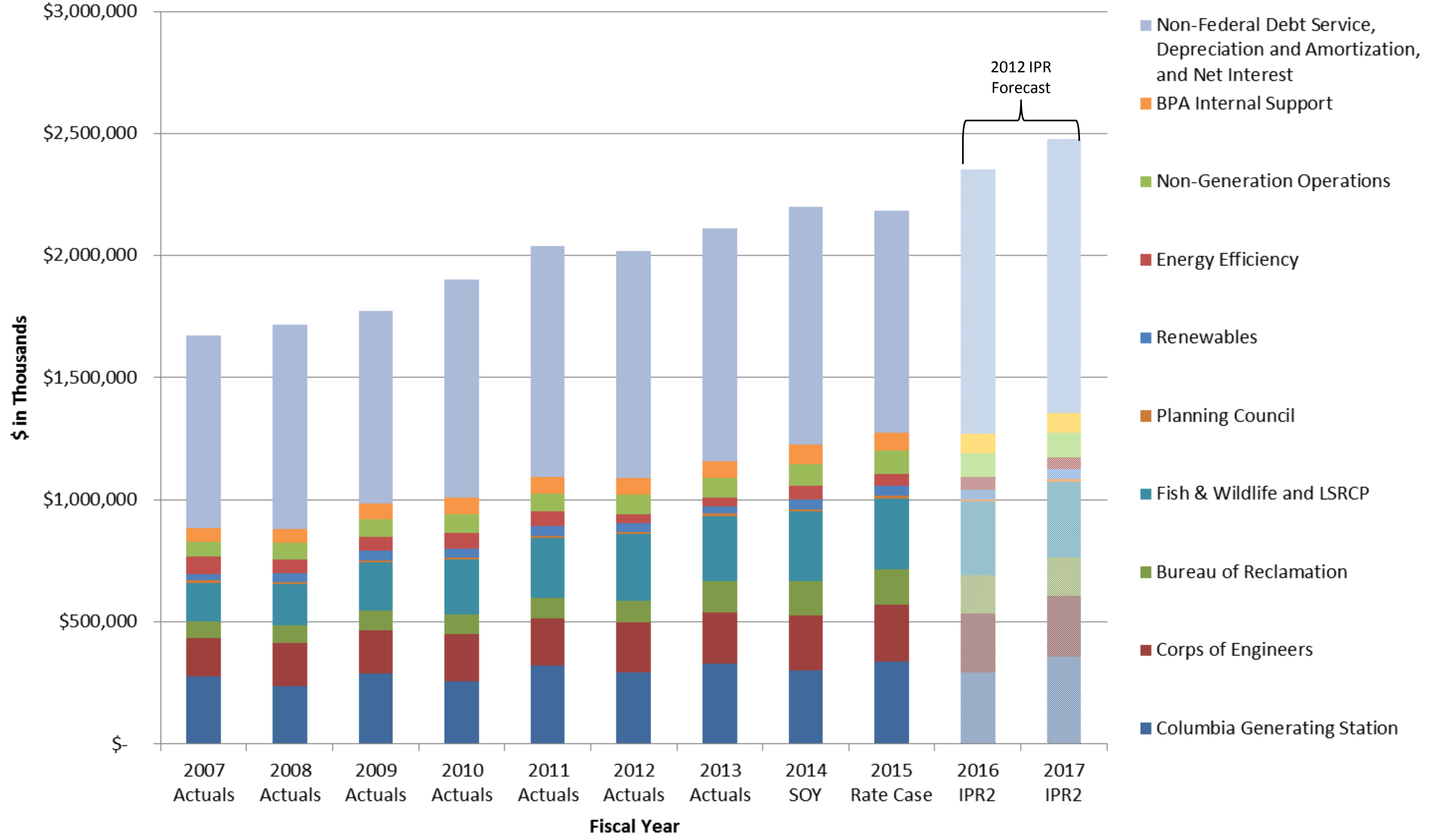
FY 2007 to FY 2017



FY 2014-15 are unlapsed levels from the BP-14 Final Proposal.

Power Expense Spending by Category

FY 2007 to FY 2017



Preliminary Power Rate Effect for FY 2016-17

(average change from prior rate period)

		A	B
		Assumed change from BP-14 to FY 2016/17	
	Expenses	$(Million)	% Change in Rates
1	Columbia Generating Station	4	0.2%
2	Bureau of Reclamation	16	0.8%
3	Corps of Engineers	19	1.0%
4	Residential Exchange 1/	16	0.8%
5	Fish and Wildlife	15-25	0.8-1.3%
6	Energy Efficiency	3	0.2%
7	Transmission and Ancillary Services	4	0.2%
8	Internal Operations	9	0.4%
9	Capital-Related Costs 2/	134	6.8%
10	Other Costs 3/	(3)	-0.2%
11	**Expense Sub-Total**	**216-226**	**11.0-11.5%**
	Revenues 4/		
12	Net Power Purchase and Sale 5/	(2)	-0.1%
13	4(h)10(c)	4	0.2%
14	Generation Inputs	2	0.1%
15	DSI Sales	(10)	-0.5%
16	Other Revenues	(1)	-0.1%
17	**Revenues Sub-Total**	**(7)**	**-0.4%**
18	Load Change to Rate [1/(1+delta)]		-0.2%
19	**Total Change in Net Revenue Requirement**	**209-219**	**10.6-11.1%**

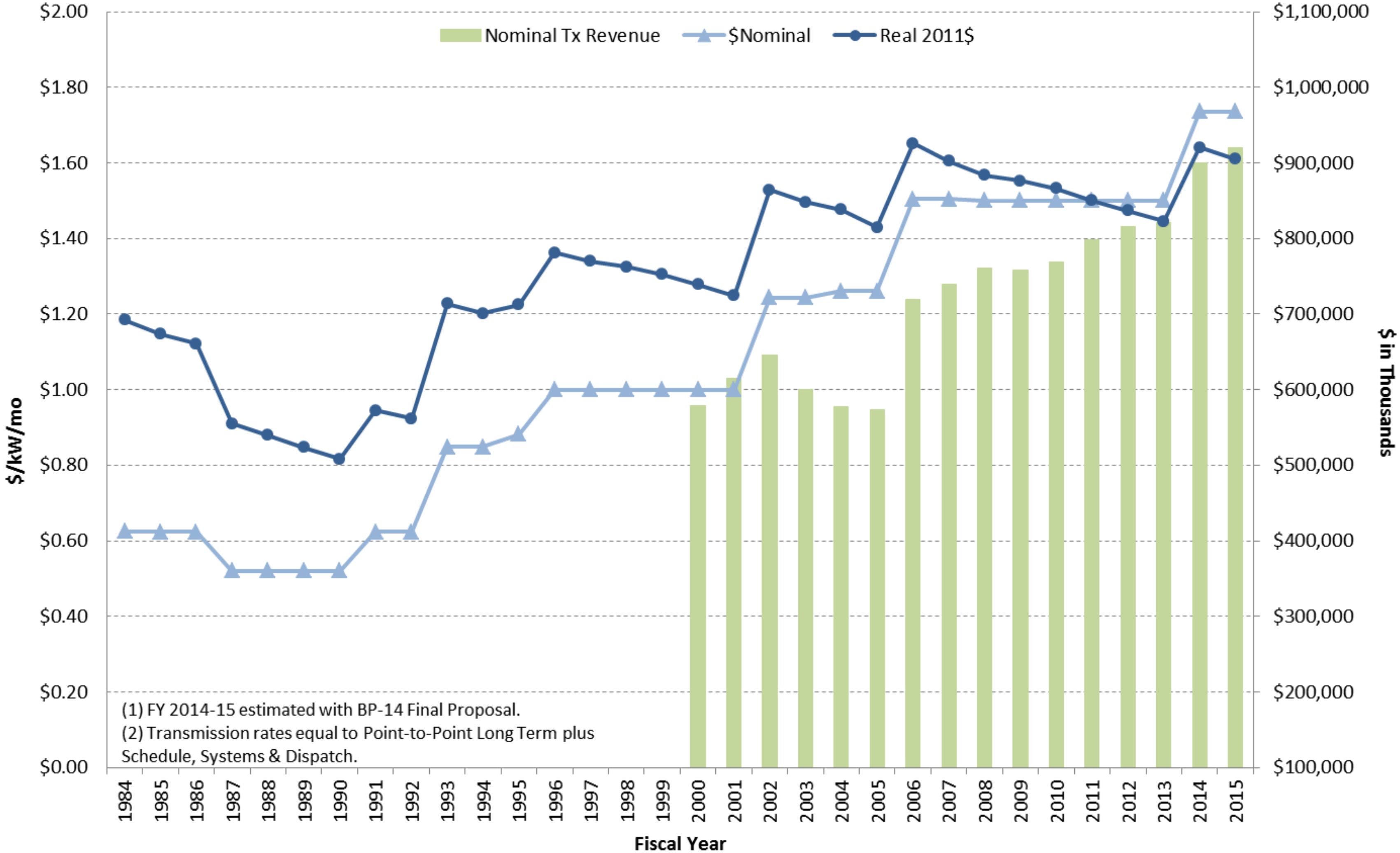
1/ Residential Exchange Program net of refund of $76.5 million per year.
2/Includes Depreciation, Amortization, Minimum Required Net Revenue, Net Interest and Non-Federal Debt Service. Financing assumptions are based on current practice and do not reflect debt management actions discussed at the Oct. 23 Debt Management Workshop.
3/ Includes Irrigation and Low Density Discount, Other Operating Generation, Generation Settlements and Non-Operating Generation.
4/ Negative sign reflects an increase in revenues.
5/ Includes the modeled power and purchase expenses for system augmentation, balancing purchases, and secondary sales. Secondary sales include the value of slice secondary which is anticipated to be delivered directly to slice customers, rather than sold in the market by BPA. This line item also includes the winter hedging purchase which terminates in FY 2014. Note this is different than “net secondary,” which is defined as the difference between anticipated non-slice secondary sales less balancing purchase and hedging costs.

Preliminary Power Rate Forecast Assumptions

- **Spending Levels**
  - Expense spending levels are based on forecasts developed nearly two years ago in preparation for the 2012 IPR, with adjustments from the IPR2. These forecasts are expected to change and offer a starting point for discussion.
  - Capital spending levels reflect forecasts from the 2012 IPR2 and 2012 CIR.
- **Sales and Revenue Forecasts**
  - Load and resource forecasts, as well as market prices, are based on the BP-14 Final Proposal, using forecasts for FY 2016-17.
- **Financing assumptions (e.g., sources of capital) are based on current practice and do not reflect debt management actions discussed at the October 23rd Debt Management Workshop.**
- **All other items, including interest rates, are consistent with the BP-14 Final Proposal**
- **As a reminder, today's discussion is about Power drivers and not the "the numbers" which are out-of-date and will change.**

Transmission Services

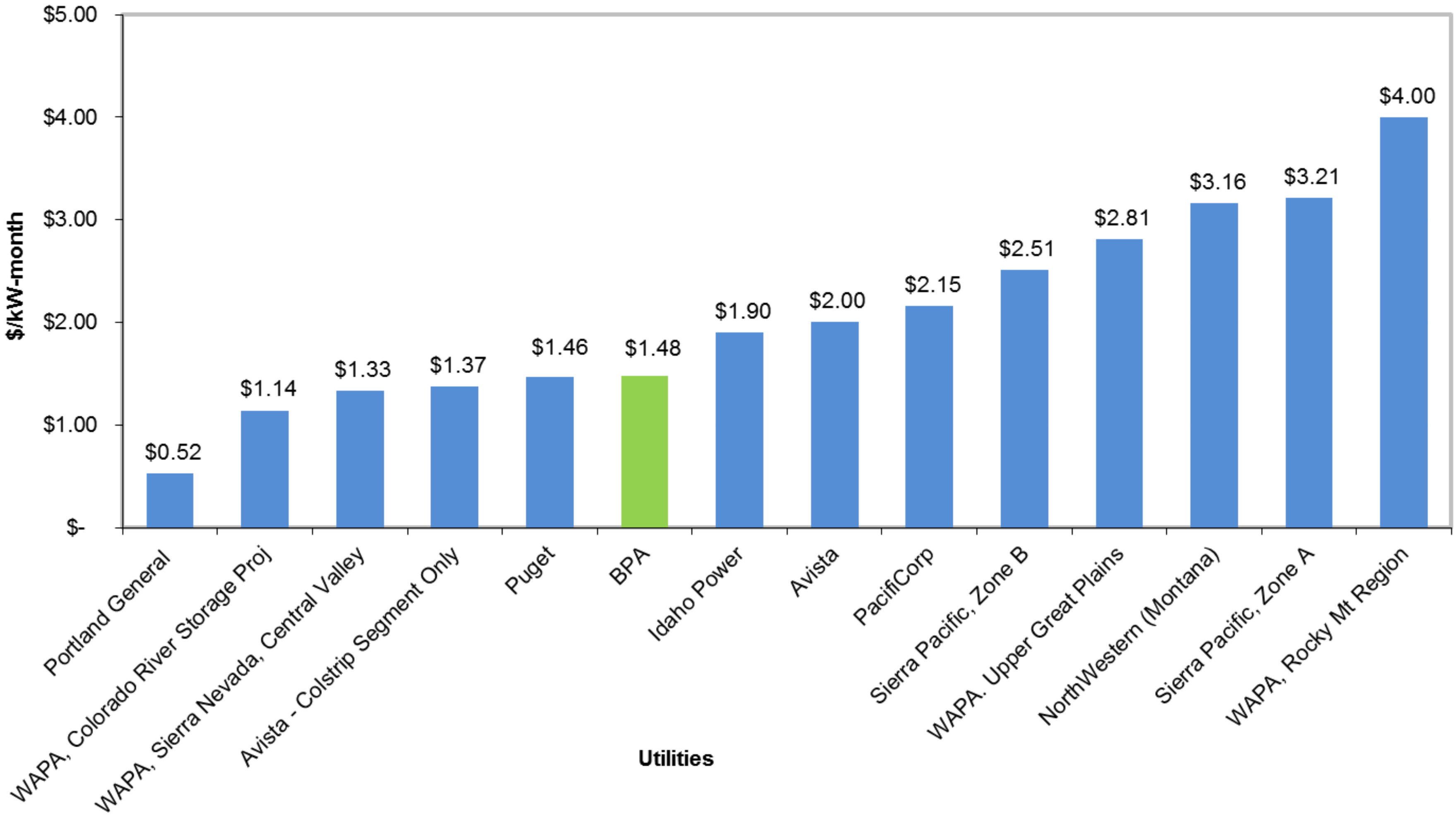
Firm Transmission Rates[1]
FY 1984-2015



Deflators for 1984-2011 from Bureau of Economic Analysis - Table 1.1.9. Implicit Price Deflators for Gross Domestic Product; 2012-15 estimated with 5-year average
1. Transmission rates are pulled from the total BPA Power rate when historically bundled in the Power rate.
2. Performance revenue actual as of 12/18/2013 exclude reimbursable and genration inputs.

Transmission's Point-to-Point Long-Term Rate Regional and WAPA Comparison

(as of December 10, 2013)

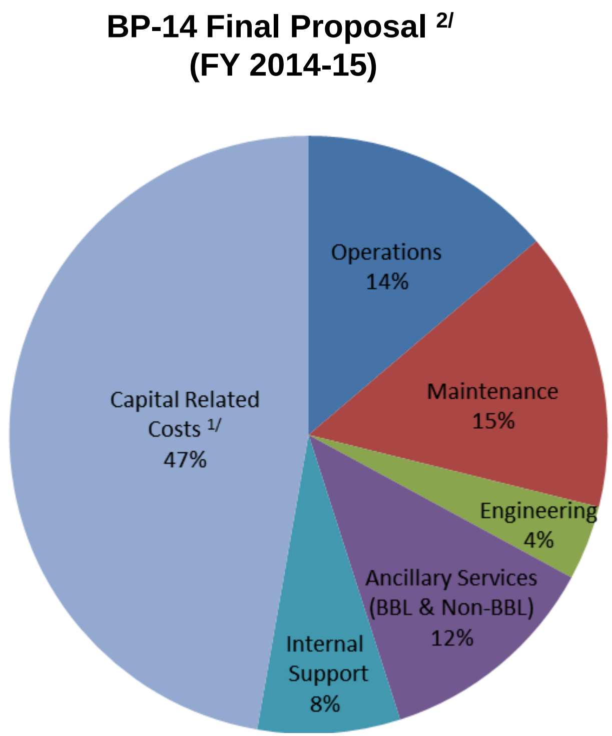


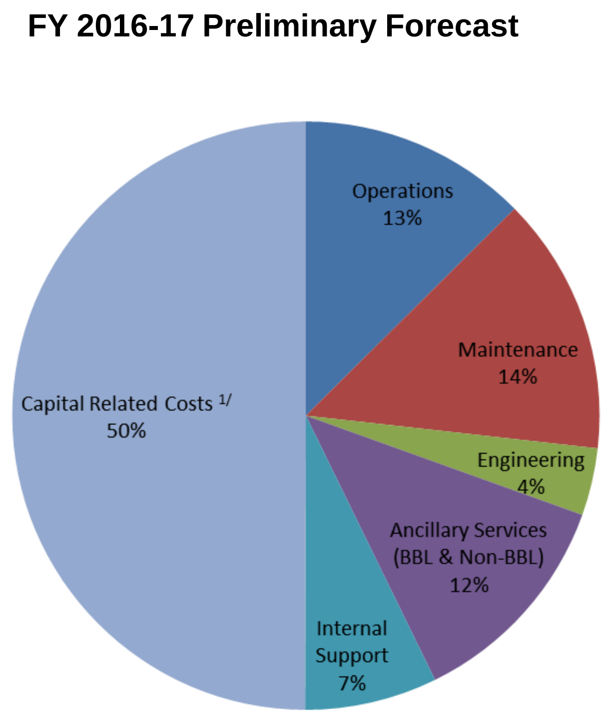
Transmission Rate Drivers

- The primary driver of the potential increase of FY 2016-17 Transmission rates is capital related costs – to be discussed later.
- Rates for the Network may increase 9.7% in the next rate period; and thereafter, have an increase that is more modest in out-year rate periods.
- Rates for the Southern Intertie may increase for the next rate period by 14%. The out-year projections for the Southern Intertie show a possible increase due to investments needed to sustain the Southern Intertie rating.
- Use of reserves to mitigate an increase in BP-14 transmission rates magnifies the percentage change in *other* expenses from BP-14 to FY 2016-17.

Transmission Revenue Requirement

Components as a % for FY 2014-15 and FY 2016-17

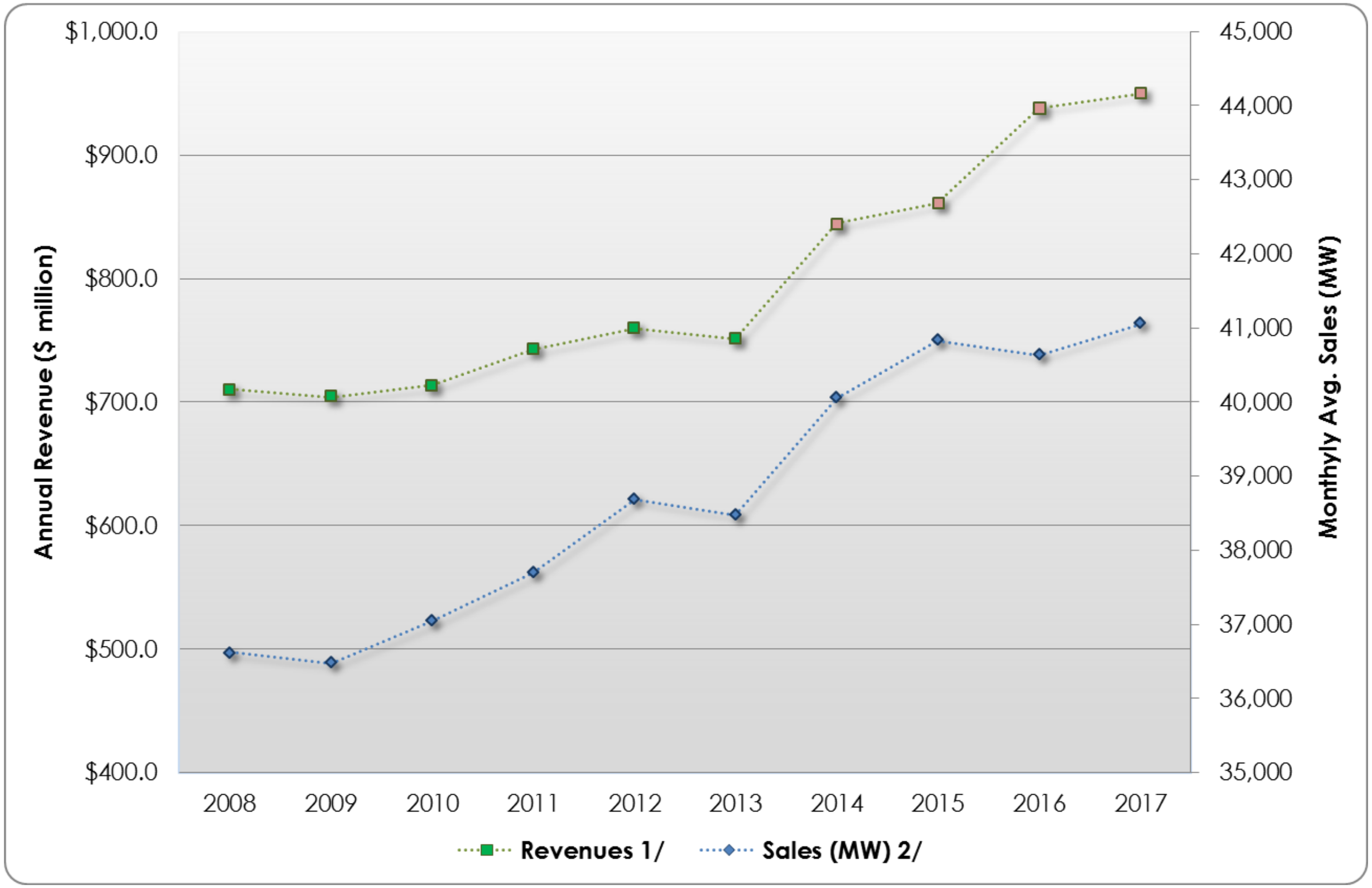




1/ Includes Net Interest Expense, Depreciation/Amortization and Minimum Required Net Revenues.
2/ Does not reflect $20 million on average of reserve funding to offset operating expenses for rate mitigation.

Transmission Sales and MW Trends

FY 2008 to FY 2017



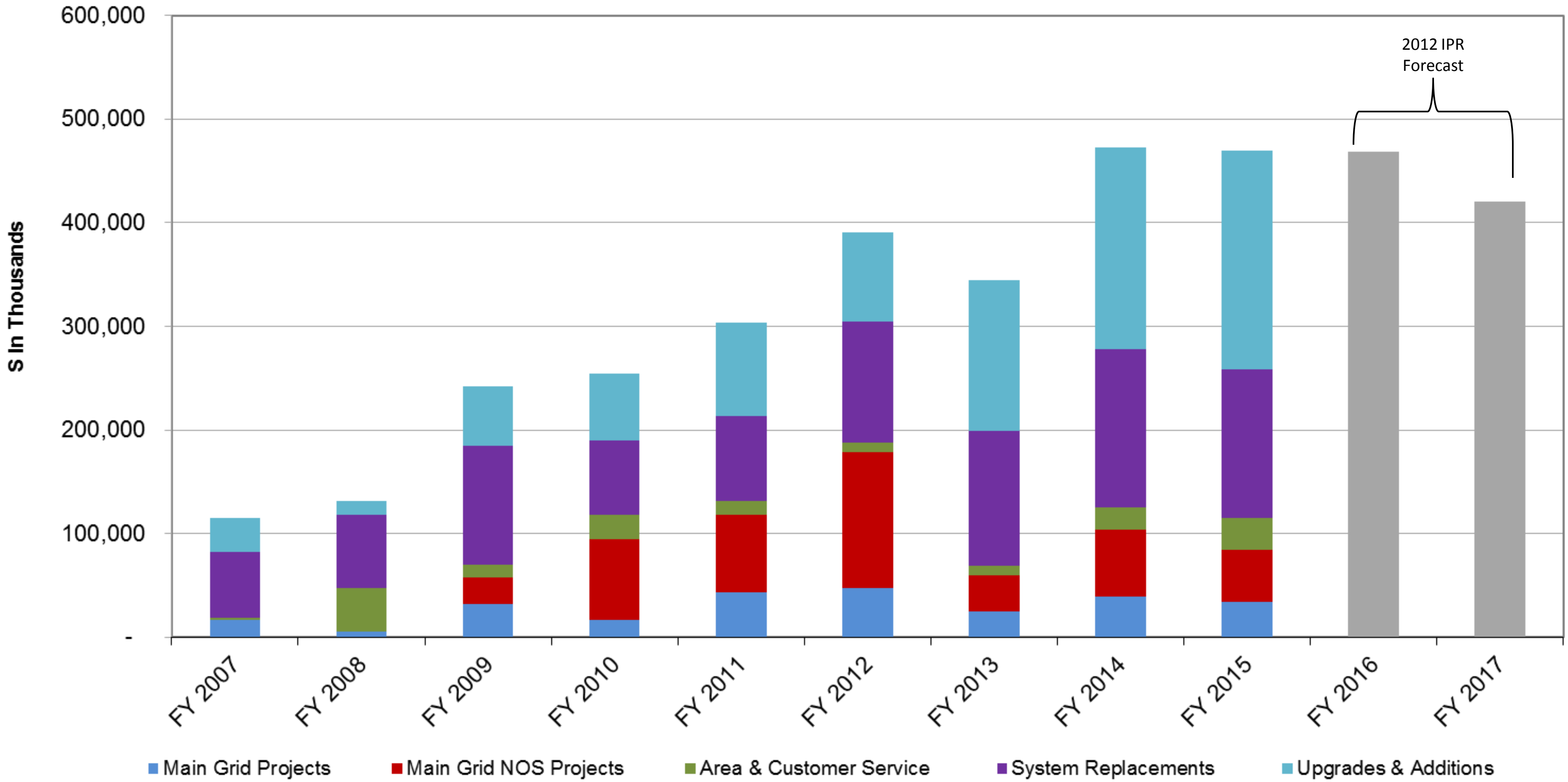
1/ Revenues consistent with rate analysis presented exclude Reimbursable, Generation Inputs, and Revenue Credits. These revenues correspond to the 11.0% rate increase from BP-12 to BP-14 rates.

2/ Sales (MW) for Network, Intertie, and Utility Delivery Segments

Network	Formula Power Transmission, Integration of Resources, Network Integration, Point-to-Point Long-Term, Point-to-Point Short-Term
Intertie	Southern Intertie Long-Term, Southern Intertie Short-Term, Montana Intertie Short-Term
Delivery	Utility Delivery

Transmission Capital Spending by Category[1/]

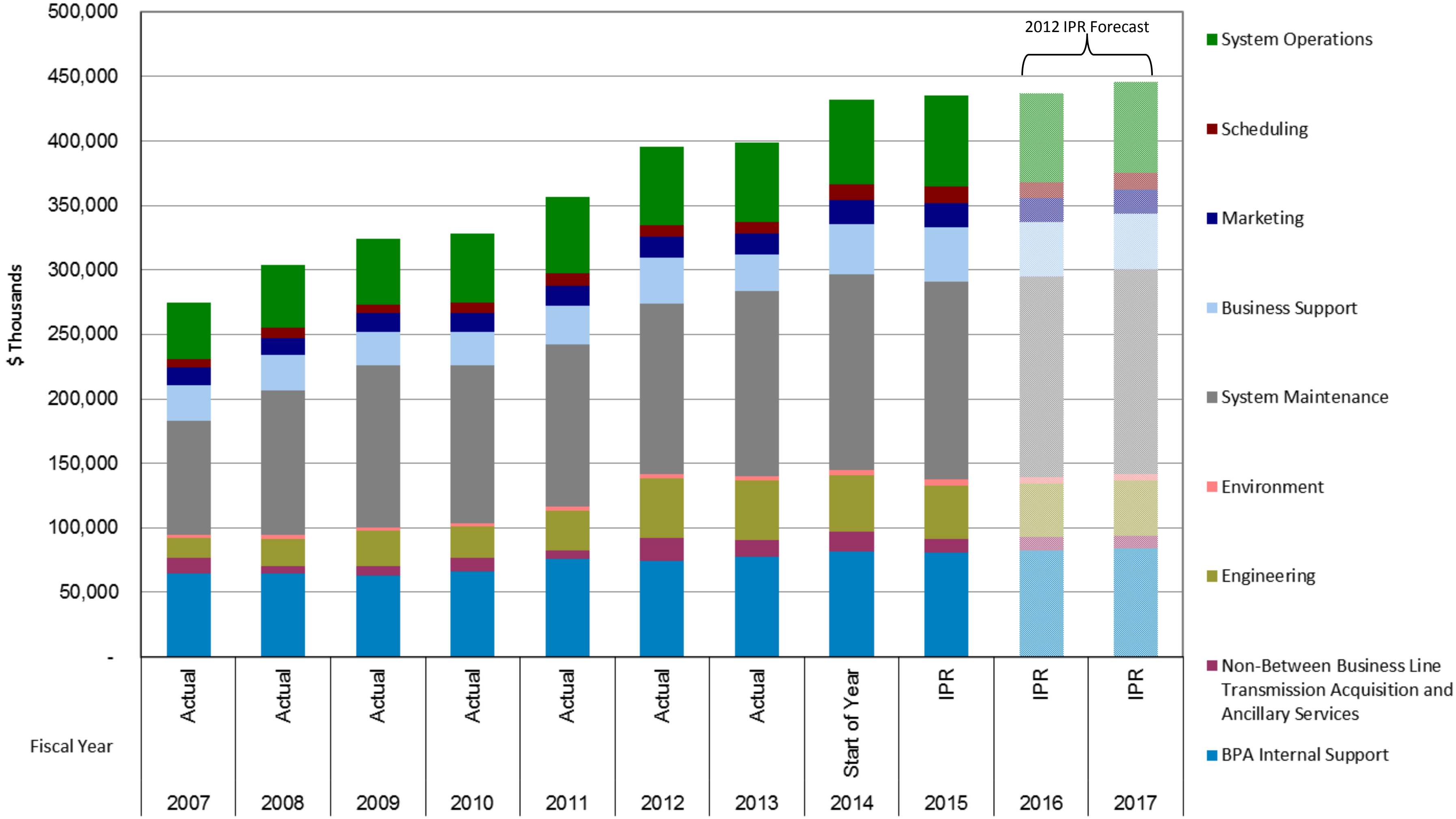
FY 2007 to FY 2017



*Costs are direct costs for all years.
1/ FY 2010 – FY 2015 excludes IT, Security, Workplace Facilities, Projects Funded in Advance and Fleet . Prior to FY 2010 incorporated in Transmission Program dollars.
FY 2007 – 13 Actuals, FY 2014 Start of Year Budget, FY 2015 IPR2 Budget, FY 2016 - FY 2017 forecasts based on reshaped 2012 CIR levels and will be revised for the 2014 CIR to reflect current information.

Transmission Services Expense Summary

FY 2007 to FY 2017



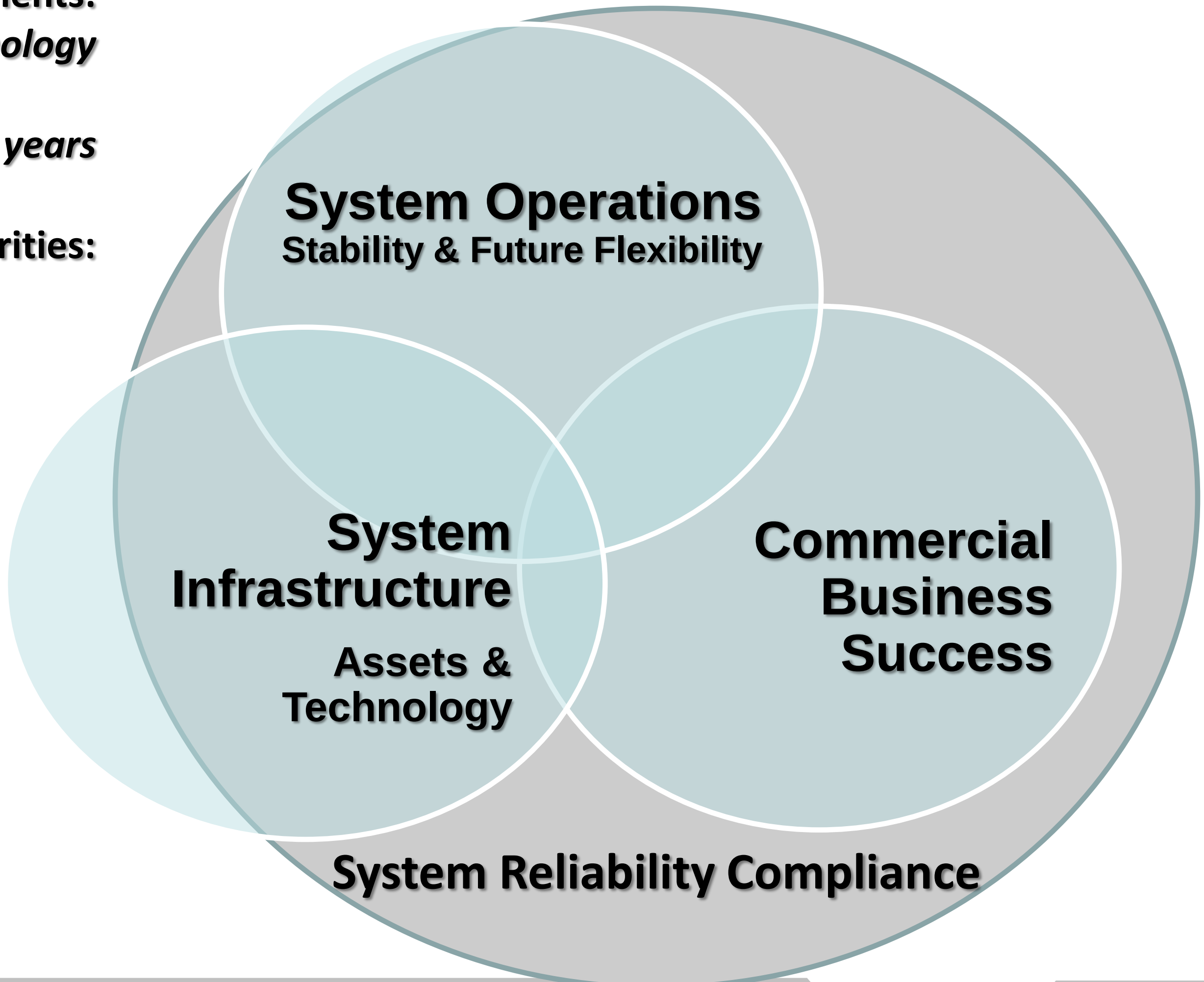
BPA Transmission Strategy

2018

Transmission Vision Elements:
Backbone, Proactive, Technology

Timeframe: ***3-5 years***

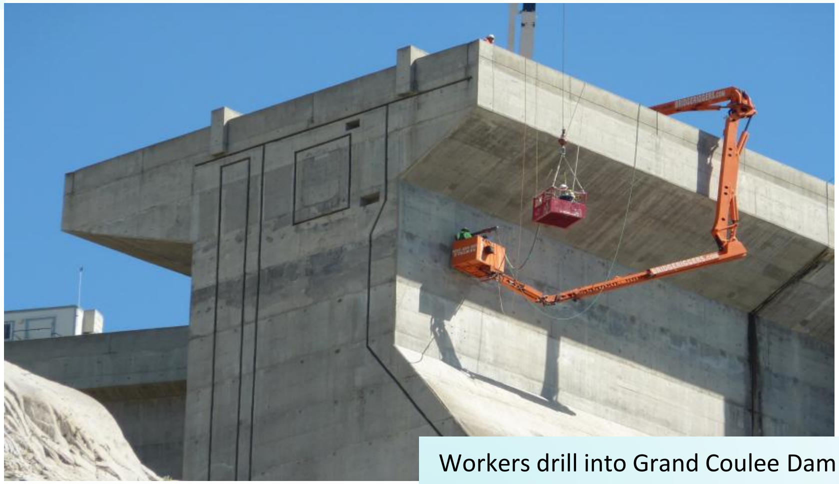
Framework and Strategic Priorities:



"To make real progress, we must set realistic goals and then achieve them, everything else is just discussion."

Lineman string wire and attach hardware on special 316 foot tall river crossing tower for Grand Coulee cable replacement project.

New 8 foot diameter 50 foot deep drilled concrete piers are constructed for new towers at Grand Coulee.



Workers drill into Grand Coulee Dam to attach 118 new conductors and overhead ground wires for river crossing.

Structure being dismantled on the Keeler-Pennwalt-115kV line at the southern Boundary of Forest Park. Part of retiring two de-energized 115kV lines running from Keeler Substation through Forest Park.

Ground wire replacement on the Ashe-Marion #2 and Buckley-Marion #1 Double Circuit 500kV line.

River crossing tower move Bettas Road - Columbia Line Upgrade.

Fall Protection Administrative Controls

Landings and increased use of aerial equipment

Changes to Work Standards and Guides

TRANSMISSION LINE MAINTENANCE STANDARDS AND GUIDES — Section III.A.8
ADMINISTRATIVE — Page 2 of 7

Working Patrol

A working patrol shall include inspecting every structure in the line being patrolled, plus driving or walking the right-of-way between each structure. In addition to the transmission line, include an inspection of the terminal spans and structures.

It is recognized that for safety reasons not all spans may be walkable. The patrolman shall make every effort to inspect every structure. Other inspection tools and procedures shall be utilized.

- Patrol all Lines a minimum of once every maintenance year.
- Urban Areas or other restricted areas not patrolled by helicopter shall be documented in TLM apps .The district foreman will determine on a case by case basis the ground patrol frequency of these lines not patrolled via helicopter. At least one ground patrol being minimum, more if conditions warrant.

Lines that are not patrolled by helicopter or radial lines may require an additional working patrol at the discretion of the Region.

Steel Tower Climbing Inspection

- WECC/Significant Equipment Lines (OB19) 1x every 10 years
- Critical crossings* 1x every 5 years
- Communication Towers ** 1x every 5 years
- Other structures 1x every 10 years

Reinforcing current work practices such as Qualified Climbers

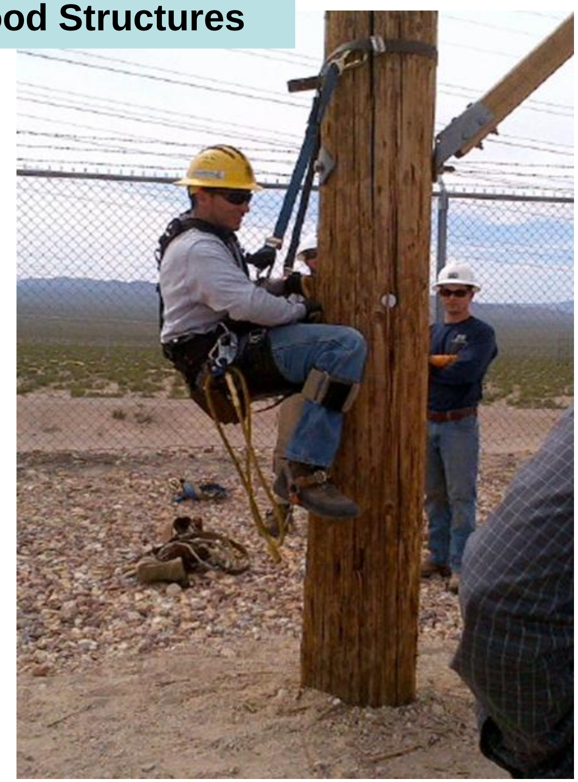
Safety and Health Program Handbook	Section A: Policies and Protocols **Safety Training**	Section: **A** Chapter: **4** Page: **2** Date: **05/01/2009**

refresher. Reference Safety & Health Program Handbook, Section F, Chapter 2. Scheduled through Technical Training.

- Qualified Climber's Recertification/Climber's Rescue - required annually - 4 hrs. Electricians, Linemen and some PSC (for all qualified climbers). Annual Qualified Climber Compliance Record (BPA F 5480.06e) required to be completed annually by supervisor. Reference Safety & Health Program Handbook, Section B, Chapter 7. Usually scheduled through the Region (in-house).

Implementation is on going

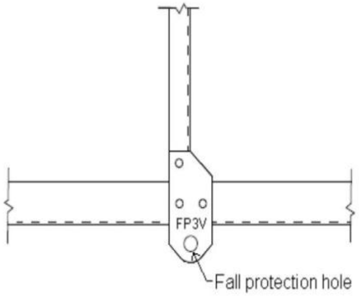
Fall Protection on Wood Structures



Fall Protection on Steel Structures

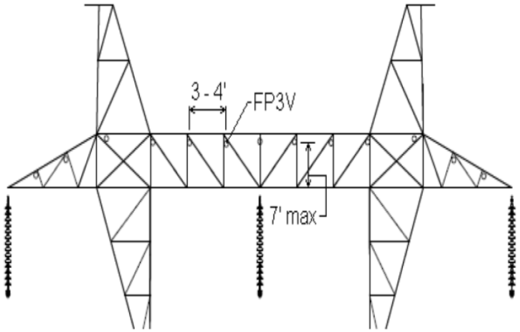
All FP holes are to be stamped near the hole with an identifying mark similar to the following examples

a. FP3V: 3000 pounds vertical
b. FP5H4V: 5000 pounds horizontal and 4000 pounds vertical



Moving across bridge and arms

a) Provide FP3V attachments at spacing adequate for lineman to maintain attachment to at least one hole when moving across bridge and arms (3 – 4'). Locate holes near top of bridge but within reach (7' max).



Fall Protection for Sub Station Equipment

317 Transformers and Reactors

BPA met the goal of having 100% Fall Protection on wood in August 2013

Preliminary Transmission Rate Effect for FY 2016-17
Contribution to Overall Assumed Rate Change

(average change from prior rate period)

		A	B
		Assumed change from BP-14 to FY 16/17	
	Expenses	$(Million)	% Change in Rates
1	Operations	1	0.1%
2	Maintenance	6	0.5%
3	Engineering	1	0.1%
4	Ancillary Services	15	1.2%
5	Internal Support	4	0.3%
6	Other[1/]	20	1.6%
7	Capital Related Costs [2/]	82	6.7%
8	**Expense Sub-Total**	128	10.5%
9	Revenues	3	-0.2%
10	**Total Change**	126	10.3%

1/ Use of reserves in BP-12 included ($33.4 million/yr) and in BP-14 ($20 million/yr) for rate mitigation.

2/ Includes Net Interest Expense, Depreciation/Amortization and Minimum Required Net Revenues

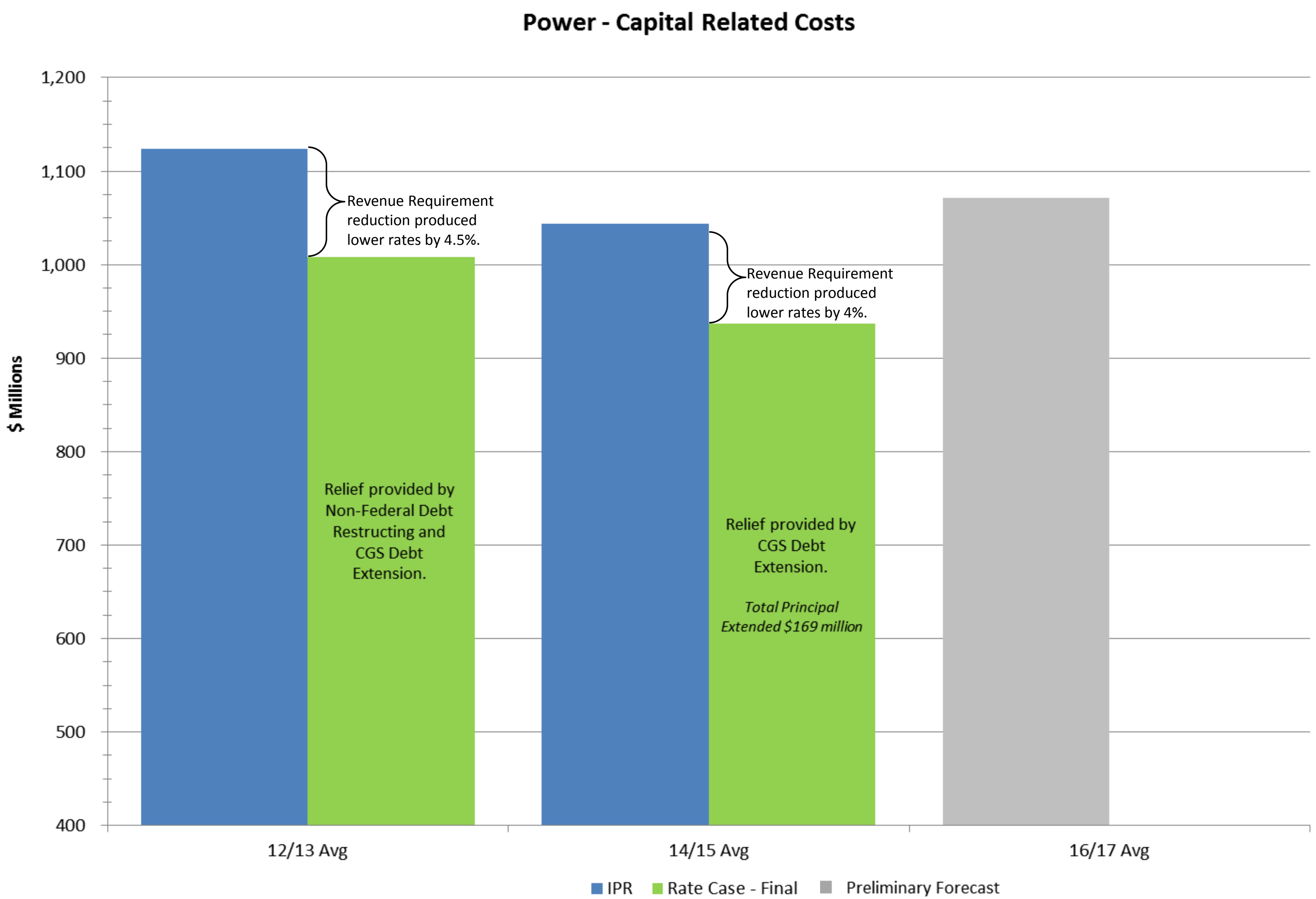
Preliminary Transmission Rate Forecast Assumptions

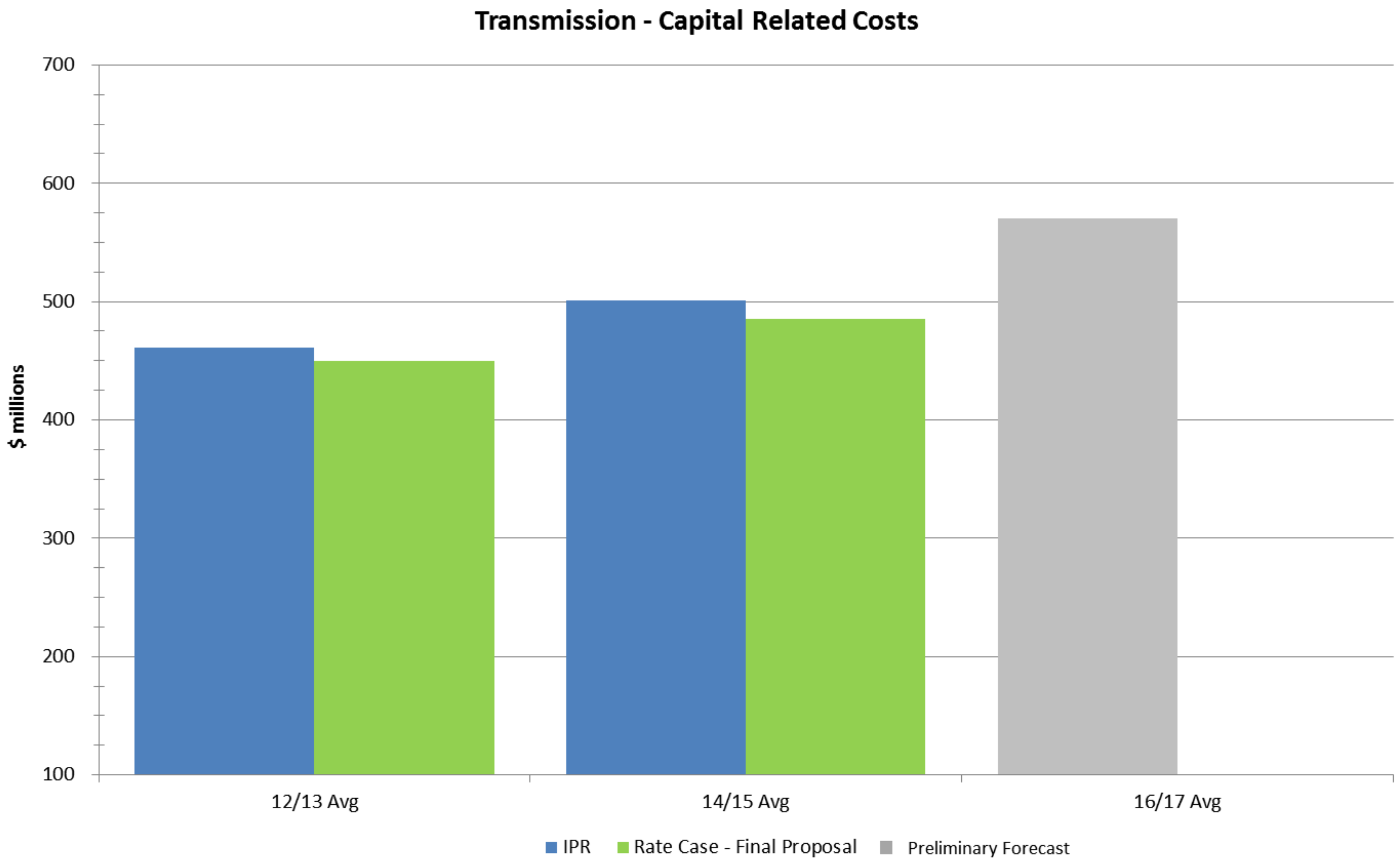
- **Spending Levels**
  - Expense spending levels are based on forecasts developed nearly two years ago in preparation for the 2012 IPR and IPR2, these forecasts are expected to change and offer a starting point for discussion.
  - Capital spending levels reflect forecasts from the 2012 IPR2.
- **Sales and Revenue Forecasts**
  - Sales and Revenue forecasts are based upon BP-14 Final Proposal assumptions updated to reflect Precedent Transmission Service Agreement (PTSA) Reform. Network Load Growth assumptions are based on the 2012 BPA White Book (annual average of 1.3%).
- Financing assumptions (e.g., sources of capital) are based on current practice including $15 million per year of reserve financing in lieu of treasury borrowing and 50% lease financing.
- All other items, including interest rates, are consistent with the BP-14 Final Proposal.

Finance

Drivers of Capital-Related Costs

- Over the past five years, capital related costs have increased due to the ramp-up in capital investments to sustain an aging power and transmission system and expand the transmission system to meet regional needs.
  - As a result, both interest expense and depreciation are increasing in the FY 2016-17 rate period.
- In addition, for Power, debt restructurings and extensions for rate relief caused uncommonly low capital-related costs in the last two rate periods. This accentuates the percentage increase in the FY 2016-17 rate period.
  - In particular, the extension for rate relief in the FY 2014-15 rate period pushed $169 million out of the period, producing roughly a 4% reduction from the potential rate increase.
  - Without this extension, the change in capital-related costs in the FY 2016-17 rate period would be closer to a 2.5% increase, rather than the 6.8% increase shown earlier.
- BPA is working on defining an “Affordability Cap”, a limit on capital spending that, when combined with BPA’s Access to Capital Strategy, will enable BPA to:
  - Meet its 10-year financing and debt management objectives.
  - Make timely investments that sustain the performance of power and transmission system assets, add capacity and capabilities when needed, and improve the efficiency of internal operations.
  - Constrain long-term rate impacts.


Power - Capital Related Costs
$ Millions
1,200
1,100
1,000
900
800
700
600
500
400
Revenue Requirement reduction produced lower rates by 4.5%.
Revenue Requirement reduction produced lower rates by 4%.
Relief provided by Non-Federal Debt Restructing and CGS Debt Extension.
Relief provided by CGS Debt Extension.
Total Principal Extended $169 million
12/13 Avg
14/15 Avg
16/17 Avg
IPR
Rate Case - Final
Preliminary Forecast


Transmission - Capital Related Costs
$ millions
700
600
500
400
300
200
100
12/13 Avg
14/15 Avg
16/17 Avg
IPR
Rate Case - Final Proposal
Preliminary Forecast

CIR & Capital Investment Prioritization

- During the 2012 Capital Investment Review (CIR), BPA proposed to develop a **method for prioritizing investments.**
- Since then, BPA has designed and is now implementing a prioritization process such that core sustain investments are prioritized through asset management strategies and expansion investments are prioritized through a BPA-wide process.
- Goals include creating an agency-level process that:
  - Furthers BPA's strategic priorities/objectives.
  - Provides a "level playing field" for projects with different risk/cost/benefit characteristics from various asset categories.
  - Optimizes BPA's investment portfolio within capital, labor, rate and other constraints.
  - Ensures decision making is risk-informed and supported by thorough analysis.
  - Provides transparency both internally and externally.
  - Enables efficient, timely decision making.
  - Enables BPA to track the performance and measure the realized value of investments.
- The methodology and process is directed at maximizing the long-term operational and economic value of assets.
- BPA will share the results of this process during the upcoming 2014 CIR.

FY 2016-17 Debt Management

- Possible Financing Actions
  - 70% Conservation Financing beginning in 2016
  - Additional Power Prepayment Program
  - 50% Lease Financing
  - Extensions of Columbia debt maturing
  - Reshaping of Energy Northwest debt
- Possible Debt Management Actions
  - Reserve Financing
  - Revenue Financing
- BPA may consider additional debt management actions after evaluating comments from the October 2013 Debt Management meeting.
- Restructuring or extension of additional Energy Northwest debt may be considered in collaboration with the region.

BPA Financial Reserves for Risk

- Ending FY 2013 Power and Transmission combined reserves for risk totaled $641 million, a $63 million decrease from the prior year.
  - Power ended FY 2013 with reserves for risk of $182 million; a decrease of $54 million from the previous year compared to the rate case plan to break even.
    - In FY 2014-15 the rate case plan is to break even from a cash flow standpoint.
  - Transmission ended FY 2013 with reserves for risk of $459 million; a decrease of $9 million from the previous year compared to the rate case plan to draw down reserves $46 million.
    - In FY 2014-15 the rate case plan is to draw down reserves for risk by an additional $70 million to both minimize rate impacts and fund capital investments of $30 million.
- Combined Power and Transmission Reserves for Risk support BPA's credit rating – higher reserves for risk increase the likelihood of successfully managing through periods of underperformance.
  - Maintaining reserves for risk is needed to support BPA's credit rating and risk mitigation.

Where We Go From Here

- **Today –** Building the Framework for the 2014 IPR
- **February – March –** Capital Investment Review (CIR) Public Process
- **May – July –** Integrated Program Review (IPR) Public Process
- **September –** Integrated Program Review Close-Out Letter
- **November –** Power and Transmission Initial Rate Proposal for FY 2016-2017
- **July 2015 –** Power and Transmission Final Rate Proposal for FY 2016-2017

Questions / Comments

- If you have questions pertaining to this meeting or future public processes, please contact BPAFinance@bpa.gov or your Account Executive.