Integrated Program Review
Energy Efficiency Workshop

June 18, 2014

Workshop Purpose and Objectives

- Provide and present:
  - BPA's Energy Efficiency Program background
  - 2013 actuals, 2015-17 proposed expense budgets, and associated assumptions
- Provide an opportunity for stakeholders to review and ask questions regarding the proposed spending levels

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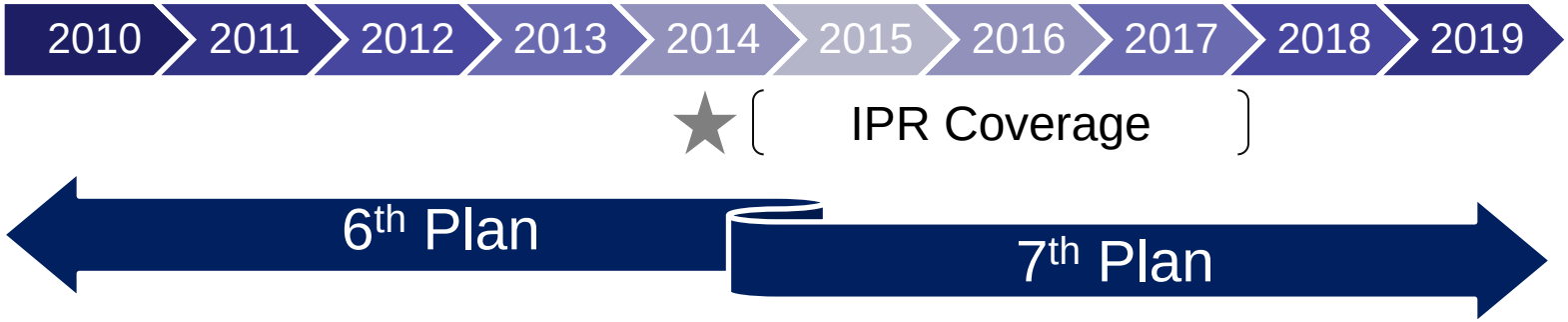
BACKGROUND & EE GOALS

Energy Efficiency Background

- Consistent with the Northwest Power Act, BPA works with its wholesale power customers to acquire a public power share of cost-effective conservation identified in the Northwest Power and Conservation Council's Power Plan at the lowest cost to BPA.
- BPA's investments in energy efficiency provide a quantified financial benefit. Analysis shows that BPA's estimated costs will be lower by approximately $750 million to $1.36 billion (net present value in year 2011) for the period 2001-2022 as a result of investing in energy efficiency from 2001-2011 rather than purchasing the equivalent amount of energy from the market. Energy efficiency's benefits continue to accrue with planned achievements.

Energy Efficiency Background

- Since 2010, BPA has been operating against the 6th Power Plan.
- The 6th Plan called for near doubling of energy efficiency achievements compared against 5th Plan targets.
- BPA and Public Power are on track to meet the 5-year targets set forth in the 6th Plan



- Must establish budgets in advance of 7th Power Plan publication/production
- For this IPR cycle, we are assuming a relatively stable trajectory of budgets and associated savings

Key Drivers

- The 6th Power Plan energy efficiency targets increase 24% over the 2015-2017 period compared with the 2010-2014 period.
- Rapid technology advancements, consumer adoption, regional legislation, and federal policy maintain an increasing demand for energy efficiency.
- BPA's Post-2011 Review anticipates a continuing important role for BPA in achieving high demands for energy efficiency.
- BPA's tiered rates and energy efficiency self-funding expectations encourages utilities to achieve more savings using their own funding mechanisms.
- The cost of delivering energy efficiency will increase over the IPR planning window for a number of reasons (e.g. federal standards changing the mix of programmatic savings achieved, penetrating "hard-to-reach" markets (e.g. multi-family housing) will cost more).

Key Assumptions

- BPA's programmatic achievements will remain relatively stable from 2014-2017.
- The 7th plan is expected to be published during 2015, and BPA will assess changes to its targets and necessary budget based on 7th Plan data when available.
- This IPR Workshop covers Expense budgets only. Assumes capital funding levels are established at the CIR-proposal levels, energy efficiency incentives will continue to be capitalized, not factoring in utility self-management estimates. Assumes 25% of programmatic achievement would remain utility self-funded.
- BPA estimates overall cost will change to an average of $2.05 – $2.10M/aMW * (from $1.9M/aMW under 2010-2014).
- BPA's expense budget is not directly correlated to the magnitude of BPA's energy efficiency targets but supports an array infrastructure services and support.
- The IPR proposed expense budget supports capital-funded acquisition of energy efficiency and directly funds approximately 25% BPA's savings target (Non-programmatic and Market Transformation).

* Estimated still in draft stage

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ANTICIPATED ACHIEVEMENTS

6th Plan Progress-to-Date

- BPA's target for 6th Plan's 2010-2014 period: 504 aMW

Table 1: 6th Plan Savings Summary (aMW) - Adjusted and Updated for Actuals

Savings by funding source	2010 Actual	2011 Actual	2012 Actual	2013 Actual	2014 Projected	Total Savings
BPA Funded Programmatic Savings	51	111	47	45	41	**295**
Utility Self Funded Savings	28	3	12	26	14	**84**
Norpac - BPA Funded	0	1	6	0	4	**10**
Norpac - Cowlitz PUD Funded	0.0	0.0	1	0	1	**2**
Market Transformation (NEEA)	10	10	10	10	9	**48**
Non-Programmatic *	16	17	20	30	44	**127**
One-Time Baseline Adjustment *						**37**
Total Annual Savings	**105**	**143**	**95**	**111**	**113**	**604**
Total Reported 6th Plan Savings*	**102**	**139**	**92**	**108**	**110**	**588**

* Totals may not be summed from components due to rounding to nearest whole number. Nonprogrammatic figures are projected based on research findings to date. One-time baseline adjustment provided by Council. Total reported 6th Plan Savings accounts for one-year measure life adjustments to Total Annual Savings figures.

Anticipated Achievements

- The 6th Plan anticipated 400 aMW 2015-2017*. BPA targets will not be finalized until 7th Plan publication, expected late in 2015. BPA will assess performance against 7th Plan targets when available, identifying necessary adjustments.

Table 2 - 6th Plan Savings Summary (aMW) - 2015-2017 - Annual Goals

Savings by funding source	2015	2016	2017	Total Savings
BPA Funded Programmatic Savings	47	45	45	**137**
Utility Self Funded Savings*	16	15	15	**46**
Market Transformation (NEEA)	6	6	5	**16**
Non-Programmatic - Low	35	37	38	**110**
Federal Standards Adjustment	21	23	23	**67**
Total Savings	**125**	**126**	**126**	**376**
*assumes 25% self funding				
Non-Programmatic - High	68	70	68	**207**
Total Savings	**158**	**158**	**157**	**473**

* Public Power's load-share allocation of 6th Plan figures

Energy Efficiency Acquisition

- Public power will achieve energy efficiency in 2015-2017 through four savings streams:
  - Programmatic Savings
  - Non-Programmatic Savings
  - Market Transformation
  - Federal Standards
- Expense funding is used towards this goal in following ways
  - Acquire and quantify a subset of the savings target set by the 6th Power Plan
  - Funds program support such as technical service providers and the research and evaluation needed to quantify non-programmatic savings and substantiate reported achievements
  - Services and labor that supports the conservation program

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PROPOSED SPENDING LEVELS

Conservation Expense Spending Level Proposal: FY 2015-2017

$(Thousands)	Actuals	Rate Case		Proposed IPR		
	2013	2014	2015	2015	2016	2017
Conservation Acquisition	10,395	16,444	16,754	14,692	14,632	14,642
Demand Response & Smart Grid	-	-	-	1,825	1,245	1,245
Entergy Efficiency Development (Reimbursable)	5,368	11,859	12,083	13,000	15,000	7,000
Legacy Programs	773	1,031	1,050	605	605	605
Low-income Weatherization and Tribal	5,025	5,155	5,252	5,252	5,336	5,422
Market Transformation	14,517	13,919	14,180	14,748	14,996	15,236
Grand Total	36,078	48,408	49,320	50,122	51,814	44,150

- **Conservation Acquisition (Expense)** – Funds acquisition support activities including: planning and evaluation, marketing, sector support, and EE's planning, tracking, and reporting systems.
- **Demand Response & Smart Grid** - assists BPA and utilities adapt to variations in loads and generation sources.
- **Energy Efficiency Development** – This rate neutral budget is used for energy efficiency work that is reimbursed governmental entities.
- **Legacy** – Funds one legacy contract for conservation measures installed in the 1990's.
- **Low Income Weatherization** – Provides grants to states and tribes for low income weatherization work.
- **Market Transformation** – Funds Northwest Energy Efficiency Alliance (NEEA) and associated conservation acquired through market transformation efforts.

Conservation Acquisition

- Re-baseline Conservation Acquisition budget after segregating Demand Response costs, formerly embedded in conservation acquisition.
- Program Infrastructure Support
  - Develops policies to encourage conservation, improves the region's ability to achieve energy efficiency through regional programs. These expense funded initiatives support BPA Conservation's capital program that provides incentive dollars to achieve cost effective energy efficiency.
  - Anticipates heavier budgetary requirement in FY2015 to support one-time program development costs that will not recur in FY2016, 2017.

Conservation Acquisition (con't)

- Program Infrastructure Support funds supply chain contracts and contract staffing that provide and deliver:
  - Market research, market characterizations, and program design
  - Emerging Technology roadmap development, technology scanning, and project management
  - Measure development and funding for RTF
  - Regional analysis and planning (such as 6 Going on 7)
  - Program support such as NW Trade Ally Network, HVAC Trade Ally Network
  - Quality assurance through evaluations

Conservation Acquisition (con't)

- Non-Programmatic Savings
  - Non-programmatic savings target energy efficiency occurring through codes and standards as well as savings created outside of utility programs or market transformation efforts.
  - A portion of the Conservation Acquisition expense proposed spending levels covers the necessary research, data collection and evaluation to capture these savings.
  - Research and data collection
  - Analysis and modeling to size non-programmatic savings

Demand Response and Smart Grid

- Demand Response
  - BPA continues piloting activities to test commercial-scale applications of demand response. BPA anticipates identification of a viable array of cost-effective demand response tools to help address BPA and utility capacity challenges.
  - This budget provides program management support for continuing pilot and product development, but does not fund capacity purchases directly.
- Smart Grid
  - Smart Grid effort closes out in 2015. FY 2015 funding needed to complete*:*
    - Navigant - an important deliverable associated with the PNW SGDP
    - Utility-friendly toolkit to evaluate DR investments.

Low Income

- Low Income Energy Efficiency - State and Tribal Grants
  - BPA administers a grant program to the four Northwest states and recognized tribes within the region for the purpose of improving efficiency levels in qualified low-income residences.
  - BPA's funding for the Low Income energy efficiency grants is adjusted at an average of 3% per year in this IPR proposal.

Energy Efficiency Development

- 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.
  - Both direct and indirect costs for these services are fully paid for by the client agency, thus making these activities rate neutral to BPA and its customers.
  - BPA has a robust pipeline of projects for FY2015 and 2016. Budget estimates for 2017 reflect today's queue of projects. Additional projects may surface causing adjustment of latter-year budget needs.

Legacy

- Legacy Programs
  - Funds are still owed to a regional entity for prior conservation work. The upfront funding to finance these measures was raised by others rather than BPA. BPA continues to pay costs from those past agreements.
  - Legacy program costs will continue through 2025.

Market Transformation

- Market Transformation Savings
  - BPA partners with and is the major funder of the Northwest Energy Efficiency Alliance (NEEA), which drives market transformation initiatives throughout the Northwest.
  - The Market Transformation budget is estimated at a level sufficient to BPA's funding proportion of NEEA's draft business plan for its 2015-2019 funding cycle.

Risks of Reducing Funding Levels

- BPA's Energy Efficiency IPR budget was built to maintain continuity in programs, services, offerings, and work streams. Reducing funding below the proposed levels would require curtailing or diminishing planned services, offerings, projects, or functions. Which would:
  - Reduce bandwidth to develop and implement programs, drive pilots and research, and provide support services.
  - Reduce planned evaluation activities. BPA is currently ramping evaluation activities to gain compliance with Regional Technical Forum guidelines on evaluation.
  - Reduce investments in program design and implementation. Doing so reduces BPA's regional infrastructure which provides critical assistance to utilities in achieving energy efficiency. BPA's programs are designed to build economies of scale. Decreasing program investments may lead to lower acquisitions overall or may lead to less cost efficient savings.
  - Reduce investments in demand response. Reducing this investment materially constrains the organization's bandwidth available to cultivate market-scale projects and build the strategic plan for the long-term leverage of demand response by BPA.

Financial Disclosure

- This information has been made publicly available by BPA on June 16, 2014 and contains information not reported in agency financial statements.

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QUESTIONS?