



Integrated Program Review

Columbia Generating Station O&M

July 18, 2012
9:00-11:00 am

BPA Rates Hearing Room, 911 NE 11th Ave Portland, OR
To participate via phone dial 503-230-5566, when prompted enter access
code 4433#



Background of CGS O&M

- **The Columbia Generating Station (CGS) costs are included in the revenue requirement of the Power Services rate structure and are tied to operations of the nuclear plant**
- **1,107 MWnet boiling water reactor**
- **Owned by Energy Northwest**
- **Located on the Department of Energy Hanford Site**
- **Began commercial operation in December 1984**
- **The Nuclear Regulatory Commission (NRC) approved Energy Northwest's request for a twenty year extension to CGS' operating license in May 2012**
- **2 year refueling and maintenance outage cycle**
- **BPA purchases 100% of CGS power and pays all operating costs per the Project, Net Billing and Direct Pay agreements**
- **BPA's goal is that the plant be operated in a safe, reliable, and cost-effective manner such that its performance is in the top quartile of the industry (technical performance) and top half of the industry (cost performance) relative to its peers on a sustained basis.**

CGS O&M Accounting Differences

- Energy Northwest prepares budgets and long range forecasts for CGS on a cost basis.
- Energy Northwest uses the cost basis budget for its accounting, cost control purposes and benchmarking.
- Energy Northwest also prepares a budget based on funding (cash) needs.
- BPA prepares its rate cases and budgets for CGS on a cash basis.
- Energy Northwest and BPA have different fiscal years:
 - Energy Northwest has a July-through-June fiscal year.
 - BPA has an October-through-September fiscal year.
- These differences make a cost to cash and fiscal year conversion necessary.
- Energy Northwest's CGS budget is submitted annually to BPA in April and non-disapproved by BPA in May.
- The Energy Northwest CGS Long Range Plan is updated annually and presented to BPA.

CGS O&M Accounting Differences (continued)

- **Differences between cost basis and cash basis:**
 - Nuclear fuel burn-up vs. Nuclear fuel procurement
 - Timing of spent fuel waste disposal fees
 - Timing of generation tax payment

- **Additional funding needs included in BPA's budget for CGS:**
 - NEIL insurance
 - Decommissioning Trust Fund contributions

Columbia Generating Station (CGS)

BPA Fiscal Years - Dollars in Millions

Columbia Generating Station	2011 ACTUAL	2012 SOY	2013 BP-12 RATE CASE	2013 IPR	2014 IPR	2015 IPR
COLUMBIA GENERATING STATION	309,272,662	293,100,000	330,200,000	331,000,000	305,500,000	348,100,000
DECOMMISSIONING CONTRIBUTIONS	10,417,329	11,266,000	13,745,000	3,767,000	3,918,000	4,075,000
NEIL INSURANCE	2,521,668	2,000,000	2,000,000	3,500,000	3,500,000	3,500,000
Total	322,211,659	306,366,000	345,945,000	338,267,000	312,918,000	355,675,000

Program Description

BPA acquires 100% of CGS generation and funds 100% of its costs plus directly funds the Decommissioning Trust Fund and NEIL insurance premiums.

Strategic Objectives

- S1 – Policy and Regional Actions
- S2 – FCRPS Operations and Expansion
- S9 – Stakeholder Satisfaction
- I4 – Asset Management
- I6 – Collaboration

Key Products and Outputs

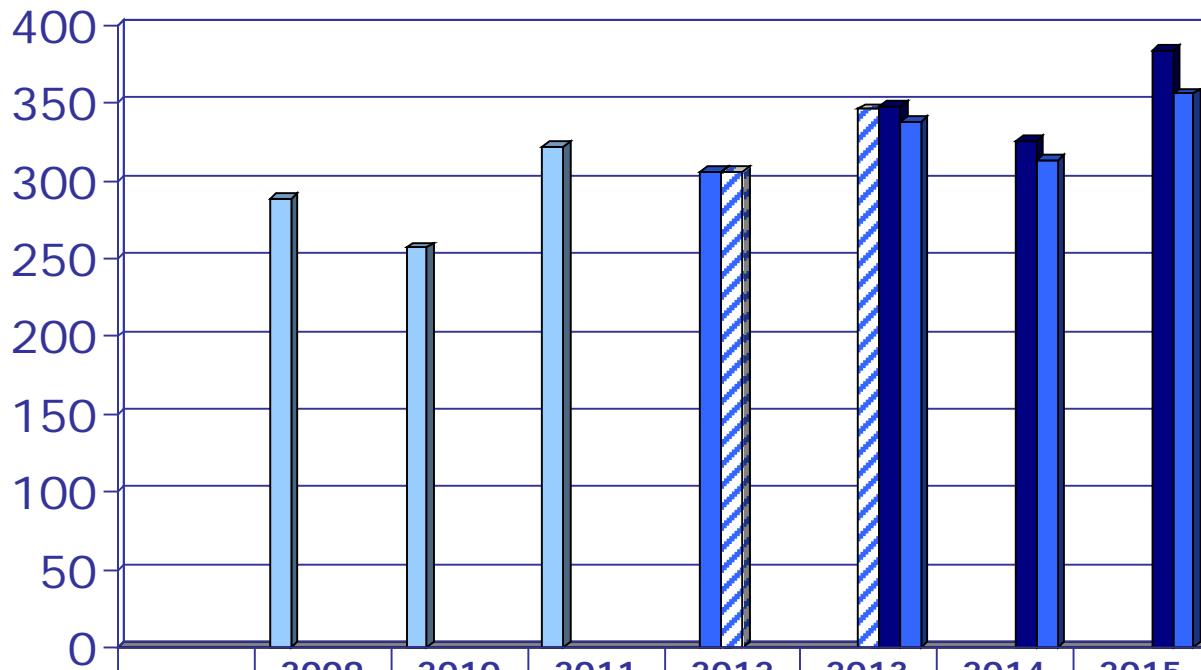
CGS continued safe, reliable operation is the key product. CGS will have a maintenance and refueling outage in FY 2013 and 2015. Capital and major maintenance projects will be implemented during the outage.

FY 2014-15 Program Spending Drivers

2014 and 2015 IPR numbers reflect the current Energy Northwest CGS Long Range Plan. CGS continues to live within its Long Range Plan that was established in 2008. Increases are due to the purchase of nuclear fuel as the uranium inventory is being replenished. The recent Depleted Uranium Project impacts have been included in the IPR forecasts and has helped reduce the increase in expected fuel funding needs. Decommissioning Trust Fund contributions have been reduced to reflect the impact of CGS extended operating life.

CGS O&M Cash Basis

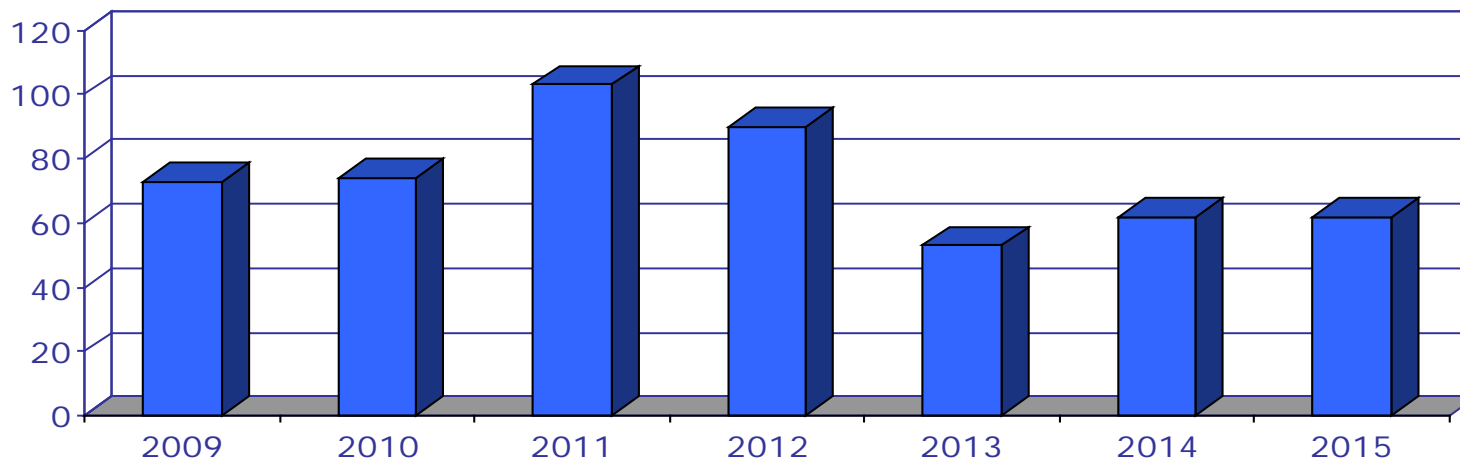
BPA Fiscal Years - Dollars in Millions



	2009	2010	2011	2012	2013	2014	2015
Actuals	288	257	322				
SOY FY 2012				306			
BP-12 Rate Case				306	346		
2012 IPR Kick Off Forecast					348	326	384
2012 IPR Updated Forecast					338	313	356

CGS Capital

Energy Northwest Fiscal Years – Dollars in Millions



Energy Northwest capital numbers are in Energy Northwest fiscal years as the associated debt service calculations are based on Energy Northwest fiscal years.

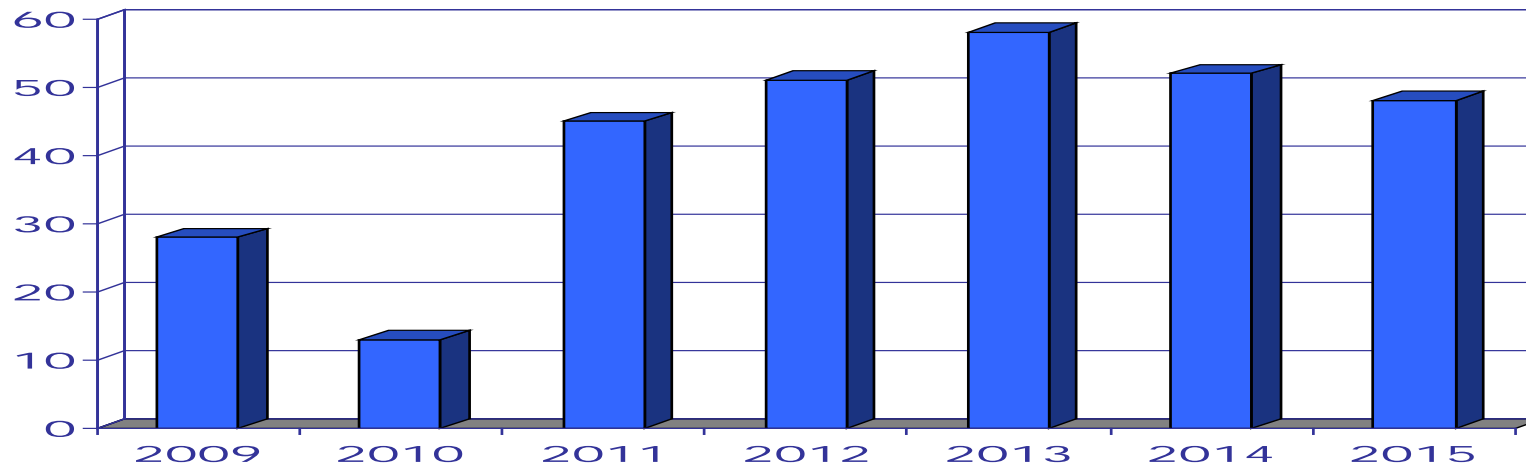
Energy Northwest's focus on continued investment to improve Plant reliability is reflected in the graph above.

The condenser replacement project was completed in 2011. The condenser settlement is included in 2012.

Fiscal years 2013, 2014 and 2015 include \$4 million, \$6 million and \$12 million respectively for Fukushima related projects. These estimates may change as regulatory mandates are issued.

CGS Nuclear Fuel

BPA Fiscal Years – Dollars in Millions



Nuclear fuel funding needs increased in 2011 through 2013 due to the end of the Uranium Tails project and the need to replenish uranium and enrichment inventory used in previous years, the purchase of additional spent fuel storage casks, and enrichment costs that were deferred from Energy Northwest FY 2011 into Energy Northwest FYs 2012 and 2013.

FY 2013, FY 2014 and 2015 reflect the Depleted Uranium project signed in May 2012.

The nuclear fuel numbers from 2009 are from the FY 2006 Rate Case.

FY 2010 and 2011 are from the FY 2010 Rate Case.

FY 2012 and 2013 are from the FY 2012 Rate Case.

FY 2014 and 2015 are from the FY 2012 IPR.

CGS Performance Indicators

BPA and Energy Northwest review CGS performance indicators jointly on a quarterly basis.

- **Quarterly Management Review**
 - Capability Factor
 - Performance Index
 - Forced Loss Rate
 - Collective Radiation Exposure
 - Cost of Power
 - Generation

- **Additional Indicators**
 - **Operation**
 - Water Use Rate
 - Automatic SCRAMS
 - Fuel Reliability
 - Equipment Reliability Index
 - Late Critical Preventative Maintenance items
 - Corrective Maintenance Backlog
 - NRC Violations and Findings
 - Human Performance
 - **Cost**
 - Capital – Year to Date
 - O&M – Year to Date
 - **Workforce**
 - Industrial Safety Accident Rate
 - Station Event Free Days Clock Resets

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Financial Disclosure

This information has been made publicly available by BPA on July 17, 2012 and contains information not reported in agency financial statements.