



2013

Integrated Resource Plan

Washington Utilities and
Transportation Commission

October 3, 2013

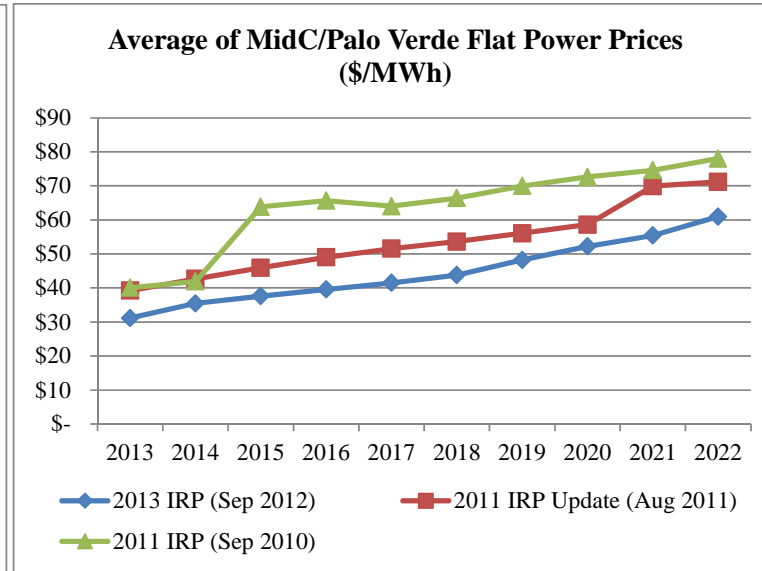
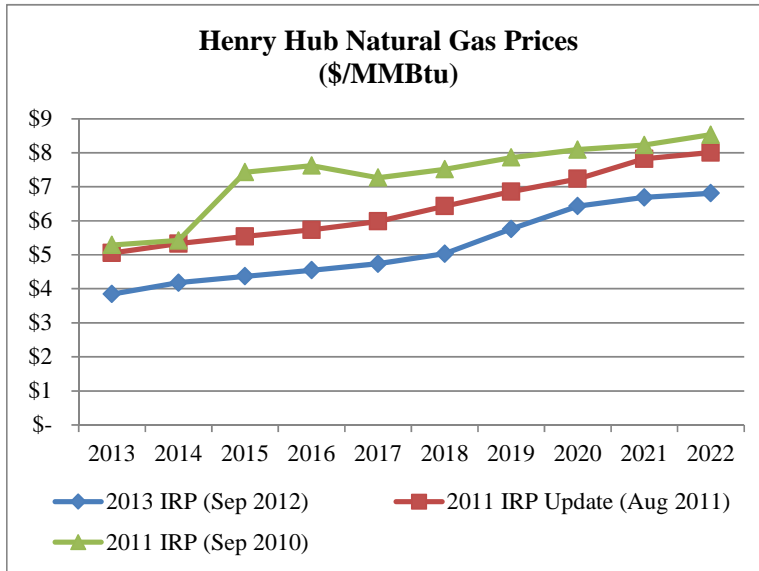
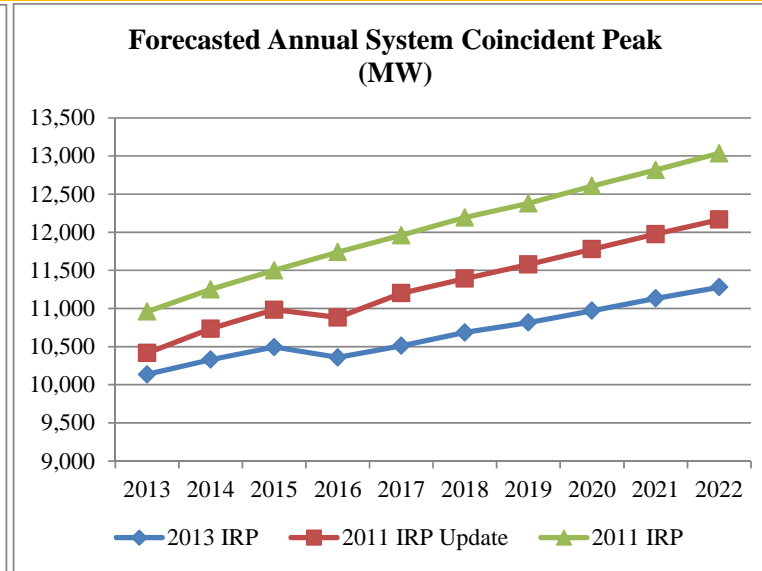
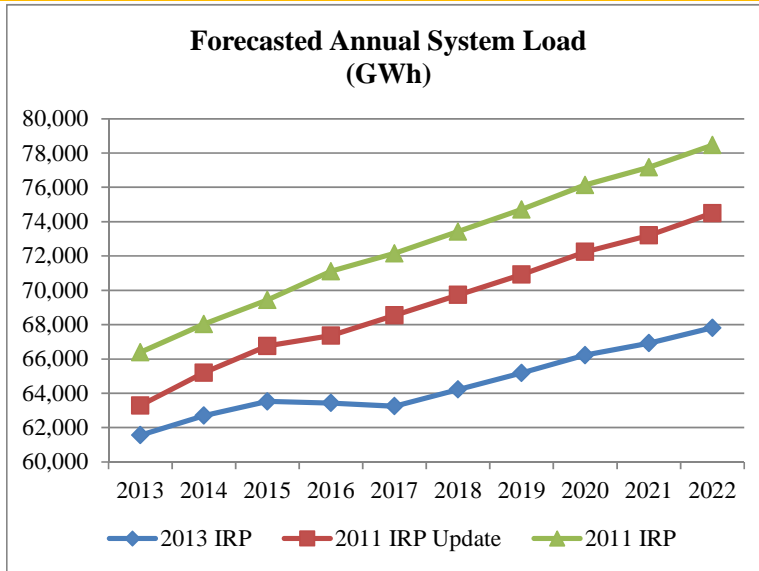


Let's turn the answers on.

2013 IRP Highlights

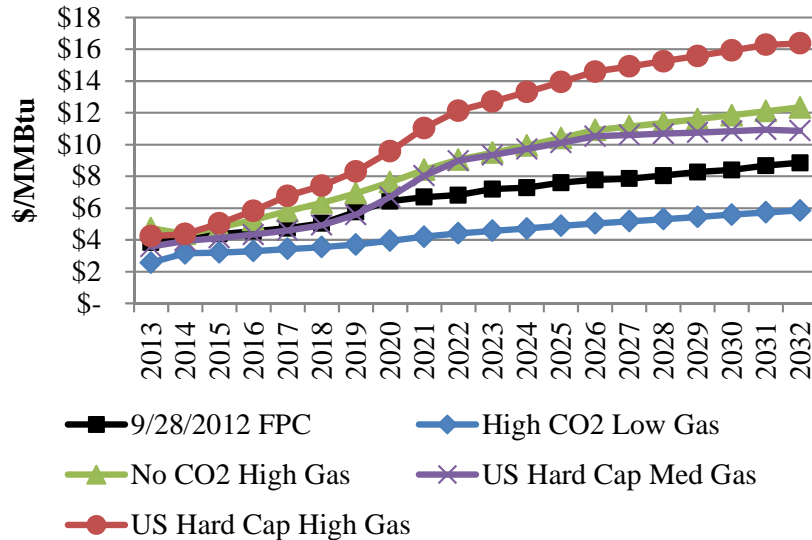
- The IRP provides a framework for actions the Company will take for our customers
- Customer energy use is down, growth in demand has slowed
- With reduced loads, two-thirds of our customers' incremental energy needs can be met with energy efficiency over the next 10 years
- With low market prices, firm purchases supplement energy efficiency resources – no major new generating resource until 2024
- Where it makes sense, we're closing coal-fueled generating plants or converting them to natural gas
- Where it makes sense, we will make the environmental investments required to keep these low-cost units operating and producing low-cost electricity for customers

Key Drivers: Loads & Market Prices

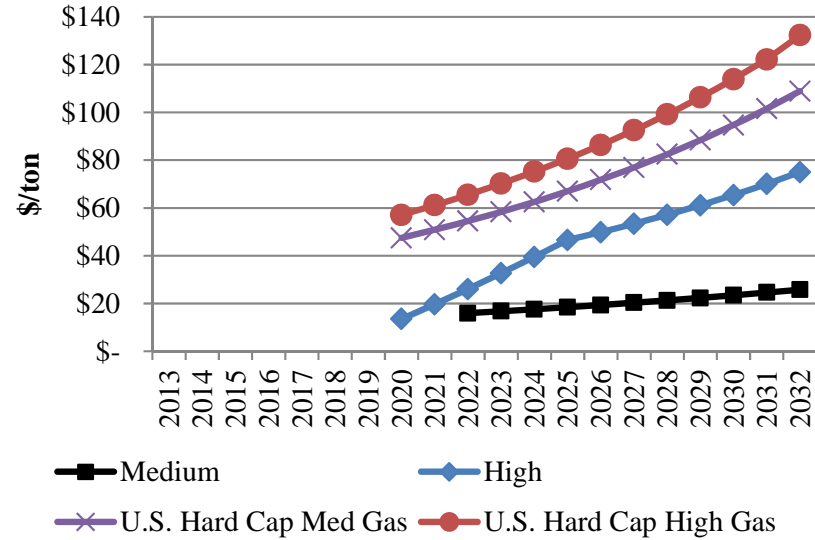


Resource Portfolio Development

Nominal Average Annual Henry Hub Gas Prices

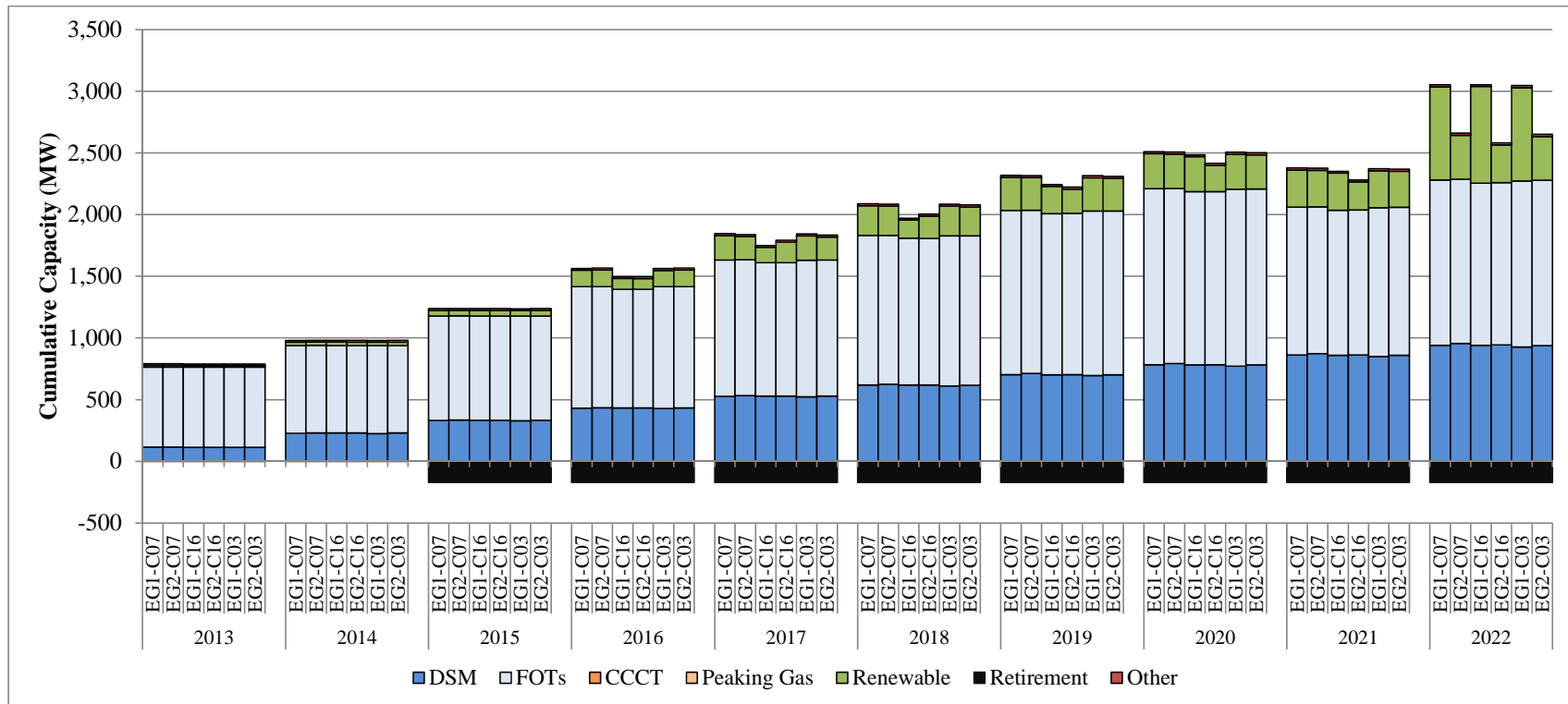


Nominal CO2 Prices



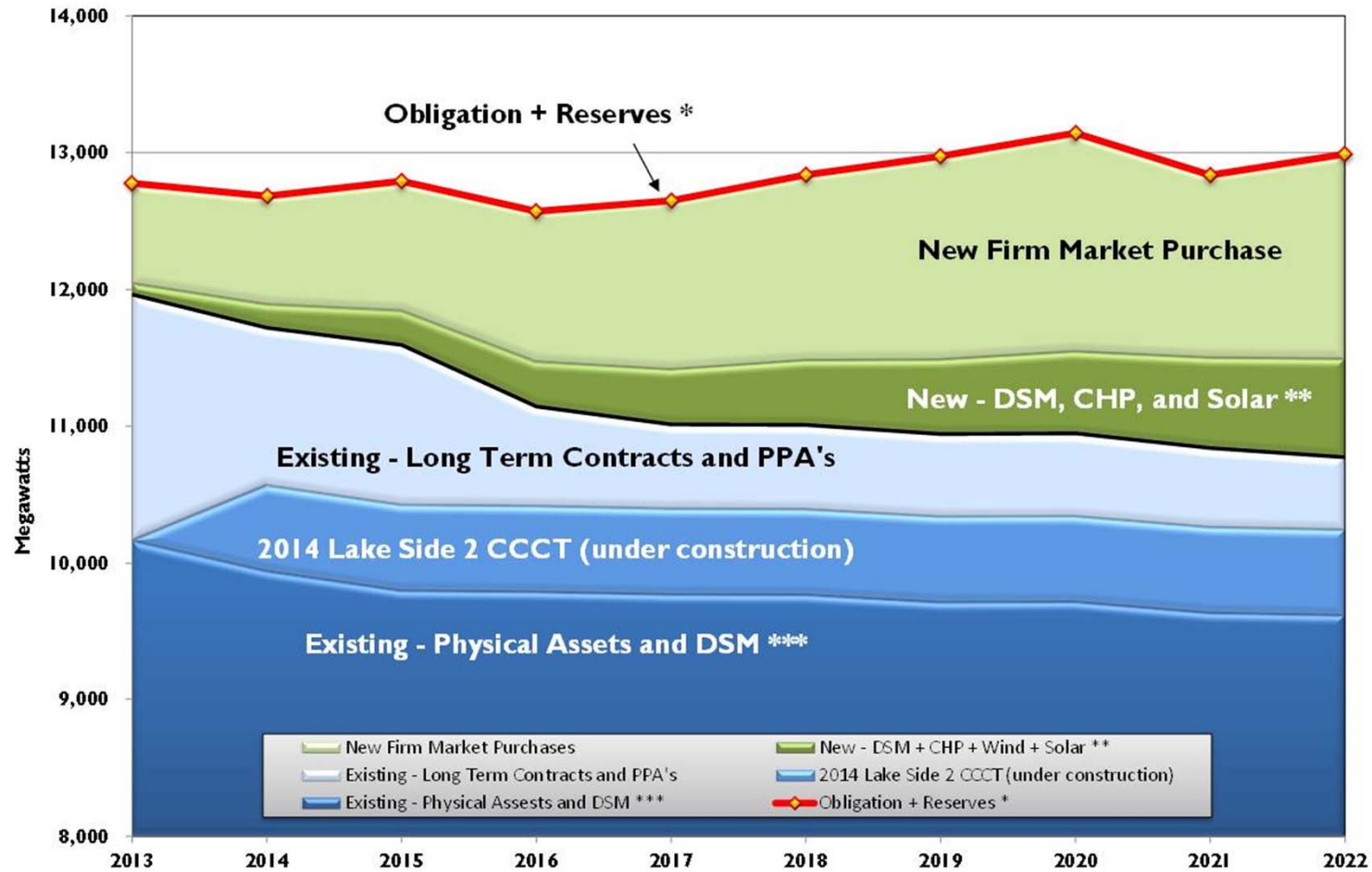
- Varying combinations of price, policy, and technology assumptions
 - Commodity prices (natural gas, power, coal, and CO₂)
 - Environmental policy
 - Renewable portfolio standards (RPS)
 - Coal unit environmental investments
 - Resource technology cost & performance
- 19 core case definitions, 5 Energy Gateway transmission scenarios (94 Portfolios)

Top Performing Portfolios



- With reduced loads and market prices, top performing portfolios are very similar
- Energy efficiency and firm market purchases are consistently lowest cost/risk means of meeting the resource need

Preferred Portfolio (Capacity)

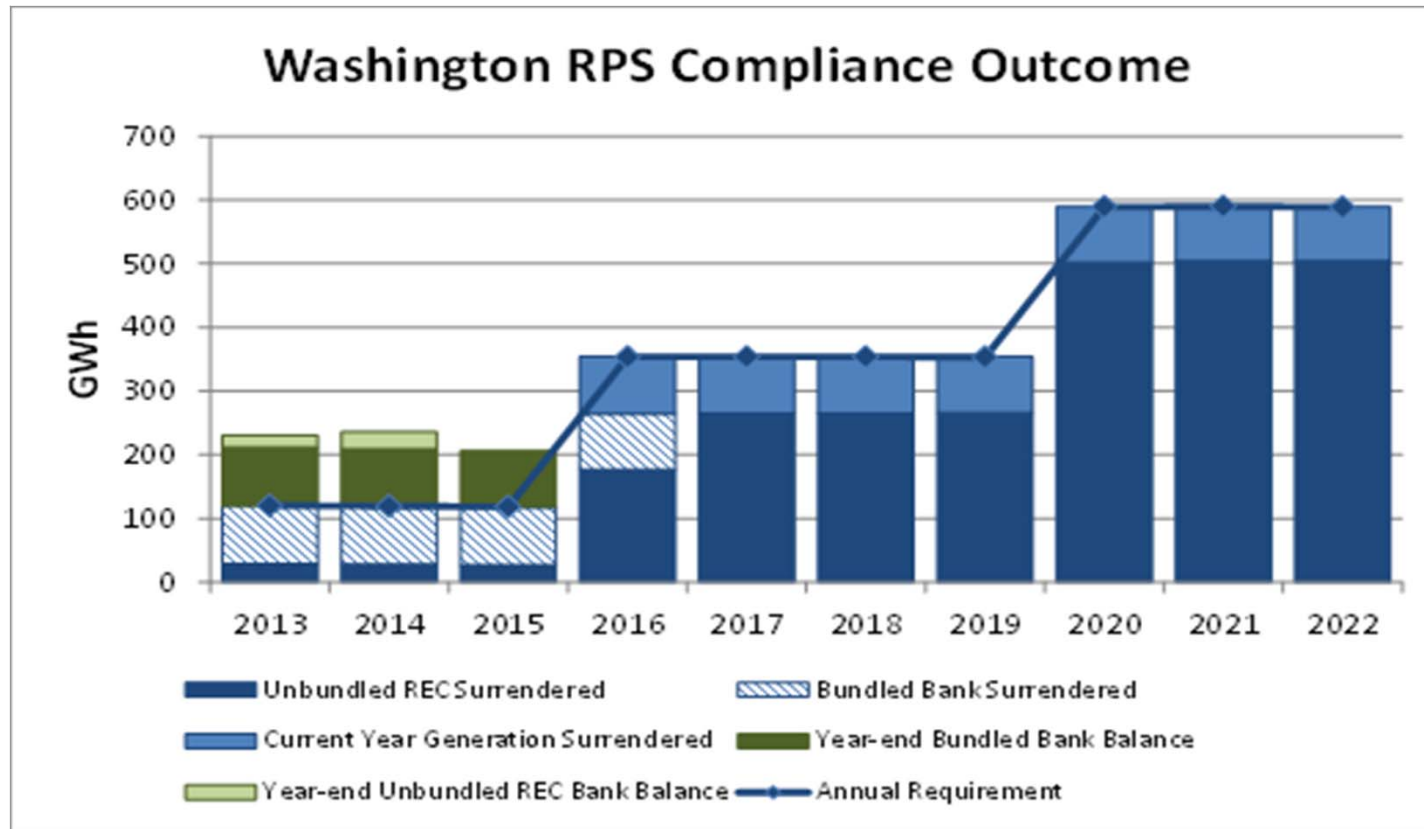


* Includes 13% Planning Reserves, Sales and Non-Owned Reserves

** Solar resources peak contribution is 8 MW by 2022 and Combined Heat and Power (CHP) contributes 12 MW.

*** Includes retirements, turbine upgrades, and gas repower. DSM includes both Class 1 and 2.

Washington Renewable Portfolio Standard



Energy Gateway Transmission

- The Sigurd-Red Butte project (Segment “G”) is under construction
- Preliminary analysis of the Windstar-Populus project (Segment “D”) shows customer benefits supporting on-going permitting efforts
- Action plan calls for further stakeholder review of Segment D analysis and continued permitting activities for all Energy Gateway Segments



Environmental Investments in Coal

- Alternatives to incremental environmental investments in existing coal units were considered in the development of candidate resource portfolios
 - Early retirement
 - Conversion to natural gas
- Detailed financial analysis included in Confidential Volume III of the 2013 IRP
 - Naughton Unit 3 conversion to natural gas (2014 – 2017 timeframe)
 - Hunter Unit 1 baghouse and low NO_x burners in 2014
 - Jim Bridger Unit 3 and Unit 4 selective catalytic reduction (SCR) in 2015/2016
- Continue to evaluate alternative compliance strategies that will meet Regional Haze compliance obligations, related to the U.S. Environmental Protection Agency's Federal Implementation Plan requirements to install SCR equipment at Cholla Unit 4

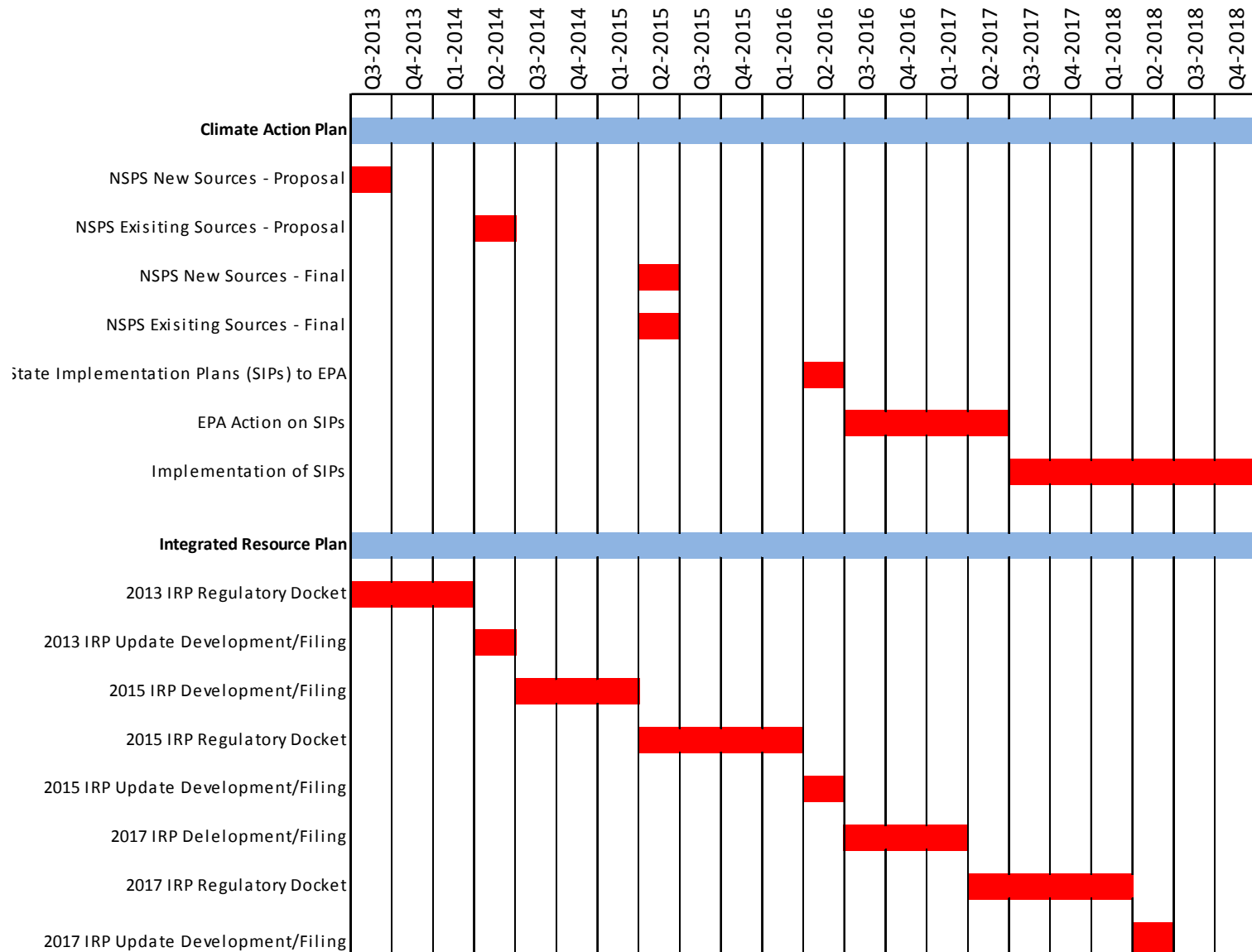
Coal Resource Action Items in the 2013 IRP

- Naughton Unit 3
 - Continue permitting/development efforts for gas conversion
 - Issue RFP to procure gas transportation for the Naughton plant
 - Issue RFP for EPC consistent with permitting process
- Hunter Unit 1
 - Complete installation of baghouse conversion and low NO_x burner projects as required by the end of 2014
- Jim Bridger Units 3 and 4
 - Complete installation of SCR as required by the end of 2015 and 2016, respectively
- Cholla Unit 4
 - Provide an update of the Cholla Unit 4 analysis regarding compliance alternatives in the 2013 IRP Update

President Obama's Climate Action Plan

- Unveiled June 25, 2013, includes a timetable for the U.S. Environmental Protection Agency (EPA) to regulate carbon dioxide emissions from power plants
- EPA to publish a new proposed rule regulating carbon dioxide emissions from existing power plants by June 2014, and to finalize the rule by June 2015
- The final rule for existing sources is to include a requirement that states submit implementation plans to the EPA no later than June 30, 2016
- Following submission of state implementation plans, EPA review would commence, and effective compliance dates would begin at some point thereafter
- The Presidential Memorandum does not include detail on how EPA will approach CO₂ regulation and does not identify what the resulting standards, regulations, or guidelines will ultimately entail

President's Climate Action Plan / IRP Timeline Overlap



Wyoming Regional Haze Compliance

Comparison of Wyoming SIP, EPA FIP Proposals and PacifiCorp IRP Cases

Unit	Unit Capacity (MW)	Wyoming Regional Haze SIP Technology	EPA 2012 Proposal Technology	PacifiCorp 2013 IRP Technology (Base Case)	PacifiCorp 2013 IRP Technology (Stringent RH Case)	EPA 2013 Re-Proposal Technology
Naughton 1	158	LNB	LNB	LNB	LNB	SCR (within 5 years)
Naughton 2	205	LNB	LNB	LNB	LNB	SCR (within 5 years)
Naughton 3	330	SCR/BH (12/31/14)	SCR/BH (12/31/14)	Gas Conv. (6/30/15)	Gas Conv. (6/30/15)	SCR/BH (12/31/14)
Jim Bridger 1	354	SCR (12/31/22)	SCR (within 5 years)	SCR (12/31/22)	SCR (12/31/17)	SCR (12/31/22)
Jim Bridger 2	363	SCR (12/31/21)	SCR (within 5 years)	SCR (12/31/21)	SCR (12/31/17)	SCR (12/31/21)
Jim Bridger 3	349	SCR (12/31/15)	SCR (12/31/15)	SCR (12/31/15)	SCR (12/31/15)	SCR (12/31/15)
Jim Bridger 4	353	SCR (12/31/16)	SCR (12/31/16)	SCR (12/31/16)	SCR (12/31/16)	SCR (12/31/16)
Dave Johnston 1	106	LNB*	LNB (7/31/18)	n/a	LNB (12/31/2016)	LNB (7/31/18)
Dave Johnston 2	106	LNB*	LNB (7/31/18)	n/a	LNB (12/31/2018)	LNB (7/31/18)
Dave Johnston 3	220	LNB	SNCR (within 5 years)	LNB	SNCR (12/31/17)	SCR (within 5 years)
Dave Johnston 4	328	LNB	LNB	LNB	LNB	SNCR (within 5 years)
Wyodak	268	LNB	SNCR (within 5 years)	LNB	SNCR (12/31/17)	SNCR (within 5 years)

- PacifiCorp must meet its compliance obligations and has initiated its assessment of EPA's new requirements on a unit-by-unit basis. The company's assessment is focused on evaluating compliance costs and identifying potential alternatives that are in the best interests of its customers. Evaluation results will be incorporated into the 2013 IRP Update or in the 2015 IRP, as appropriate.
- PacifiCorp finds EPA's re-proposed rule to be an extreme and unlawful interpretation of the Regional Haze Rules and will argue from that position in the ongoing public comment process
- If the EPA's re-proposed rule is left to stand, many of the company's coal-fueled generating plants in Wyoming could face early shut-down

* Wyoming Regional Haze SIP contemplates low-NO_x burners would be installed at Dave Johnston Units 1 and 2 by the end of 2018. However, changes to the Wyoming Air Quality regulations are required before the state can mandate the controls.

Wyoming Regional Haze FIP Comments

- EPA fails to afford the required deference to Wyoming's significant discretion in developing their SIP under the CAA and Regional Haze Program
- EPA improperly proposed to reject Wyoming's BART determinations for NO_x, which were based on Wyoming's own thorough and well-supported five-factor BART analyses
- EPA improperly proposed a FIP based on an incomplete and flawed five-factor BART analyses
- EPA acted in an untimely fashion in reviewing the Wyoming RH SIP, and due to this delay, has not based its cost effectiveness assessments on appropriate remaining lives of the affected units
- At EPA's request, PacifiCorp provided information regarding control technology options that could be finalized either instead of, or in conjunction with, EPA's FIP; however, PacifiCorp continues to believe that the alternate technologies cannot be shown to be cost effective using EPA's guidelines

Litigation Activity in Montana – Colstrip 3 & 4

- On September 18, 2012, EPA published its final Federal Implementation Plan (FIP) for the state of Montana. The FIP does not require additional emissions controls for Colstrip Units 3 and 4
- In November 2012, certain environmental groups appealed EPA's FIP to the U.S. 9th Circuit Court of Appeals. These groups assert that EPA's FIP should require SCR controls on Colstrip Units 3 and 4
- On May 28, 2013, PacifiCorp filed an amicus brief in support of EPA's FIP that does not require SCR controls on Colstrip Units 3 and 4
- Briefing by the other parties has now been completed.
- The 9th U.S. Circuit Court of Appeals is expected to hear oral arguments by the Spring of 2014, although no date has been set
- The 9th U.S. Circuit Court of Appeals is expected to issue a final decision in the Fall of 2014 or the Winter of 2015, although there is no mandated deadline for issuing a decision