

Report on Net Neutrality/Open Internet

**Tacoma Public Utility Board Study Session
January 10, 2018**

Tenzin Gyaltsen
Click! General Manager

Background

- What is Open Access Network?
- What are Open Internet/Net Neutrality Rules?
- Open Internet Rules
- City's response to the FCC's action
- Click!/ISPs stance on open Internet

What is Open Access Network?

- Open Access Network is a network that is open for use by many service providers
- Two layer model:
 - An owner/operator of the network
 - One or more entities providing services over the network
 - The owner/operator typically does not compete with the entities providing services over the network
- Three layer model:
 - An owner of the network
 - An operator of the network
 - One or more service providers using the network
- Click! operates under a two layer model

What are Open Internet/Net Neutrality Rules?

- Per the FCC's Consumer Guide on Open Internet:

“Sometimes referred to as “net neutrality,” “Internet freedom” or the “open Internet,” these rules protect your ability to go where you want when you want online. Broadband service providers cannot block or deliberately slow speeds for internet services or apps, favor some internet traffic in exchange for consideration, or engage in other practices that harm internet openness.”

2005 Internet Policy Statement*

- To encourage broadband deployment and preserve and promote the open and interconnected nature of the public Internet, consumers are entitled to:
 - Access the lawful Internet content of their choice
 - Run applications and use services of their choice, subject to the needs of law enforcement
 - Connect their choice of legal devices that do not harm the network
 - Competition among network providers, application and service providers, and content providers

*FCC 05-151 - Policy Statement; Adopted: August 5, 2005; Released: September 3, 2005

2010 Open Internet Order*

- Transparency
- No blocking and no unreasonable discrimination
- Reasonable network management
- Open Internet Order challenged by Verizon in 2011
- In January 2014, DC circuit court while upholding the FCC's authority and the basic rationale supporting the Open Internet Order, struck down the no blocking and no unreasonable discrimination rules
 - The Communications Act prohibits the FCC from exercising its authority to impose common carrier regulation on a service not classified as a "telecommunications service" and common carrier treatment of "private mobile service"

*FCC 10-201 – Report and Order; Adopted: December 21, 2010; Released: December 23, 2010

2015 Title II Order*

- “Light touch” approach using Title II – tailored for the 21st Century
- 700 codified rules made inapplicable
- Bright Line Rules:
 - No blocking
 - No throttling
 - No paid prioritization
 - No unreasonable interference or unreasonable disadvantage standard for Internet Conduct
 - Transparency requirements to protect and promote Internet openness

*FCC 15-24 – Report and Order on Remand, Declaratory Ruling, and Order; Adopted: February 26, 2015; Released: March 12, 2015

2017 Internet Freedom Order*

- Restores broadband Internet access service to its Title I information service classification
- Reinstates private mobile service classification of mobile broadband Internet access service
- Retains Transparency Rules in the Open Internet Order with some modifications and eliminates the additional reporting obligations of the Title II Order which requires all ISPs to disclose the following:
 - Blocking
 - Throttling
 - Affiliated prioritization
 - Paid prioritization

*FCC 17-166 – Declaratory Ruling, Report and Order, and Order; Adopted: December 14, 2017; Released: January 4, 2018

2017 Internet Freedom Order (cont'd)

- Congestion management
 - Application-specific behavior
 - Devise attachment rules
 - Security
 - Service Description
 - Impact of Non-Broadband Internet Access Service Data Services
 - Price
 - Privacy policies
 - Redress options
- Revokes Small System Waiver
 - Preempts any state and local measures
 - Restores authority of the Federal Trade Commission to police privacy practices of ISPs

City's response to the FCC's action

- The City of Tacoma adopts Resolution 39902 on December 19, 2017 urgently requesting the Tacoma Public Utility Board require Click! Network to include in all contracts with current and future ISPs, as a condition to use Click! Network, that the ISPs abide by the Click! Network Open Internet Policy

Click!/ISPs stance on open Internet

- Click! has an existing Open Internet Policy
- The Open Internet Policy is posted on the Click! website
- As owner/manager of the network, Click! proactively manages the network to ensure its shared/best effort Internet service is optimized for all users of its service and provisions the Internet service for resale by the ISPs
- The Click! ISPs resell the Internet service that is provisioned by Click!
- The Click! ISPs have no access nor control over the Internet connection therefore have no ability to disrupt the Internet service
- As such, there is no action necessary at this time stemming from the City Council resolution to modify ISP contracts
- Rainier Connect is a private telecommunications company that has business interests that are independent of its relationship with Click!

About PGP

Public Generating Pool (PGP) is a trade association, representing 10 consumer-owned utilities in Oregon and Washington



- PGP have diverse customer profiles, market positions, BPA relationships, and resource ownership.
- Public Generating Pool (PGP) is a trade association, representing 10 consumer-owned utilities in Oregon and Washington.

About E3 – Energy + Environmental Economics

- Founded in 1989, E3 is a prominent energy consulting firm that helps utilities, regulators, policy makers, developers, and investors make the best strategic decisions possible as they implement new public policies, respond to technological advances, and address customers' shifting expectations.

“Stakeholders of all stripes rely on E3’s rigorous, unbiased analysis to inform public policy discussions.”

Ralph Cavanagh, Energy Program Coordinator, NRDC

Arne Olson, Partner, E3

- 25 years of experience in energy analysis
- Consults extensively for utilities, electricity system operators, asset owner, project developers, electricity consumers and regulators
- Frequent speaker and prolific author on a wide range of issues, including resource planning, renewables and emerging technologies, transmission planning and pricing, energy and climate policy.
- *Last but not least*, Arne is a Washingtonian. He grew up in
- East Wenatchee, graduated from the UW and served for six years in the Energy Policy Division of the Washington State Energy Office.



Energy+Environmental Economics

Pacific Northwest Low Carbon Scenario Analysis

Achieving Least-Cost Carbon Emissions
Reductions in the Electricity Sector

Tacoma Power
January 10, 2018

Arne Olson, Partner
Nick Schlag, Sr. Managing Consultant
Jasmine Ouyang, Consultant
Kiran Chawla, Consultant



About This Study

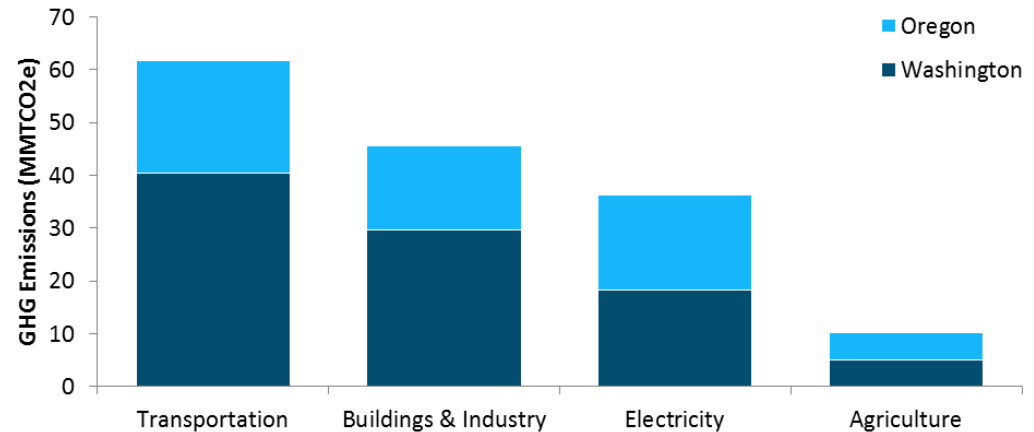
+ Oregon and Washington are currently exploring potential commitments to deep decarbonization in line with international goals:

- 80-91% below 1990 levels by 2050 (proposed)

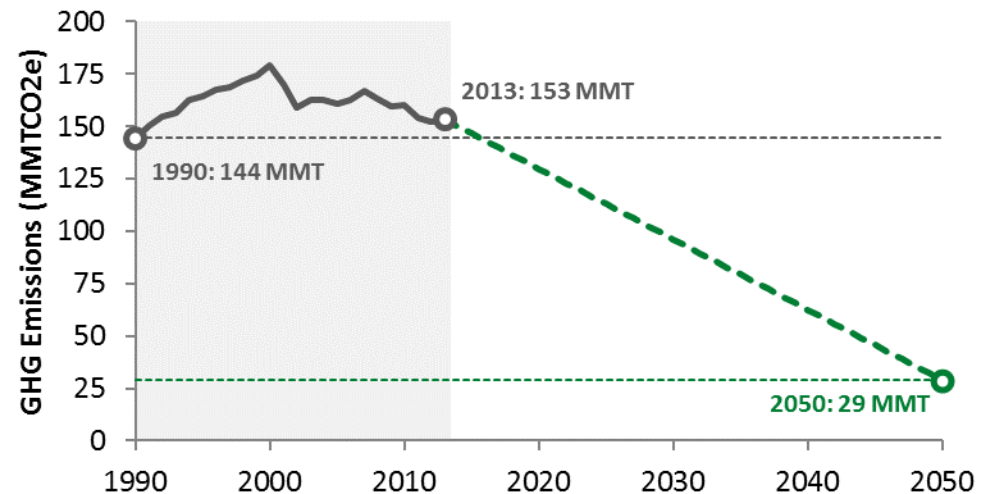
+ This study was conceived to inform policymakers on the effectiveness of various potential policies to reduce GHG emissions in the Northwest:

- What are the most cost-effective ways to reduce electricity sector emissions?
- What is the value of existing carbon-free resources?

2013 GHG Emissions for Oregon and Washington



Historical and Projected GHG Emissions



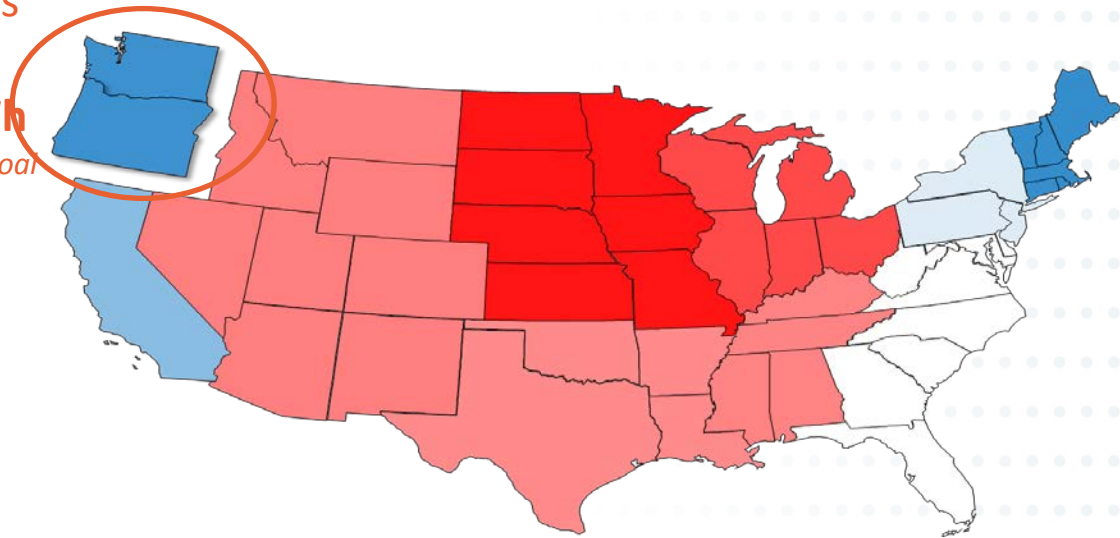


Carbon Intensity of the Northwest's Electricity Sector is Relatively Low

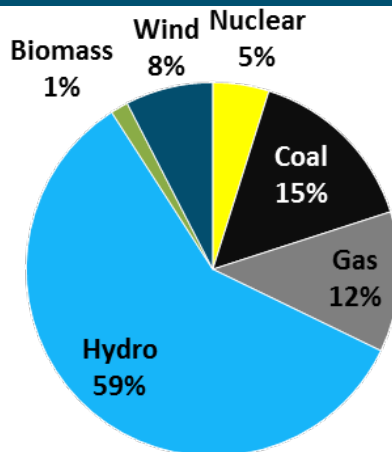
- + Due to large fleet of existing zero-carbon resources, electric emissions intensity in the Pacific Northwest is already below other regions in the United States

2013 Regional GHG Intensity of Electricity Supply (tons/MWh)

2013 emissions intensity:
0.26 tons/MWh
(includes out-of-state coal resources)



WA/OR Generation Mix



2013 Emissions Intensity (tons/MWh)

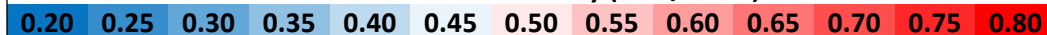
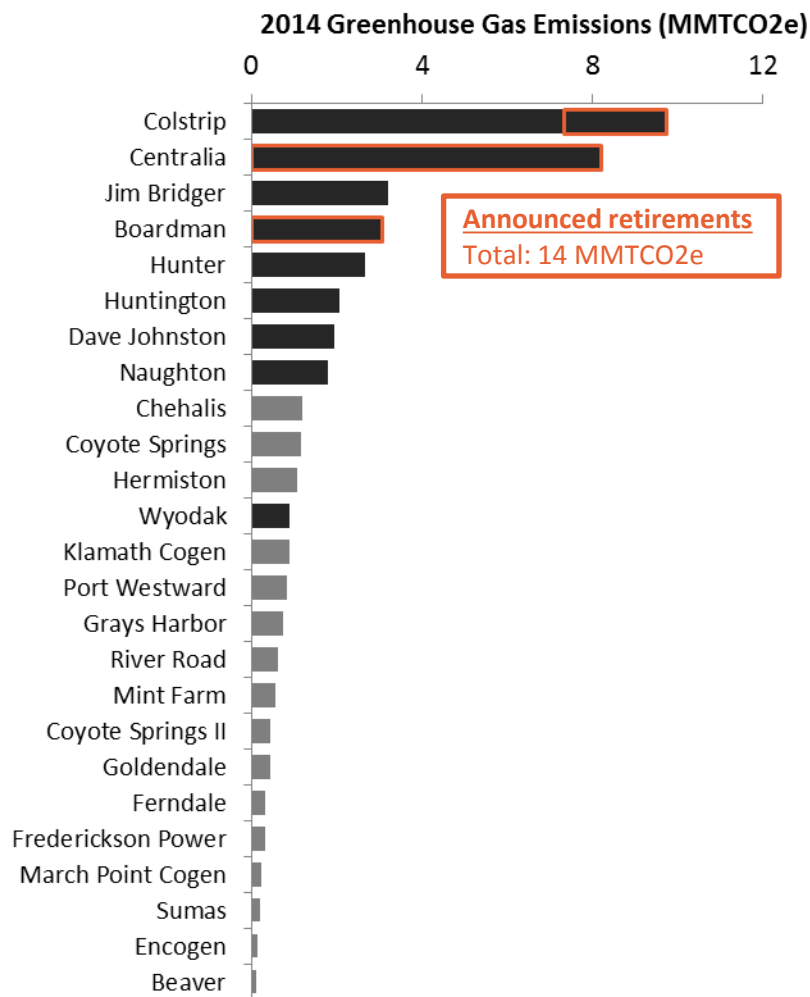


Figure developed using data gathered from state 2013 GHG inventories for Washington, Oregon, and California; supplemented with data from EIA Annual Energy Outlook 2016



A Handful of Plants are Responsible for Most of the Electric Sector GHG Emissions in the Northwest



+ Existing coal plants (9 units) are responsible for 33 million metric tons of emissions—roughly 80% of all emissions attributed to Washington & Oregon

- Includes contracted generation in Montana, Wyoming

+ Existing gas generation accounts for roughly 9 million metric tons



Overview of the Analysis

+ This study uses E3's Renewable Energy Solutions (RESOLVE) Model

- Designed for modeling operations and investments for high-renewable power systems
- Utilized in several jurisdictions including California, Hawaii and New York

+ Selects optimal portfolio of renewable and conventional resources over time

- Optimal dispatch over a representative set of operating days in each year
- Meets energy, capacity and balancing needs
- Complies with RPS or GHG target ("overbuilding" portfolio if necessary)

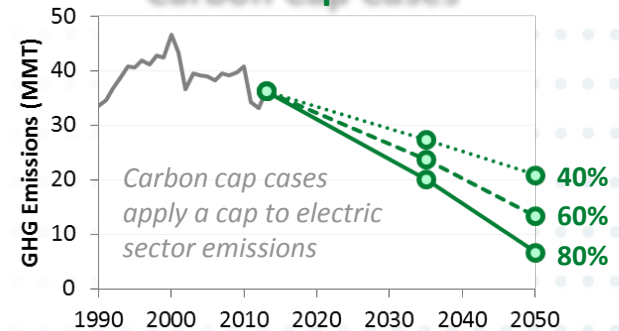
Resource Option	Examples of Available Options
Natural Gas Generation	<ul style="list-style-type: none">• Simple cycle gas turbines• Reciprocating engines• Combined cycle gas turbines• Repowered CCGTs
Renewable Generation	<ul style="list-style-type: none">• Geothermal• Hydro upgrades• Solar PV• Wind
Energy Storage	<ul style="list-style-type: none">• Batteries (>1 hr)• Pumped Storage (>12 hr)
Energy Efficiency	<ul style="list-style-type: none">• HVAC & appliances• Lighting
Demand Response	<ul style="list-style-type: none">• Interruptible tariff (ag)• DLC: space & water heating (res)



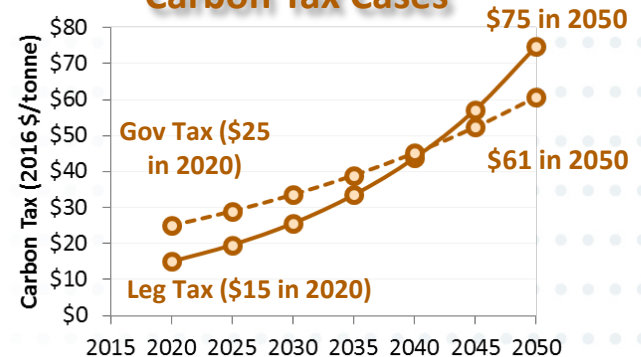
Overview of Core Policy Scenarios

- 1. Reference Case:** reflects current state policy and industry trends,
 - Achieves regionwide average 20% RPS by 2040
 - Reflects announced coal retirements: Boardman, Colstrip 1 & 2, Centralia
- 2. Carbon Cap Cases:** 40%, 60%, and 80% reduction below 1990 levels by 2050
- 3. Carbon Tax Cases:** Two specific Washington proposals
 - Gov.:** \$25/ton in 2020, 3.0% real escalation
 - Leg.:** \$15/ton in 2020, 5.5% real escalation
- 4. High RPS Cases:** 30%, 40%, and 50% regionwide average RPS by 2050
- 5. 'No New Gas' Case:** prohibits construction of new gas generation

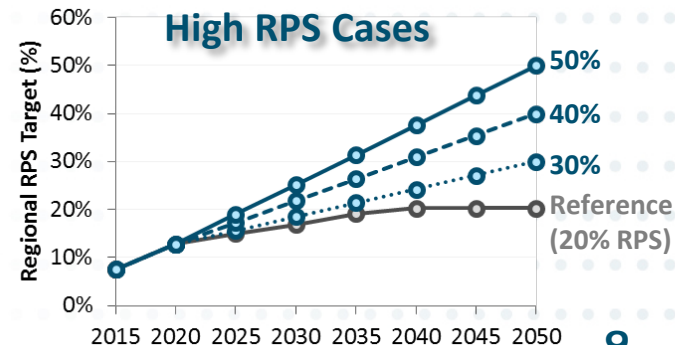
Carbon Cap Cases



Carbon Tax Cases



High RPS Cases

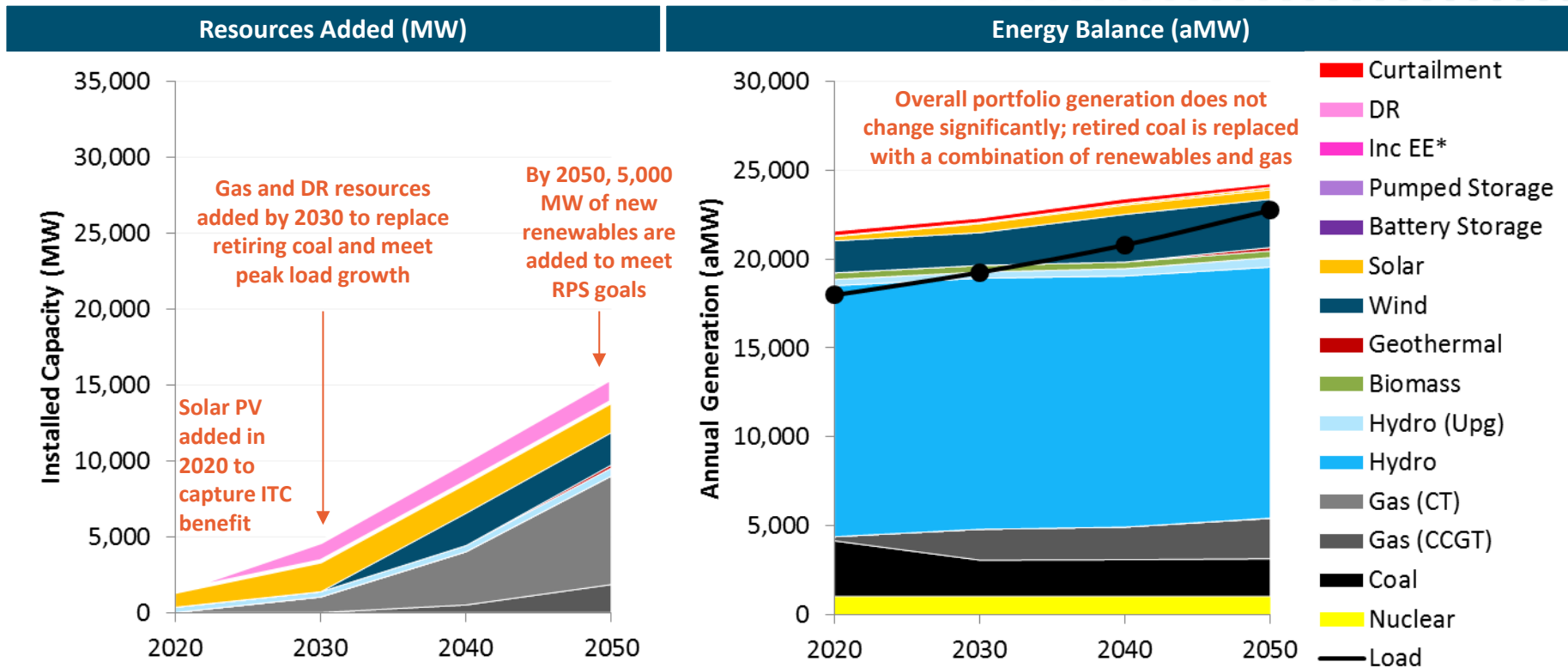




Portfolio Summary

Reference Case

- + New gas gen. and DR added after 2020 to meet capacity needs
- + Planned coal retirements result in increased reliance on gas generation
- + By 2050, 5 GW of renewable resources are needed to meet RPS goals





2050 Portfolio Summary

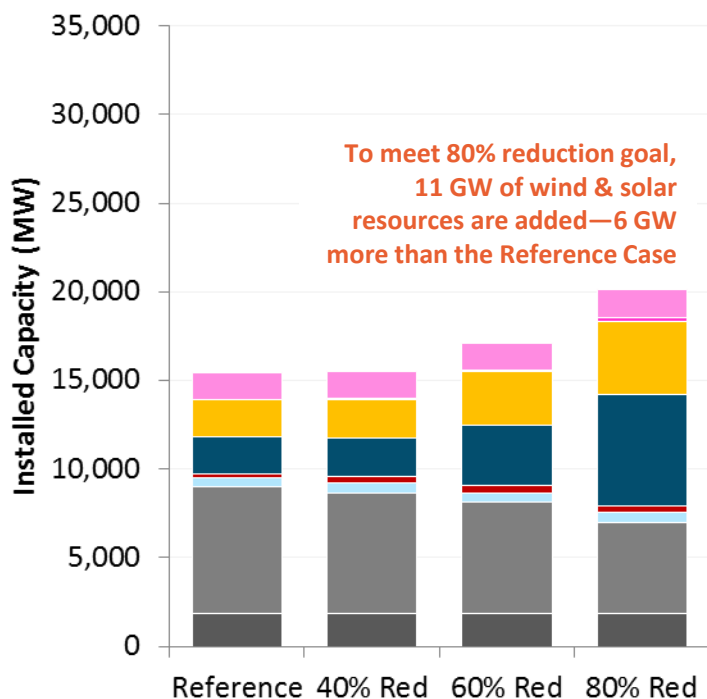
Carbon Cap Scenarios

Highlights

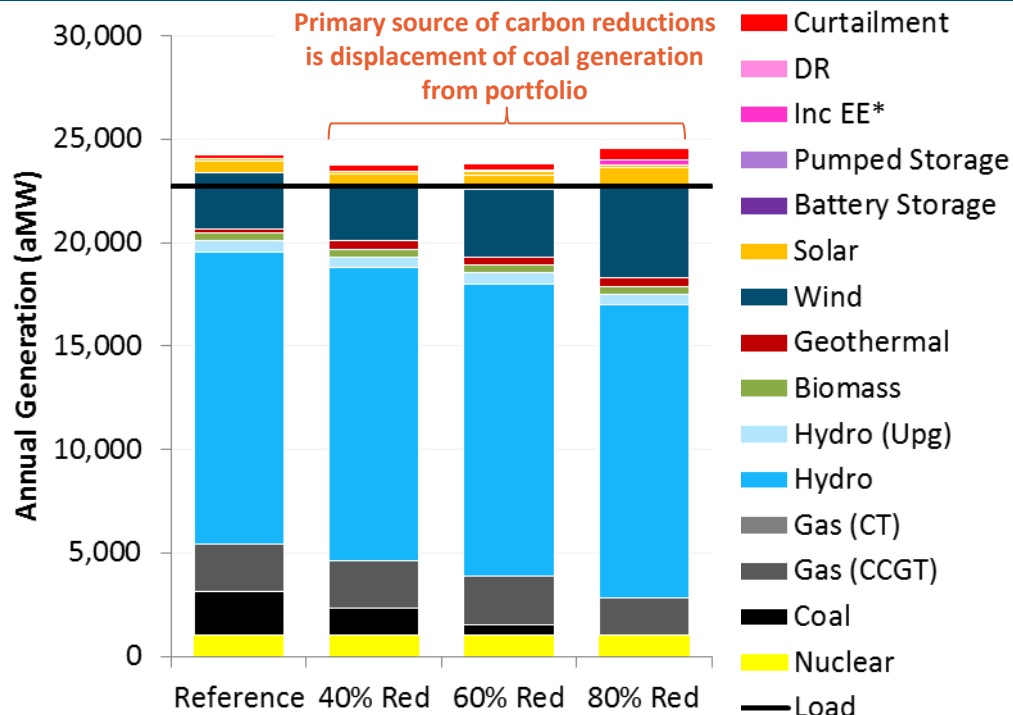
- Coal retired under 80% Case, replaced with renewables & gas
- 11 GW of new renewables by 2050
- 7 GW of new gas capacity added
- Gas capacity factor is 30% in 2050

Scenario	Inc Cost (\$MM/yr.)	GHG Reductions (MMT)	Effective RPS %	Zero CO2 %
Reference	—	—	20%	91%
40% Reduction	+\$163	7.5	21%	92%
60% Reduction	+\$434	14.2	25%	95%
80% Reduction	+\$1,046	20.9	31%	102%

Resources Added (MW)



Energy Balance (aMW)





2050 Portfolio Summary

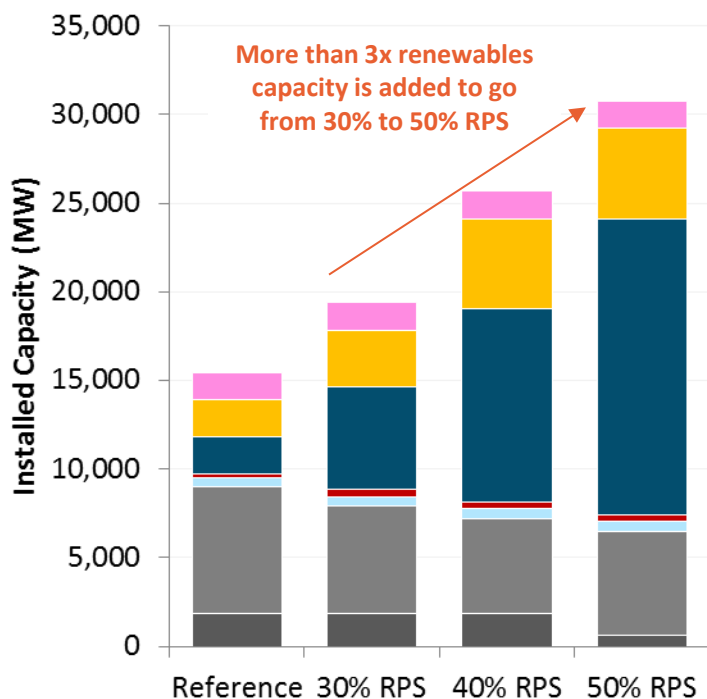
High RPS Scenarios

Highlights

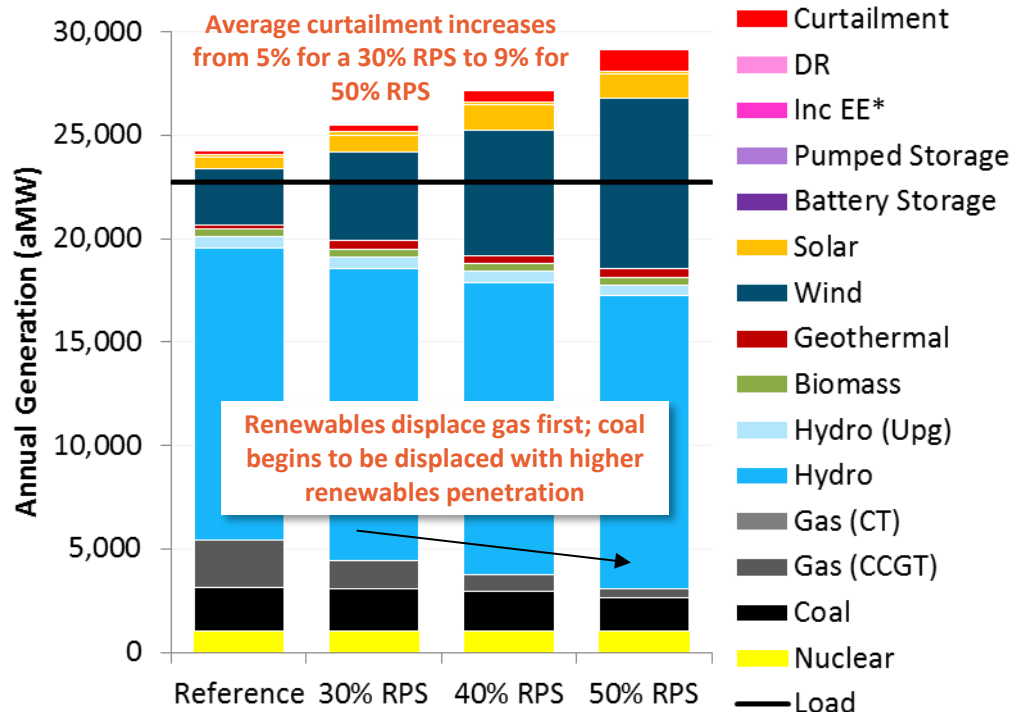
- 23 GW of new renewables needed to meet a 50% RPS by 2050
- Curtailment increases to 9% of available renewable energy
- Coal provides most thermal energy

Scenario	Inc Cost (\$MM/yr.)	GHG Reductions (MMT)	Effective RPS %	Zero CO2 %
Reference	—	—	20%	91%
30% RPS	+\$330	4.3	30%	101%
40% RPS	+\$1,077	7.5	40%	111%
50% RPS	+\$2,146	11.5	50%	121%

Resources Added (MW)



Energy Balance (aMW)

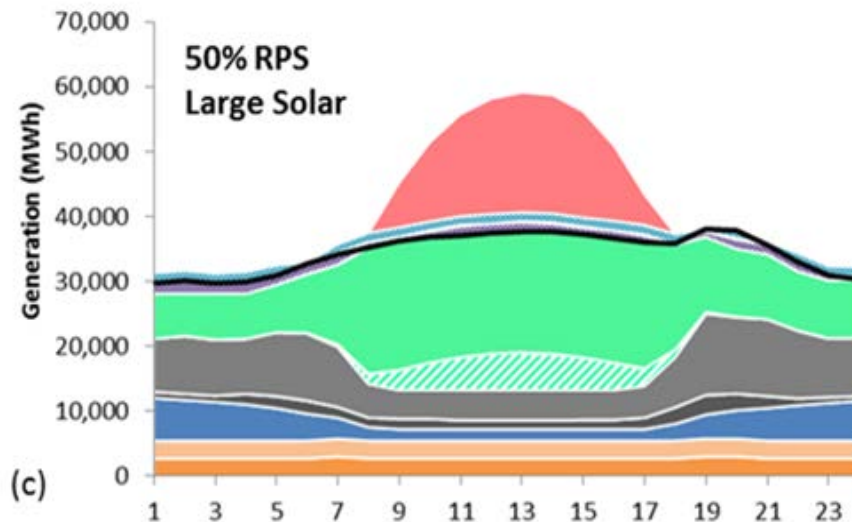


* EE shown here is incremental to efficiency included in load forecast (based on NWPCC 7th Plan)

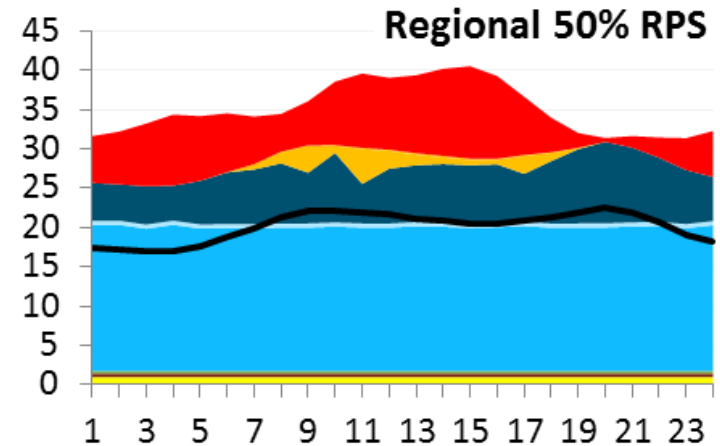


Battery storage is less helpful in the Northwest than in California

Renewable oversupply in California is driven by solar, and can be addressed with 4-6 hour batteries



Renewable oversupply in the Northwest is driven by hydro and wind, and occurs day after day during high hydro years





2050 Portfolio Summary

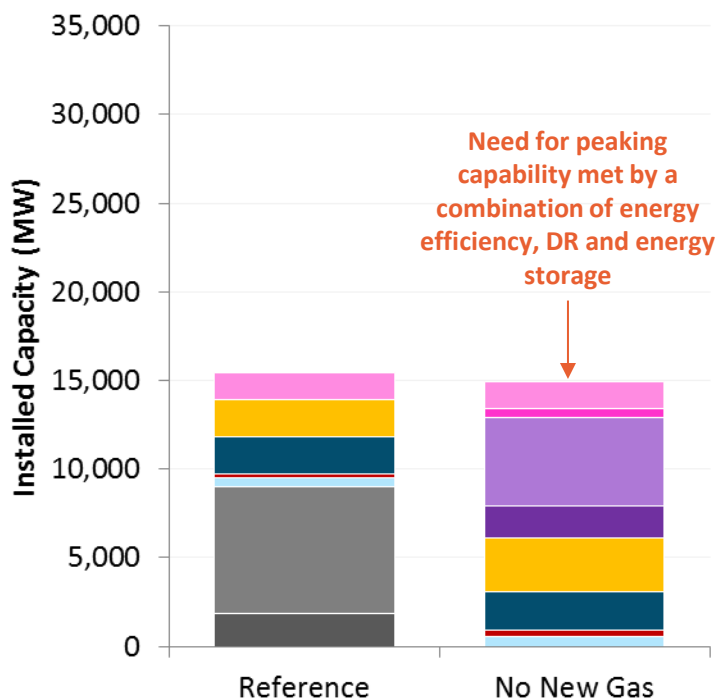
No New Gas Scenario

Highlights

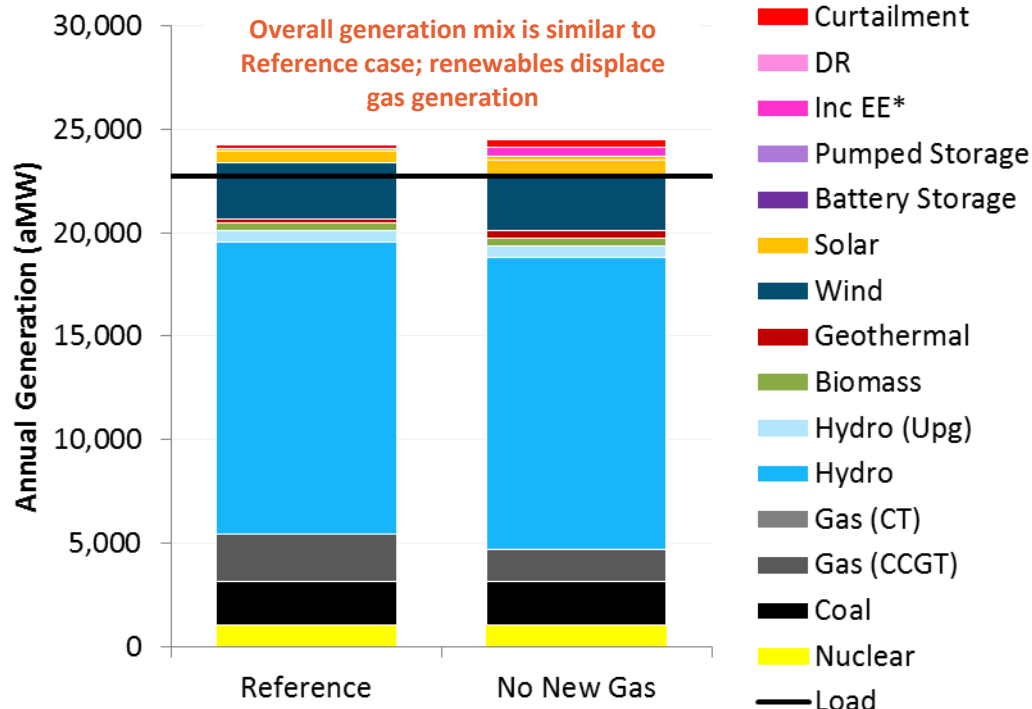
- 7 GW of new energy storage added to meet capacity needs
- Very little change in coal & gas generation or GHG emissions

Scenario	Inc Cost (\$MM/yr.)	GHG Reductions (MMT)	Effective RPS %	Zero CO2 %
Reference	—	—	20%	91%
No New Gas	+\$1,202	2.0	22%	93%

Resources Added (MW)



Energy Balance (aMW)



* EE shown here is incremental to efficiency included in load forecast (based on NWPCC 7th Plan)



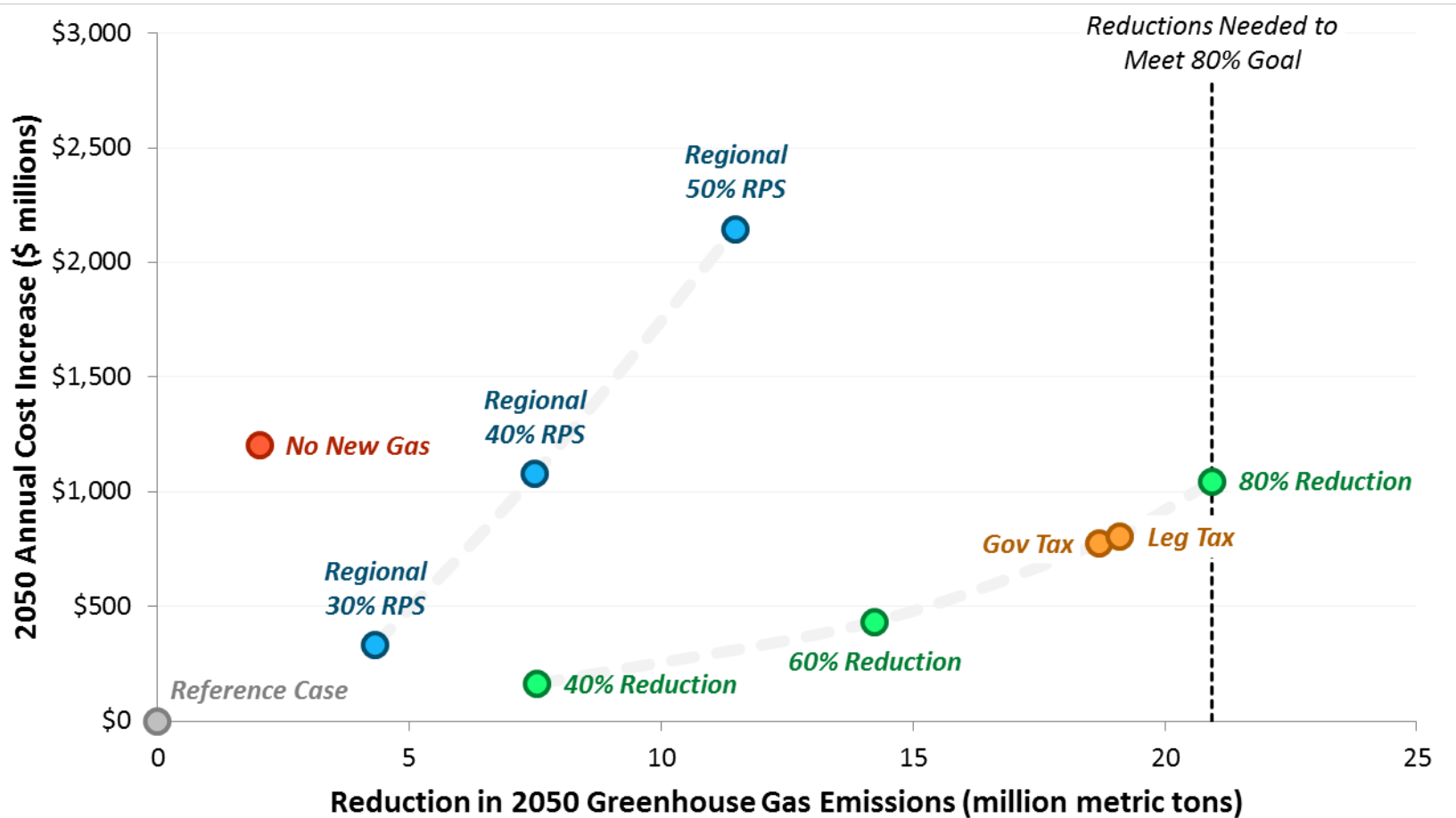
No New Gas Scenario Might Not Be Resource Adequate After 2025

- + New resources are needed in 2025-2030 time frame to ensure resource adequacy due to coal plant retirements and load growth**
 - Primary source of capacity added under No New Gas Case is energy storage (pumped hydro & batteries)
- + Storage provides capacity to help meet peak demands but does not generate energy that is needed during low hydro years or multi-day low generation events**
- + More study is needed to analyze whether the system as modeled meets reliability expectations**
 - The 'No New Gas' portfolio meets the current reserve margin requirement with the addition of new energy storage
 - However, it is unclear how much energy storage can contribute to Resource Adequacy in the Pacific Northwest



Cost & Emissions Impacts

All Cases



Note: Reference Case reflects current industry trends and state policies, including Oregon's 50% RPS goal for IOUs and Washington's 15% RPS for large utilities



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SENSITIVITY RESULTS

*Existing Resource
Retirement*



Retirement of Existing Zero-Carbon Generation

- + In order to highlight the value of existing zero carbon (non-RPS-qualifying) resources—and their key role in meeting GHG goals—E3 evaluated a sensitivity in which approximately 2,000 aMW of nuclear & hydro was assumed to retire:**
 - Columbia Generating Station (1,207 MW)
 - 1,000 aMW of generic existing hydro
- + Sensitivity analysis conducted on Reference Case (current policy), 80% GHG Reduction Case and 50% RPS Case**



2050 Portfolio Summary

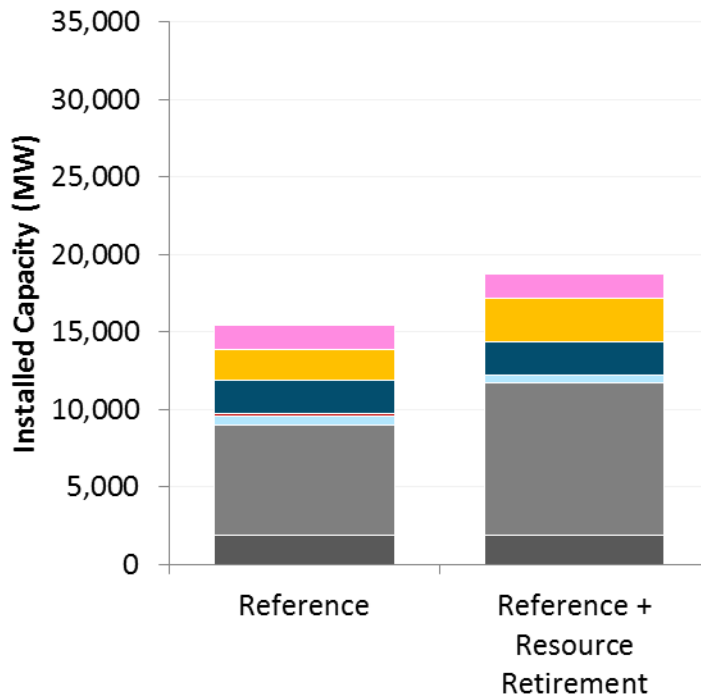
Reference Case (Existing Resource Retirement)

Highlights

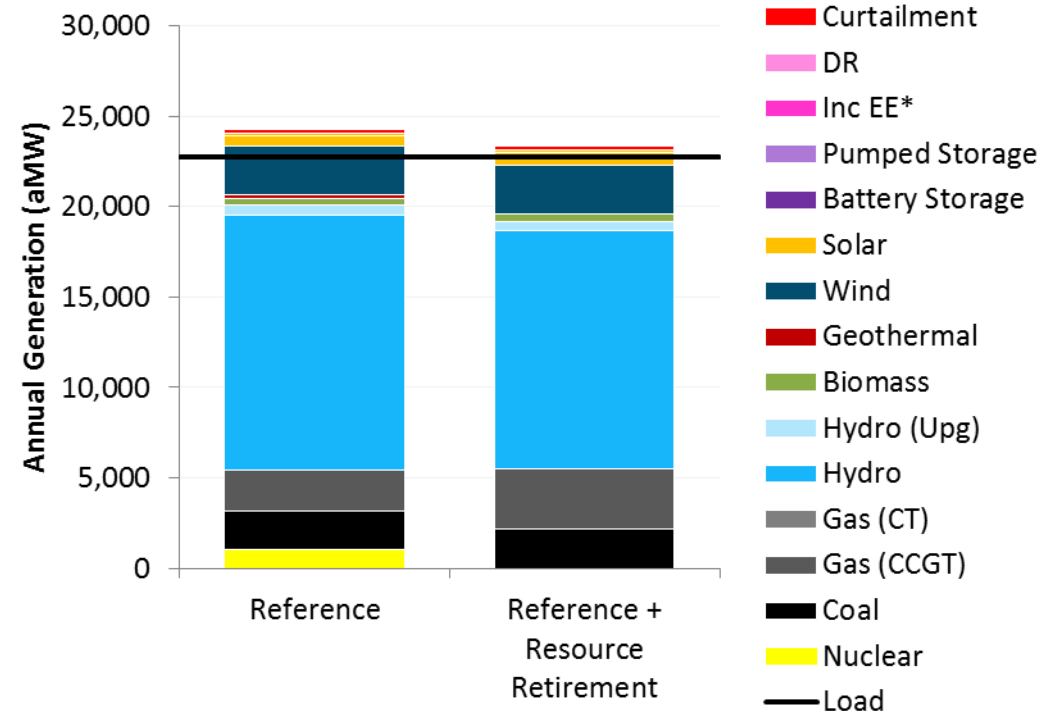
- Under Reference Case, retiring resources are replaced with gas generation
- Results in both higher costs and GHG emissions

Scenario	Inc Cost (\$MM/yr.)	GHG Reductions (MMT)	Effective RPS %	Zero CO2 %
Base	—	—	20%	91%
Retirement Case	+\$1,071	-5.1	20%	82%
Delta	+\$1,071	-5.1	—	-9%

Selected Resources (MW)



Energy Balance (aMW)



* EE shown here is incremental to efficiency included in load forecast (based on NWPCC 7th Plan)



2050 Portfolio Summary

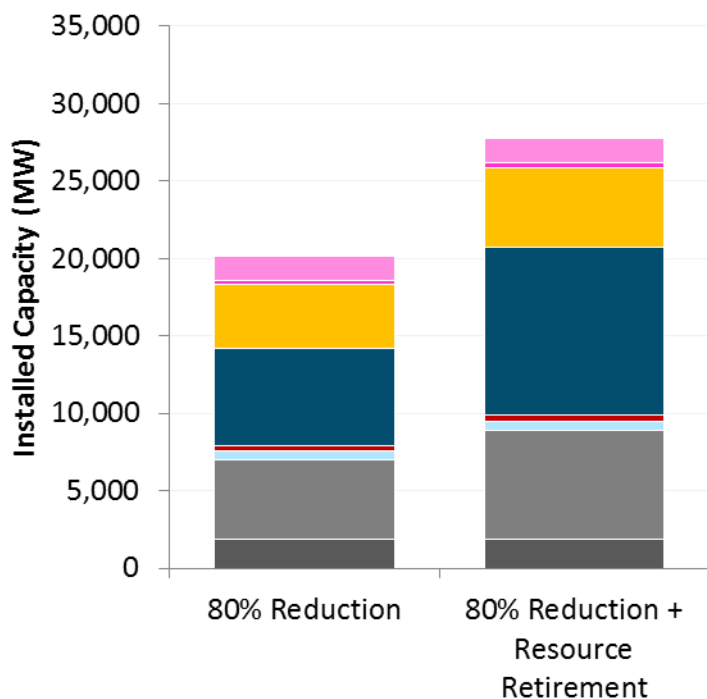
80% Reduction (Existing Resource Retirement)

Highlights

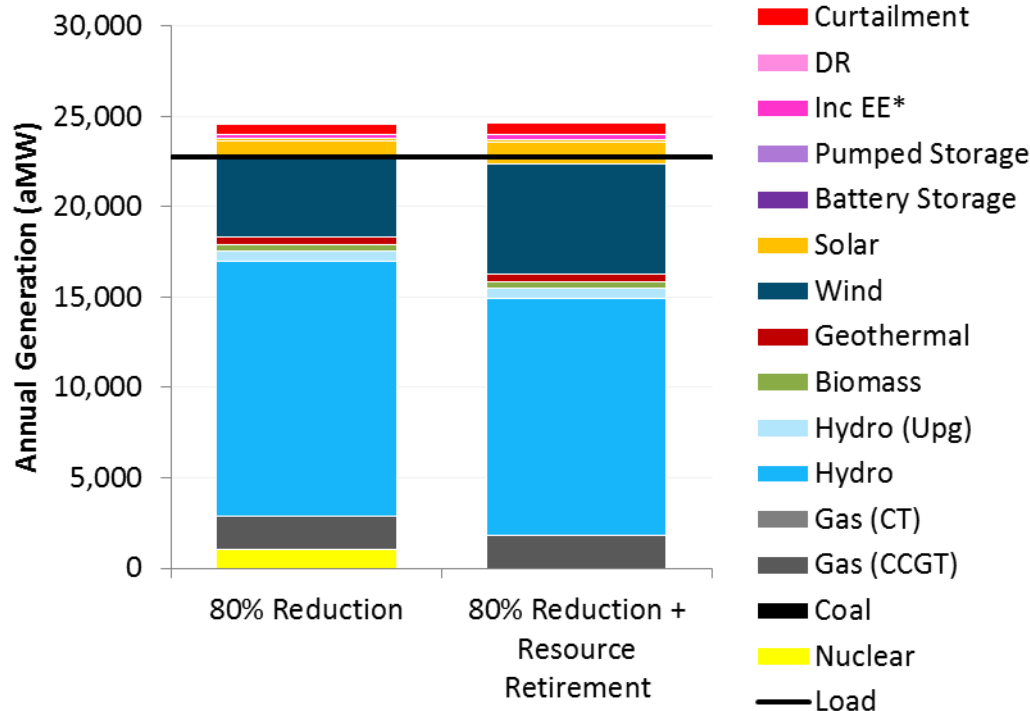
- Under 80% GHG reduction scenario, retiring carbon-free resources replaced with 5.5 GW of renewables and 2 GW of gas
- Cost to meet goal increases \$1.6 B

Scenario	Inc Cost (\$MM/yr.)	GHG Reductions (MMT)	Effective RPS %	Zero CO2 %
Base	+\$1,046	20.9	31%	102%
Retirement Case	+\$2,652	20.9	40%	102%
Delta	+\$1,606	—	+9%	—

Selected Resources (MW)



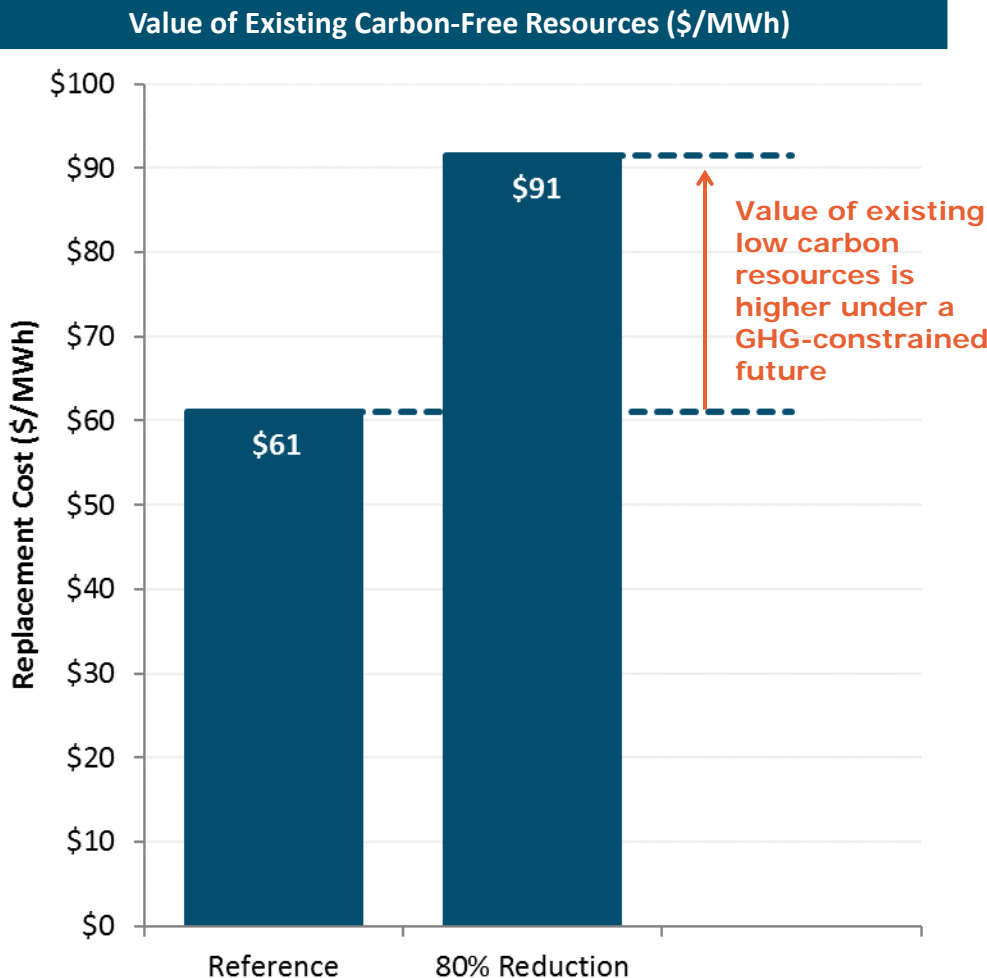
Energy Balance (aMW)



* EE shown here is incremental to efficiency included in load forecast (based on NWPCC 7th Plan)



Value of Existing Zero Carbon Gen Increases Under GHG Constraints



- + In the Reference Case, lost capacity and energy is replaced with natural gas generation
- + In the 80% GHG Reduction Case, lost energy is replaced with 5500 MW of renewables and lost capacity is replaced with 2000 MW of gas generation
- + Higher value in a carbon constrained world reflects the significant increase in cost to meet GHG policy goals should existing low carbon resources retire



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CONCLUSIONS & KEY FINDINGS



Key Findings (1 of 3)

- 1. The most cost-effective opportunity for reducing carbon in the Northwest is to displace coal generation with a combination of energy efficiency, renewables and natural gas**
 - Coal generation produces approximately 80% of the Northwest's electricity-sector GHG emissions today
 - A technology-neutral policy that focuses on carbon provides incentives for leveraging the lowest-cost GHG emissions reductions
- 2. Renewable generation is an important component of a low-carbon future, however a Renewables Portfolio Standard results in higher costs and higher carbon emissions than a policy that focuses directly on carbon**
 - RPS policy has been successful at driving investment in renewables but ignores other measures such as energy efficiency and coal displacement
 - RPS policy has unintended consequences such as oversupply and negative wholesale electricity prices that create challenges for reinvestment in existing zero-carbon resources



Key Findings (2 of 3)

3. Prohibiting the construction of new natural gas generation adds significant cost but does little to save GHG emissions

- Older gas plants run at a higher capacity factor and generate more carbon emissions
- More study is needed to determine whether the system modeled has sufficient energy and capacity to meet resource adequacy requirements
- Building new gas resources for capacity is part of a least-cost portfolio even under carbon-constrained scenarios

4. Meeting decarbonization goals becomes significantly more challenging and costly should existing zero-carbon resources retire

- Replacing 2,000 aMW of existing hydro or nuclear generation would require nearly 6,000 MW of new wind and solar generation and 2,000 MW of natural gas generation at an annual cost of \$1.6 billion by 2050
- A policy that encourages the retention of existing zero-carbon generation resources will help contain costs of meeting carbon goals



Key Findings (3 of 3)

5. Returning revenues raised under a carbon pricing policy to the electricity sector is crucial to mitigate higher costs

- This is a common feature of carbon pricing programs adopted in other jurisdictions
- This helps ensure that electricity ratepayers are not required to pay twice: first for the cost of investments in GHG abatement measures, and second for the emissions that remain

6. Research and development is needed for the next generation of Energy Efficiency measures

- Higher-cost measures that have not traditionally been considered may become cost-effective in a carbon-constrained world

7. Vehicle electrification is a low-cost measure for reducing carbon emissions in the transportation sector

- Electrification has benefits for society as a whole, but may increase costs in the electric sector



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Thank You!

Energy and Environmental Economics, Inc. (E3)

101 Montgomery Street, Suite 1600

San Francisco, CA 94104

Tel 415-391-5100

Web <http://www.ethree.com>

Arne Olson, Partner (arne@ethree.com)

Nick Schlag, Sr. Managing Consultant (nick@ethree.com)

Jasmine Ouyang, Consultant (jasmine@ethree.com)

Kiran Chawla, Consultant (kiran@ethree.com)

Carbon Policy & Tacoma Power Economic Impacts

January 10th, 2018

Purpose

- Discuss potential impacts of state energy policy on Tacoma Power:
 - Compliance Costs
 - BPA Power Costs
 - Wholesale Market Impacts

RPS or Carbon Tax?

- Which policy is more effective at reducing carbon emissions?
- Which policy is better for Tacoma Power ratepayers from a financial standpoint?

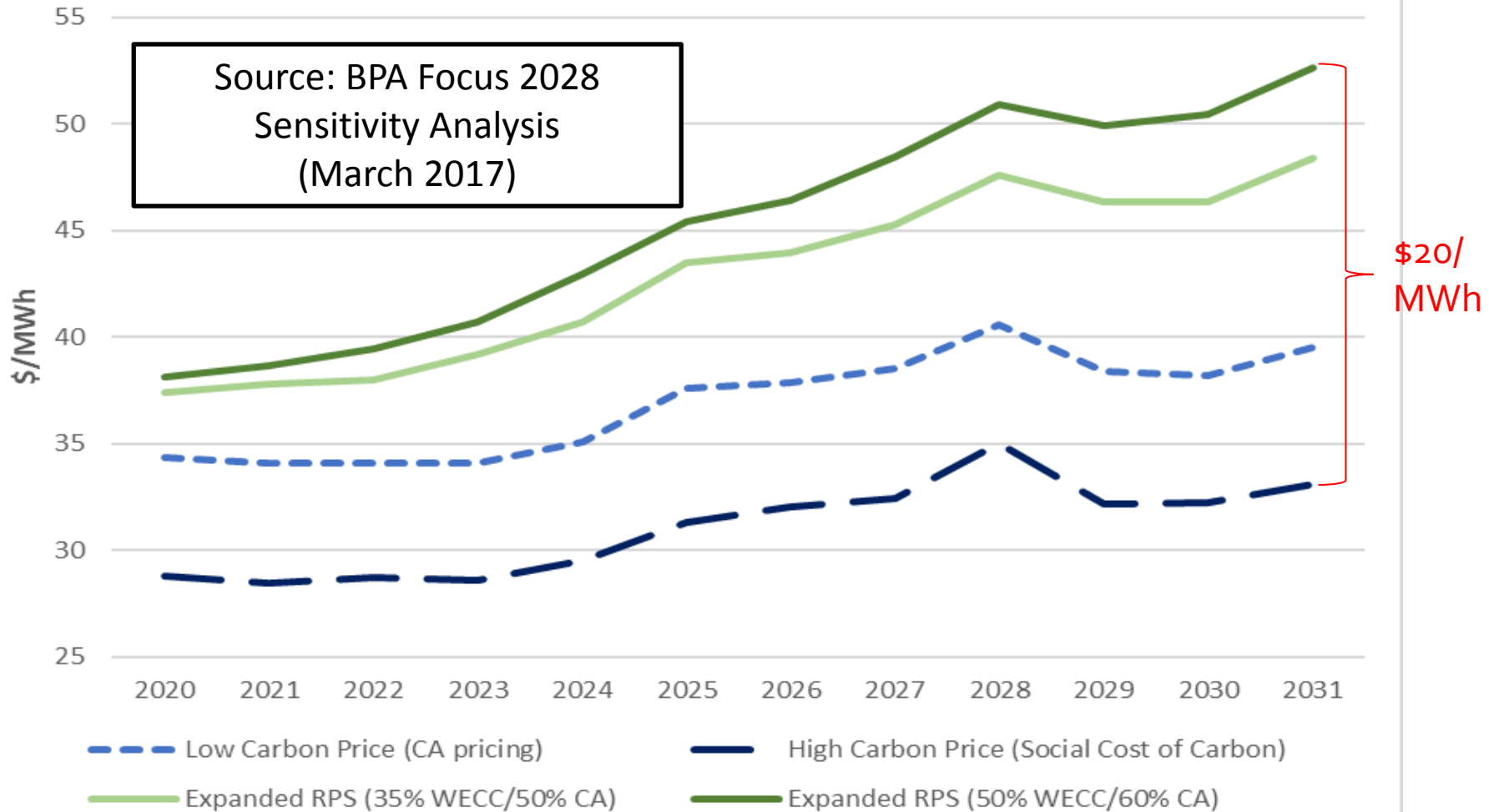
Carbon/RPS Proposal Basics

- We're already seeing proposals that take these forms:
 - Increased RPS: Higher “eligible renewable” portfolio standards, building toward 50% RPS in 2050
 - Carbon Tax: Price per metric ton of carbon that escalates over time

High-Level Policy Effects

- Increased RPS: Requires investment in new renewables, but does not directly incentivize divestment from fossil fuels. Lowers wholesale energy prices, making it harder for our surplus hydro to compete, *despite being carbon-free*.
- Carbon Tax: Directly incentivizes divestment from fossil fuels. Increases wholesale energy prices, making our surplus hydro more competitive, *due to its carbon-free nature*.

BPA's Own Rate Estimate

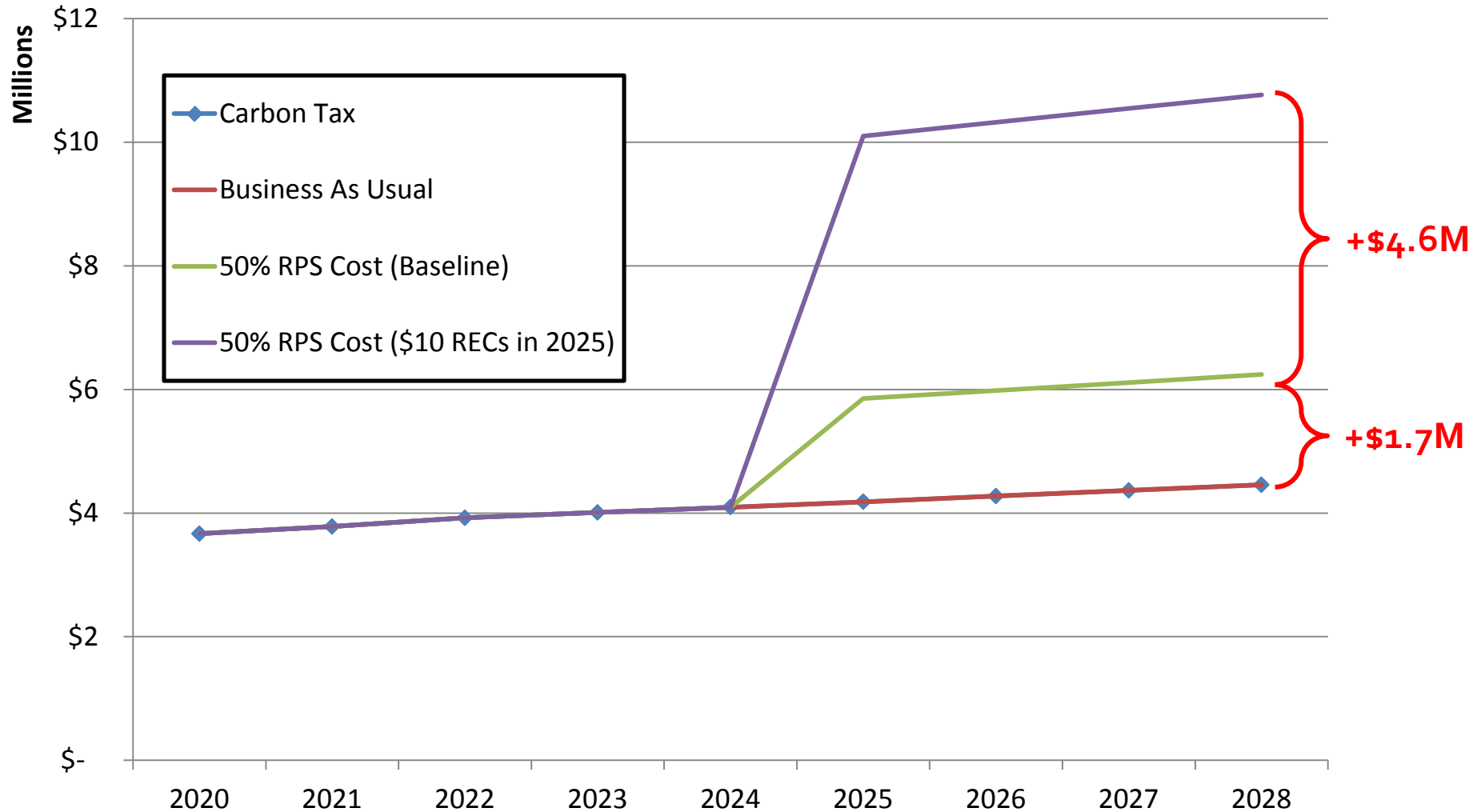


Tacoma Power Scenario Analysis

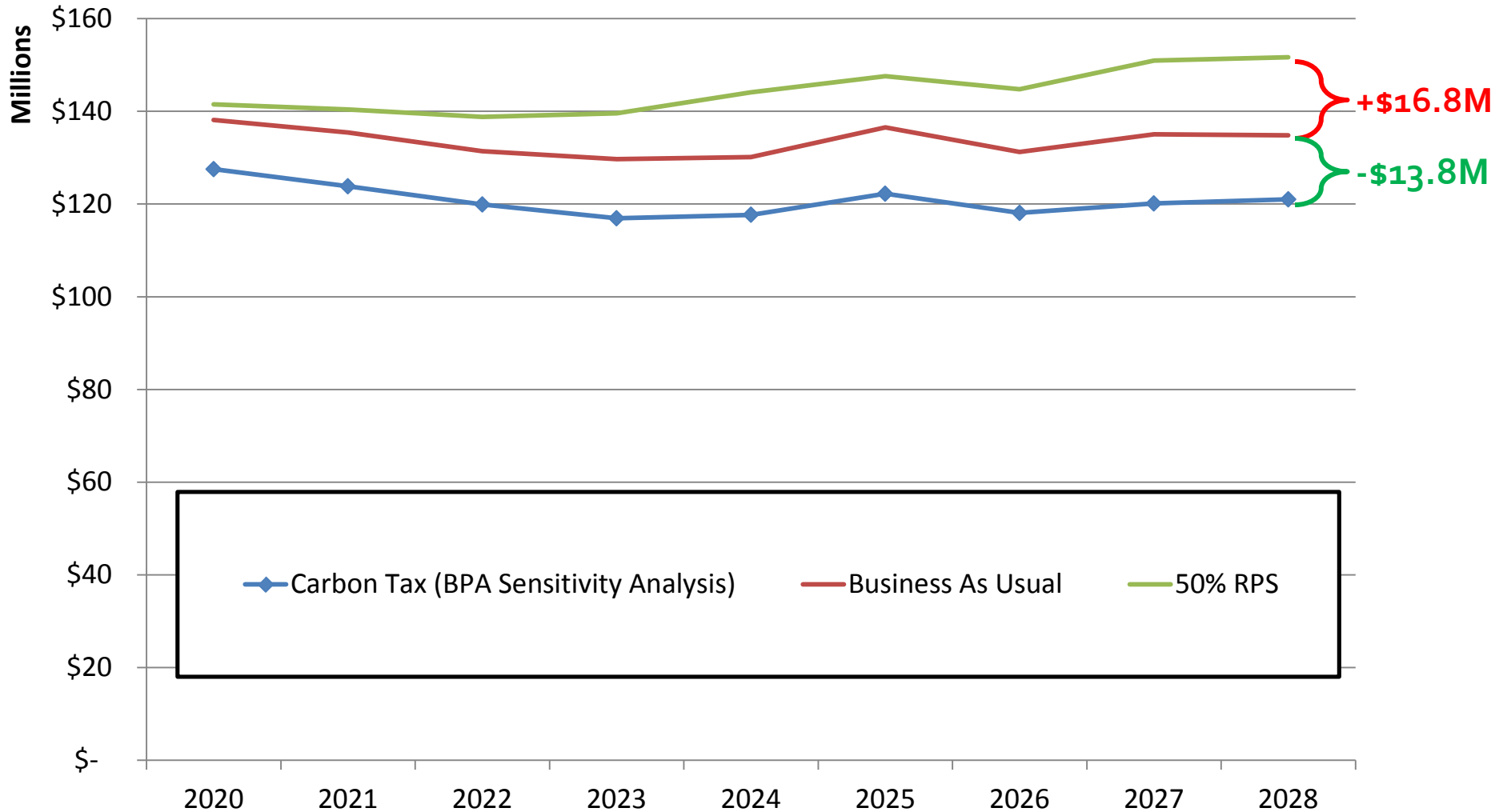
Policy Scenarios:

1. Increased RPS: 50% in 2050
 - 15% in 2020
 - 21% in 2025
 - REC basis price of \$5-\$10/MWh
2. Carbon Tax:
 - \$25/MTCO₂e in 2020 with 3% real annual escalation

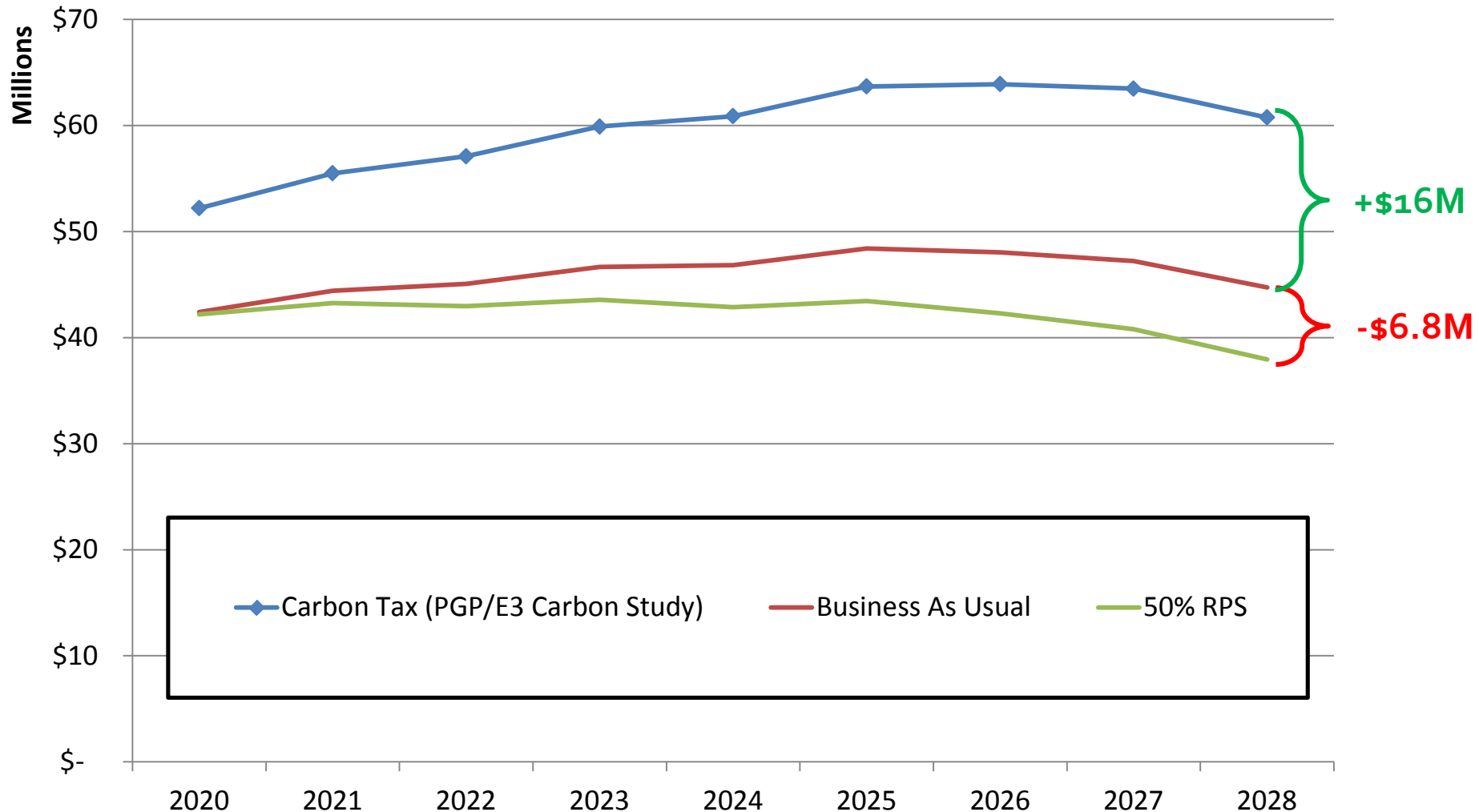
Annual RPS/Policy Compliance Costs



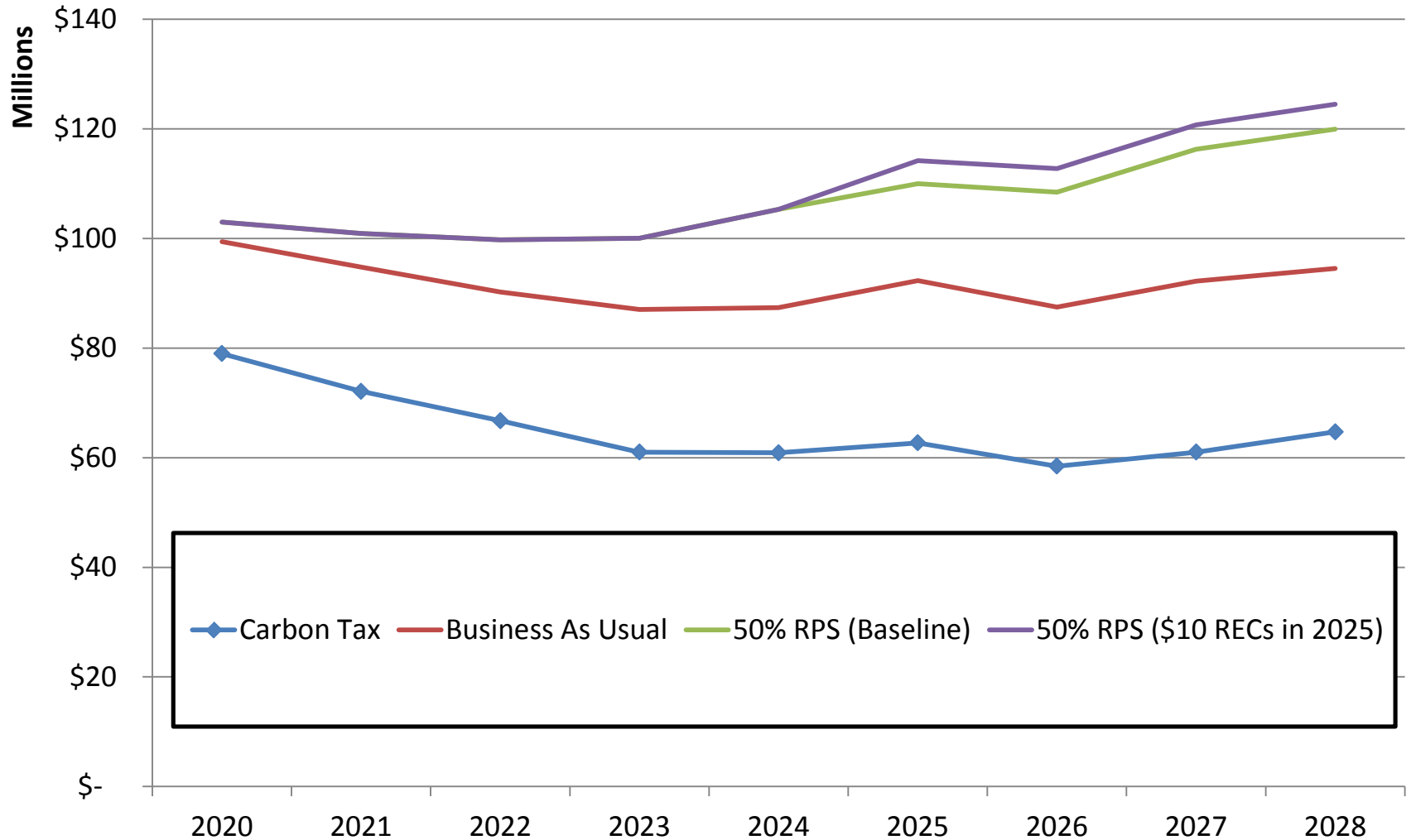
Annual BPA Power Supply Costs



Annual Tacoma Power Wholesale Market Revenues



Annual Net Total Costs



Tacoma Power Estimated Impact (2028): 50% RPS vs. Carbon Tax

Component of Difference from “Business As Usual”	50% RPS in 2050	Carbon Tax	50% RPS vs Carbon Tax
<i>REC Purchase Costs</i>	+\$6.3 Million	Net Zero	+\$6.3 Million
<i>BPA Costs</i>	+\$16.8 Million	-\$13.8 Million	+\$30.6 Million
<i>Wholesale Market Revenues</i>	-\$6.8 Million	+\$16.0 Million	-\$22.8 Million
<i>Total Estimated Incremental Cost (Costs – Revenues)</i>	+\$29.9 Million	-\$29.8 Million	<u>+\$59.7 Million</u>

Summary 1: Environmental Outcomes

- The PGP/E3 Carbon Study demonstrates that a Carbon Tax approach to reducing carbon produces larger reductions in carbon emissions for a fraction of the cost of an increased RPS.
- Electric Vehicle ownership becomes more cost-effective under a carbon tax.
 - A carbon tax increases the price of gasoline, whereas an RPS does not.
 - A carbon tax helps keep our retail rates low, whereas an RPS increases them.
- A price on carbon helps financially justify Tacoma Power's pursuit of environmentally-friendly programs, projects, and services.

Summary 2: Financial Outcomes

- An increased RPS increases the amount of REC purchases Tacoma Power must make, given our lack of new energy resource need.
- A carbon tax incentivizes investment in new renewable resources while still preserving the current RPS.
- An increased RPS increases BPA power rates, which is passed on to Tacoma Power and its customers.
- A carbon tax helps reduce BPA rate increases, passing the savings on to Tacoma Power and its customers.
- An increased RPS decreases Tacoma Power's wholesale revenues, which causes upward retail rate pressure.
- A carbon tax increases Tacoma Power's wholesale revenues, which helps mitigate upward retail rate pressure.

Conclusion: A carbon tax is a win-win-win for the environment, Tacoma Power, and its customers.

Next Steps

- PUB approval of TPU legislative policy
- Ongoing carbon policy management with PGP during 2018 legislative session

Thank You!

Appendix

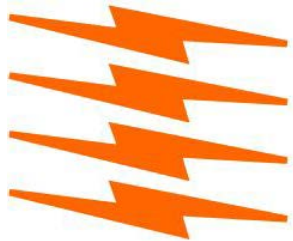
Assumptions

- Timeframe: 2020-2028
- All prices and financial impacts expressed in \$2016 real dollars
 - Deflator of 2% (Aligned with utility standard inflation rate)
 - This is consistent with PGP/E3 Carbon Study
- 3% Real Annual Escalator on REC Price (Aligned with utility discount rate)
- PGP/E3 Carbon Study: \$25/MTCO₂e in 2020 with 3% real annual escalation
- BPA Sensitivity Analysis: \$16.55/MTCO₂e in 2020 to \$27.75/MTCO₂e in 2028
- Inputs from 2017 Integrated Resource Plan:
 - RPS Compliance Requirement, Surplus power position (Average Water), BPA product volume
- BPA Power Rates sourced from BPA's internal Sensitivity Analysis
 - Nominal results, adjusted for inflation to \$2016 real dollars
- Wholesale Market prices sourced from PGP/E3 Carbon Study
- Net Total Cost = (Compliance Cost + BPA Cost) – Wholesale Market Revenues

Legislative Policy Update

January 10, 2018

- Clark Mather, Community and Government Relations Manager
- Marian Dacca, State Relations Manager



Overview

- Political Update
- 2017 Legislative Session recap
- What's ahead in 2018
- Legislative Policies review

Legislative Update -- Overview

State

- State Legislature adjourned on July 24th 2017, after a record breaking 193 consecutive days, and three special sessions
- Adjourned without passing a Capital Budget
- November 2017, General Election
 - Special election for 45th LD Senate seat vacated by the late Sen. Hill (R) -- Manka Dhingra (D) defeats Jinyoung Lee Englund (R) flipping the State Senate back to Democratic control
 - Senate: Democrats hold the majority in the Senate (25 -23 -1) with one Democrat who caucuses with the Republicans providing a 25-24 edge
 - House: Democrats hold the majority in the House (50 -48)
 - Governor: Governor Jay Inslee (D)
- 2018 Legislature convened January 8th for a 60-day session

Legislative Update -- Overview

Federal

- President Donald Trump elected in 2016
 - President Trump won the electoral college vote 306-232
 - Hillary Clinton won the popular vote (Clinton: 48.0% -- Trump 45.9%)
- Congress in session – slow going but some potential progress on TPU issues
 - Republicans hold majority in the Senate (52-46) -- 2 independents (King, Sanders) caucus with Democrats
 - Republicans currently hold the majority in the House of Representatives (239-193) – three seats are currently vacant
 - More than 30 Members of Congress have announced their retirements/decision to not seek re-election

State Legislative Update

POWER

Solar Incentives – Senate Bill 5939

- Closed the existing solar incentive program which was set to expire and created a new program for renewable energy systems beginning July 2017
- Total program is capped at \$110 Million
- Named Washington State University Energy Program (WSU) the new administrator
- Systems may be installed until June 2021, eligible for payout until June 2030
- Participants receive a fixed production incentive rate for 8 years or 50% of the total system price, whichever occurs first
 - This is a notable decrease from the legacy program

State Legislative Update

POWER

Telecommunications Industry Legislation - Senate Bill 5711

- Took away local control and preempted cities on zoning, design standards, and public process
- Jeopardized the ability of public utilities in WA State to set pole attachment rates that fully recover costs
- Cities, municipal utilities and public utility districts worked together to raise strong concerns and defeat SB 5711

We anticipate legislation similar to SB 5711 and others will be reintroduced during the 2018 Legislative Session

State Legislative Update

POWER

Electrification of Transportation, Clear Authority for Public Utilities

- During the 2017 Legislative Session, TPU partnered with a coalition of public utilities to seek clear legislative authority to be able to offer incentive programs and services in electrification of transportation for its customers
- Legislation failed to pass in 2017
- The Coalition has continued its efforts through the interim and intends to introduce new legislation in 2018

State Legislative Update

POWER

Carbon Legislation or Carbon Ballot Initiative

- Environmental advocacy groups and the Governor have indicated that they would like the 2018 Legislature to pass new policy aimed at reducing carbon
- If the legislature fails to act, a 2018 Ballot Initiative will be filed
- Potential proposals include:
 - Carbon Tax
 - Cap and Trade
 - Expanded RPS
 - No New Natural Gas
- On January 9, the Governor released his carbon tax legislative proposal – TPU/Tacoma Power are analyzing the legislation
- Environmental advocacy groups have not yet indicated which specific carbon policy proposal they support



State Legislative Update

WATER

Lead in Drinking Water

- National attention of lead in drinking water triggered introduction of several state proposals in 2017
- Worked with sponsors to share our commitment to public health and lead protection programs by Tacoma Water
- \$3 million provided in biennial Operating Budget, for testing of water fixtures in schools across the state, screening, case management, and an electronic data reporting system to identify and track children who are at the highest risk of elevated lead levels



State Legislative Update

WATER

***Hirst* Supreme Court Decision**

- 2016 Washington State Supreme Court decision that changed how counties decide to approve or deny building permits that use wells for a water source

***Foster* Supreme Court Decision**

- 2015 Washington State Supreme Court decision that changed how the Department of Ecology uses OCPI (“public interest”) and mitigation in relation to instream flows

Failure to negotiate on both sides of the aisle on these water rights issues led to numerous special sessions and no Capital Budget

State Legislative Update

RAIL

- Several state proposals were introduced concerning rail safety and the transportation of oil
- Worked with sponsors to share our commitment to safety and ongoing efforts led by Tacoma Rail:
 - Slow Speeds
 - More training
 - Coordination with first responders
 - Less oil barged on Puget Sound/Commencement Bay
- No legislation was enacted during the 2017 Legislative Session

Federal Legislative Update

TPU-WIDE

Tax Reform

- President Trump signed tax reform legislation on December 22, 2017
- Current law on municipal bonds largely intact, some new restrictions on, “advanced refunding”

Appropriations process

- Appropriations legislation behind schedule
- Current continuing resolution expires January 19, 2018

Federal infrastructure package discussed, outlook dim

Federal Legislative Update

POWER

Energy legislation progressing? We shall see...

- Senate moving Cantwell-Murkowski legislation – TPU has endorsed
- House moving individual bills, including hydro relicensing reform

Columbia River Treaty – some progress

- New negotiator appointed by Trump Administration
- Negotiations will start in 2018

More federal regulation of pole attachments in play

- FCC rulemakings on pole attachments
- Legislative “Discussion Draft” made public – put forward by Senate Commerce Committee John Thune (R-S.D.) and Brian Schatz (D-HI)
- TPU staff working with General Government, committed to maintaining municipal control over pole attachment fees and regulations

Federal Legislative Update

WATER

Bipartisan, bicameral letter on Howard Hanson Dam – Additional Water Storage Project

- Sept. 27, 2017 letter to federal agencies signed by Sens. Patty Murray (D-WA), Maria Cantwell (D-WA) and Reps. Kilmer (D, WA-06), Reichert (D, WA-08), Smith (D, WA-09) and Heck (D, WA-10)
- Congressional delegation: Honor cost share in 2003 Project Cooperation Agreement
- Federal agencies still negotiating new Biological Opinion

Federal Legislative Update

RAIL

'45G' tax credit – push for permanent extension

- S. 407/H.R. 721 would permanently extend the Railroad Track Maintenance Tax Credit or '45G' tax credit. S. 407 has 55 cosponsors including Sens. Patty Murray (D-WA) and Maria Cantwell (D-WA). H.R. 721 has 250 cosponsors including Reps. Herrera Beutler (R, WA-03) Kilmer (D, WA-06), Reichert (R, WA-08), Smith (D, WA-09), and Heck (D, WA-10)

Shortline rail program developed – lack of infrastructure action dims prospects

- Tacoma Rail continues work with delegation on new infrastructure program for shortline railroads

Proposed Legislative Policies

Maintain existing policies with one exception

POWER

Added language on state residential/community solar incentives

- “TPU supports additional state funding that would make residential solar generation and community solar projects financially feasible for low-income customers and TPU’s broader customer base.”
- Commitment made at September 12, 2017 joint PUB/City Council study session

Proposed next steps

- January 10 Study Session
- January 24 PUB adoption of legislative policies
- Ongoing legislative coordination with General Government