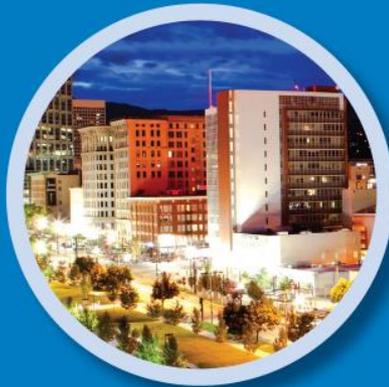


# Washington State Clean Power Plan Technical Group Meeting

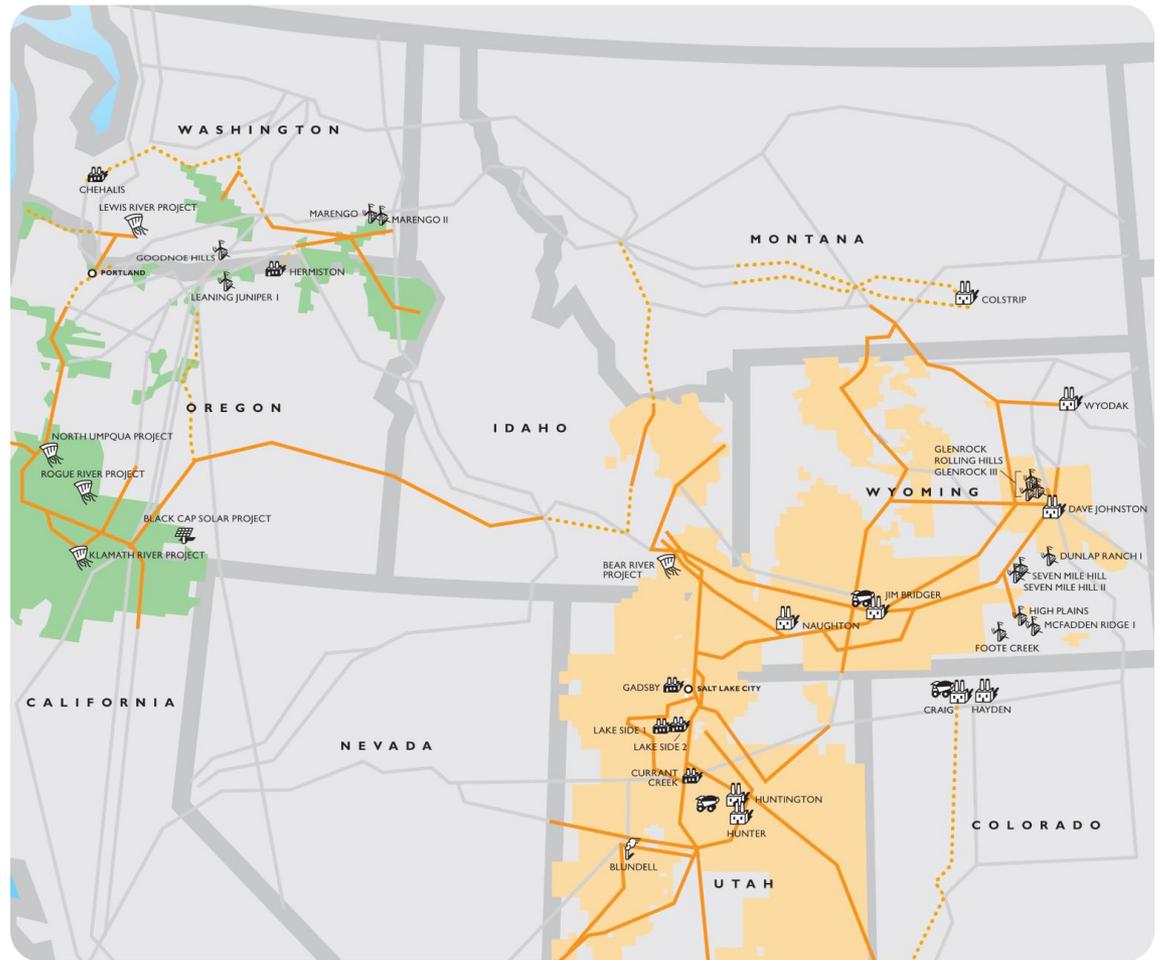
Olympia, WA  
November 10, 2015



*Let's turn the answers on.*

# PacifiCorp Service Territory & Generation Resources

- Pacific Power service area
- Rocky Mountain Power service area
- Thermal plants
- Gas-fueled thermal plants
- Wind projects
- Geothermal plants
- Mining
- Hydro systems
- Solar projects
- Company-owned transmission lines
- Transmission access
- Other transmission



# Clean Power Plan

- The pre-publication version of the U.S. Environmental Protection Agency's final Carbon Pollution Emissions Guidelines for Existing Stationary Sources ("Clean Power Plan") was released August 3, 2015
- The final rule is expected to be published in the *Federal Register* in October 2015
- States are required to submit state plans implementing the Clean Power Plan by September 6, 2016, with an option to request an extension to September 2018
- EPA also issued a draft Federal Implementation Plan ("FIP") and model trading rules for comment; comments are due January 21, 2015
- PacifiCorp is participating in stakeholder efforts in all of its states and intends to provide technical support where appropriate to aid states in the implementation process
- PacifiCorp is also participating in regional efforts led by the Western Interstate Energy Board and the Center for New Energy Economy related to the development of implementation concepts

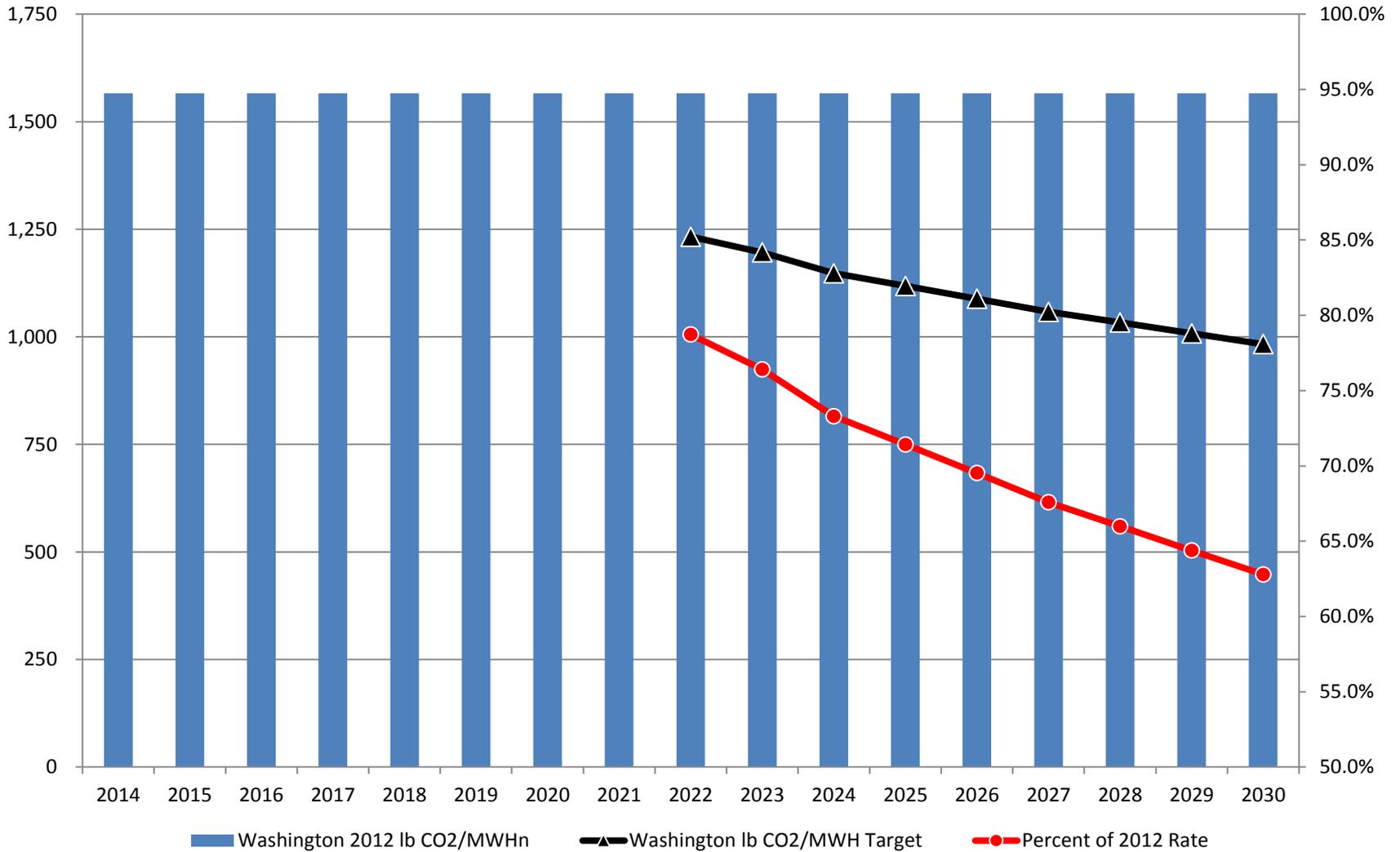
# Clean Power Plan – PacifiCorp State Goals

|                   | MASS-BASED PROGRAM   |  |  | RATE-BASED PROGRAM                    |                           |  |
|-------------------|--|--|--|---------------------------------------|---------------------------|--|
| STATE             | Interim Goal - Tons Affected Sources can emit from 2022 through 2029 | Annual Tons Affected Sources can emit in 2030 and Beyond | Reduction from 2012 Emissions Baseline | 2022-2029 Interim Average Goal lb/MWH | 2030-31 Final Goal lb/MWH | Reduction from 2012 Emissions Baseline |
| <b>Montana</b>    | 102,330,640  | 11,303,107   | <b>37%</b>                             | 1,534                                 | 1,305                     | <b>42%</b>                             |
| <b>Wyoming</b>    | 286,240,416  | 31,634,412   | <b>37%</b>                             | 1,526                                 | 1,299                     | <b>39%</b>                             |
| <b>Colorado</b>   | 267,103,064  | 29,900,397   | <b>28%</b>                             | 1,362                                 | 1,174                     | <b>32%</b>                             |
| <b>Arizona</b>    | 264,495,976  | 30,170,750   | <b>25%</b>                             | 1,173                                 | 1,031                     | <b>29%</b>                             |
| <b>Utah</b>       | 212,531,040  | 23,778,193   | <b>23%</b>                             | 1,368                                 | 1,179                     | <b>35%</b>                             |
| <b>California</b> | 408,216,600  | 48,410,120   | <b>-5%</b>                             | 907                                   | 828                       | <b>-19%</b>                            |
| <b>Oregon</b>     | 69,145,312   | 8,118,654  | <b>-6%</b>                             | 964                                   | 871                       | <b>-22%</b>                            |
| <b>Washington</b> | 93,437,656   | 10,739,172   | <b>-46%</b>                            | 1,111                                 | 983                       | <b>-30%</b>                            |
| <b>Idaho</b>      | 12,401,136   | 1,492,856  | <b>-112%</b>                           | 832                                   | 771                       | <b>-127%</b>                           |

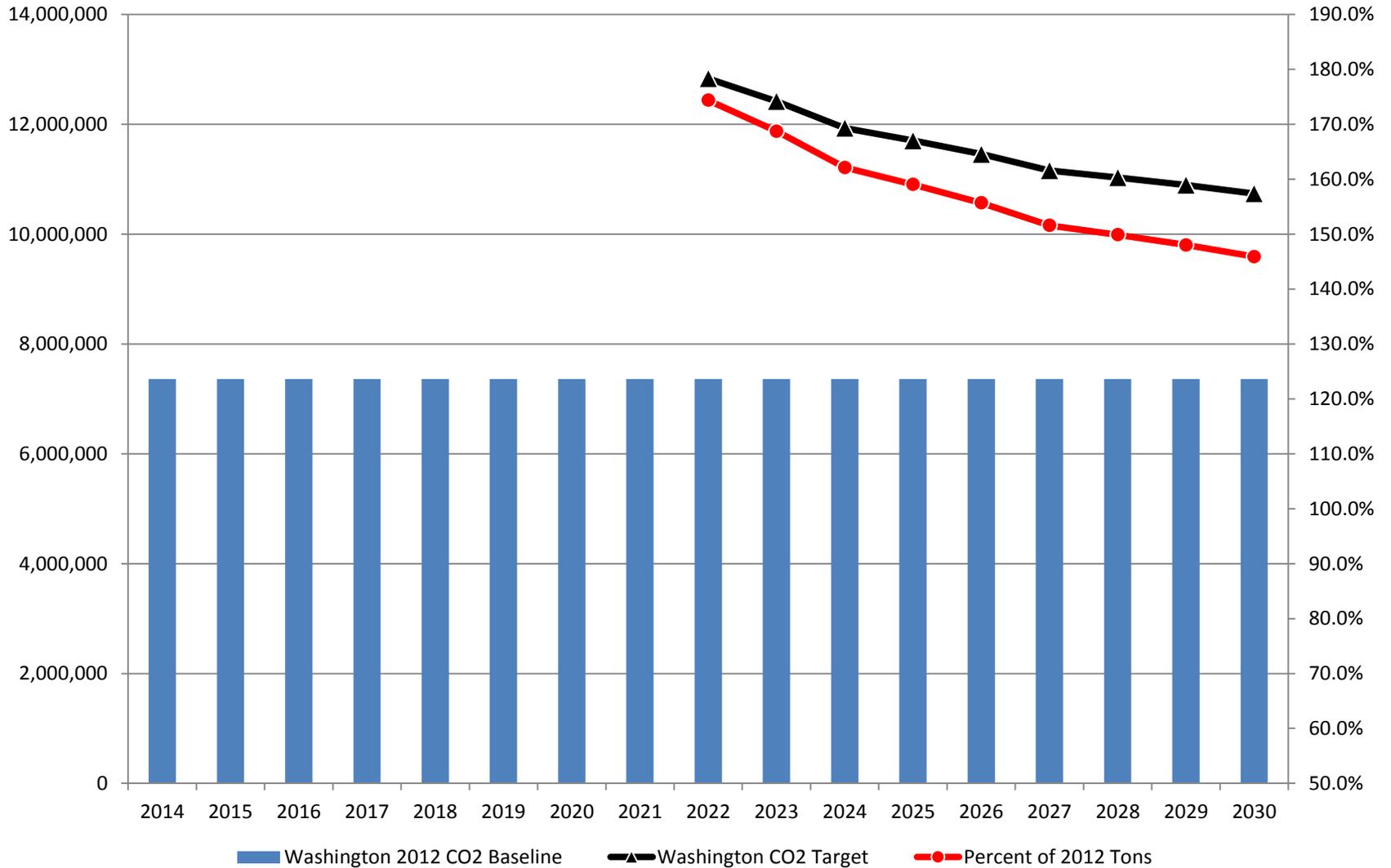
# Implications

- Key decisions for states will influence impacts to customers and program effectiveness
  - Rate or mass-based program
  - Single-state or multi-state program
  - Whether to adopt “trading ready” approach or other “state measures” type approach
  - In a rate-based program, interaction between renewable energy certificates and emission reduction credits
  - In a rate-based program, what evaluation, measurement, and verification requirements are instituted
  - In a mass-based program, distribution of allowances among affect and non-affected electric generating units (and whether they are allocated or auctioned)
  - In a mass-based program, how the state addresses leakage
  - Whether intra- or interstate trading is adopted by the state, how broad the trading program is and whether the trading market is sufficiently liquid
- While compliance is by state, compliance costs will affect PacifiCorp customers in multiple states

# Washington Affected CO<sub>2</sub> EGU Emissions - Lb/MWH



## Washington Affected CO<sub>2</sub> EGU Emissions - Tons



# Clean Power Plan

- Under the final rule, states have many options in terms of compliance pathways – the chosen pathways will have significant influence on cost and impacts to customers
  - Advocate for state plans that achieve emissions reductions required in the most cost-effective and least administratively burdensome manner
- The final rule incorporates a concept for states to be “trading ready” and trade compliance instruments without a formal multi-state agreement
  - This may include cooperation and coordination between states, but may not necessarily involve a comprehensive compact for environmental attribute trading
  - Work with states to assess benefits, if any, of multi-state coordination

# State Activities

- Most states have kicked off or are in the process of developing stakeholder processes for state plan development
- Work with stakeholders and state agencies to identify least-cost compliance approaches for customers
- Support state efforts with technical analysis and information as needed – timing of stakeholder processes are unlikely to align with any single company IRP cycle
- Though Clean Power Plan stakeholder processes will be separate from IRPs, future IRPs will continue to incorporate Clean Power Plan analysis and input from states on the development of their plans