

Washington State Department of Commerce

Clean Power Plan Technical Discussion

November 10, 2015



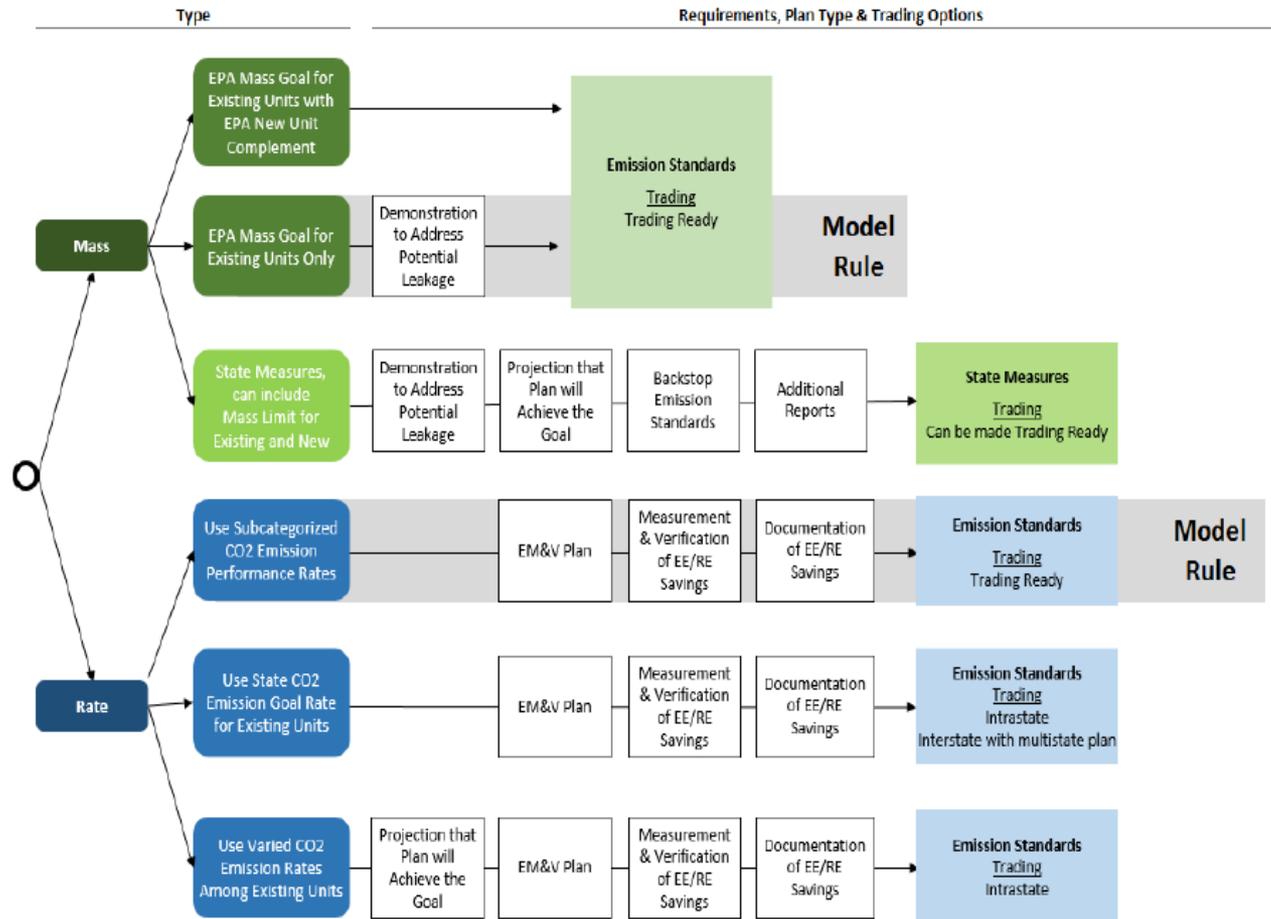
Department of Commerce
Innovation is in our nature.

Agenda

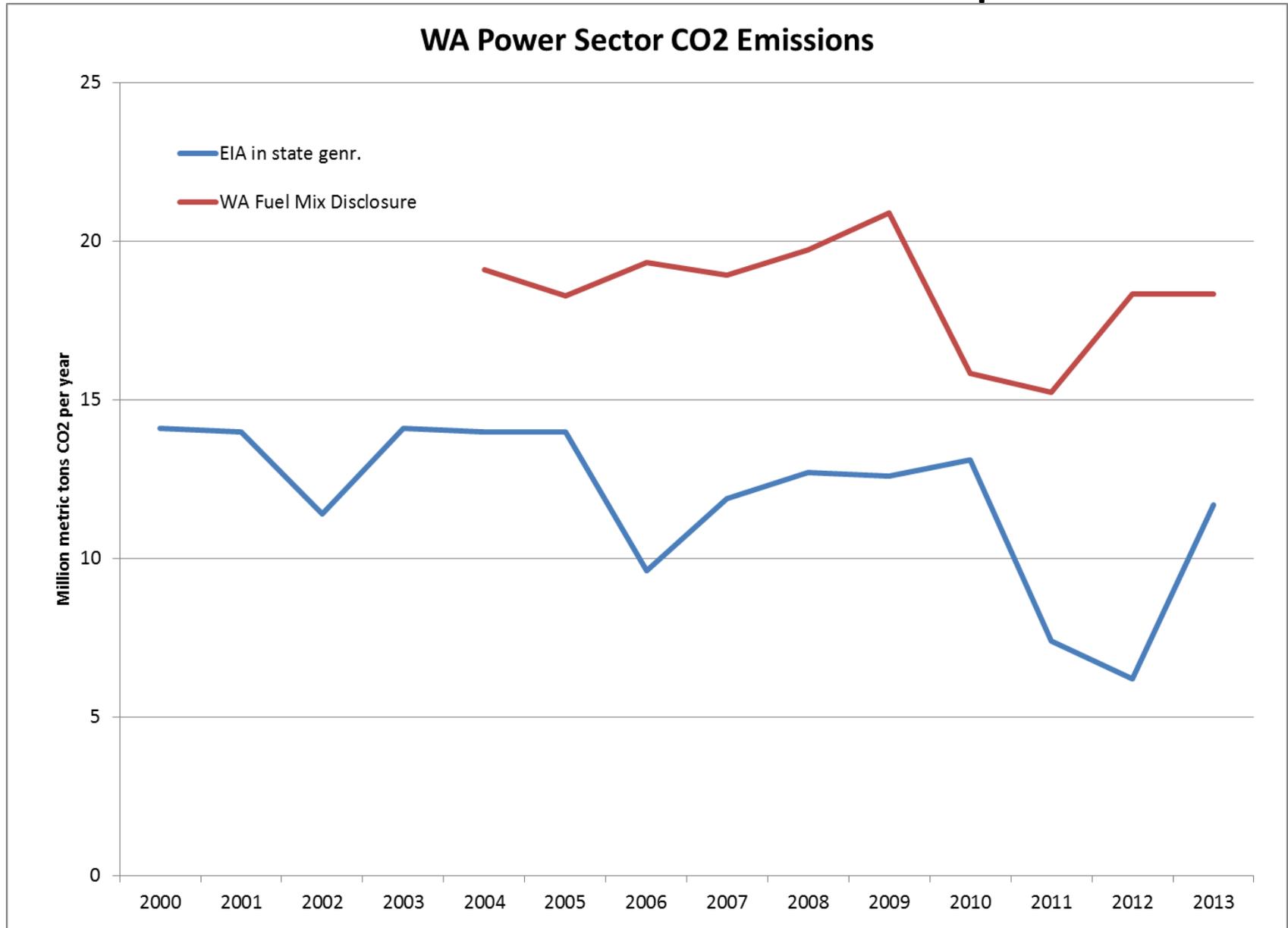
- 10:00 Greetings, meeting logistics, and introductions – Greg Nothstein.
- 10:15 General meeting objectives – Tony Usibelli
- 10:20 Presentations and discussion of existing Clean Power Plan Analyses
 - Environmental Protection Agency IPM – Mikhail Adamantiades
 - Puget Sound Energy – Keith Faretra
 - Avista – Clint Kalich
 - Pacific Power – Mary or Chad
 - National Resources Defense Council - Noah Long
 - Others
- 12:30 Lunch break, on your own
- 1:30 Brief review of other CPP analyses - Greg
- 1:45 General discussion of future CPP analysis/review - Greg/Tony
 - Need for additional analyses?
 - Areas of future analytical focus: i.e. CPP compliance options, multi-state plans, cost of compliance, allowance trading, allowance allocation, allowance retirements, allowance set asides, CEIP, etc.
 - Who has analytical capability
 - Timeline
- 2:25 Wrap and adjournment

State Plans: More State Options, Lower Costs

- This chart shows some of the compliance pathways available to states under the final Clean Power Plan. Ultimately, it is up to the states to choose how they will meet the requirements of the rule.
- EPA's illustrative analysis shows that nationwide, in 2030, a **mass-based approach is less-expensive** than a rate-based approach (\$5.1 billion versus \$8.4 billion).
- Under a mass-based plan, states that anticipate continuing or expanding investments in energy efficiency have unlimited flexibility to leverage those investments to meet their CPP targets. EE programs and projects do not need to be approved as part of a mass-based state plan, and EM&V will not be required.
- For states currently implementing mass-based trading programs, the "state measures" approach offers a ready path forward.
- Demand-side energy efficiency is an important, proven strategy that states are already widely using and that can substantially and cost-effectively lower CO₂ emissions from the power sector.



WA: In-state Generation vs. Consumption Basis



Clean Power Plan: Analytical tools/resources/reports for Washington State and the Pacific NW

- MJ& Bradley forecast tool which is designed for analysis of state level compliance: https://www.dropbox.com/sh/55elz0ivqks8w4f/AADpn_Nyu98yRY5g4qGaSBYia?dl=0 ,
- NWPCC Draft 7th Power Plan scenario analysis and possible analytical support going forward. Draft power plan: <https://www.nwcouncil.org/energy/powerplan/7/home/>
- Resources for the Future, Modeling and Analysis of CPP implementation: Preproposal to the Energy Foundation.
- Regulatory Assistance Project: Regulatory assistance/insight?
- MT scenario analysis of CPP final rule: <http://leg.mt.gov/content/Committees/Interim/2015-2016/EQC/111d-Subcom/Meetings/Sept-2015/psc-111d-analysis.pdf>
- NRDC analysis of hypothetical Montana CPP compliance: simple analysis with focus on EE and RE. <http://www.nrdc.org/air/clean-power-plan/files/CPP-MT-Compliance-IB.pdf>
- Natl. Bureau of Economic Research: Strategic Policy Choice in State-Level Regulation: The EPA's (proposed) Clean Power Plan, <http://www.nber.org/papers/w21259>
- Center for Climate and Energy Solutions: Modeling EPA's (proposed) Clean Power Plan., <http://www.c2es.org/publications/modeling-epas-clean-power-plan-insights-cost-effective-implementation> and <http://www.c2es.org/federal/executive/epa/carbon-pollution-standards-map>
- Union of Concerned Scientists: Debunking Misleading Studies on the Clean Power Plan, <http://www.ucsusa.org/our-work/global-warming/fight-misinformation/debunking-misleading-studies-clean-power-plan#.VgQ1RU3luAY>
- PSE, Avista, Pacific Corp, and WAPUD Assn have or will probably develop models/scenarios for WA/PNW CPP compliance. The utilities may already have some analysis in their recent IRPs.
- EPA IPM Model: <http://www.epa.gov/airmarkets/programs/ipm/cleanpowerplan.html>
- WECC CPP Assessment using 2024 Common Case. Evaluation of compliance as a region or individual states. Update of assessment (2016-18) using 2026 Common Case criteria. <http://westernenergyboard.org/wirab/>

CPP Mass Gap: Calc. Using WECC 2024 Common Cause

