



Montana Environmental Information Center



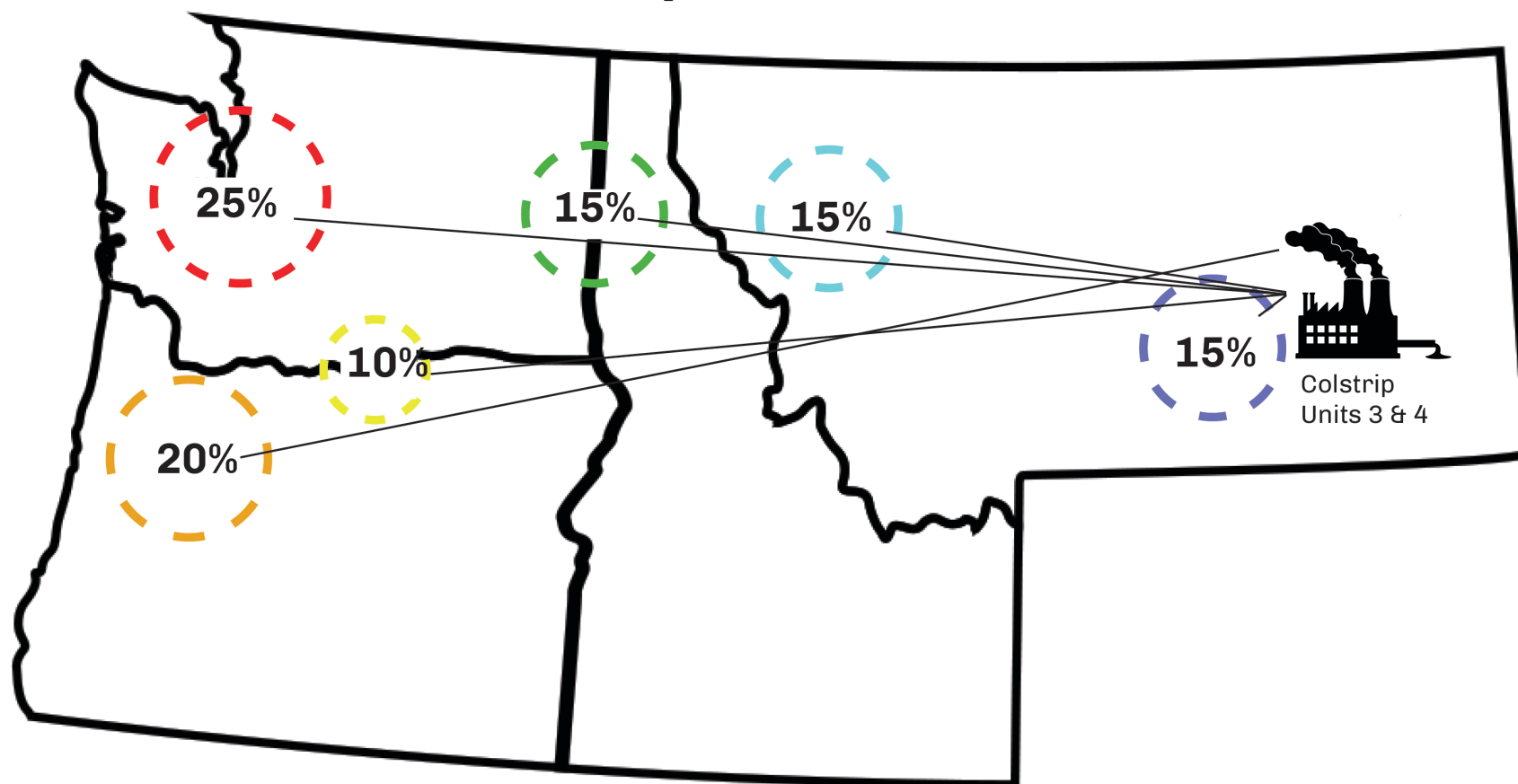
The Quarantine Series Colstrip 202

**Deeper Dive into Costs &
Risks of Colstrip**



Colstrip Ownership Is Complicated

Colstrip Units 3 and 4



Puget Sound Energy



Pacificorp



NorthWestern Energy



Portland General
Electric



Avista Energy

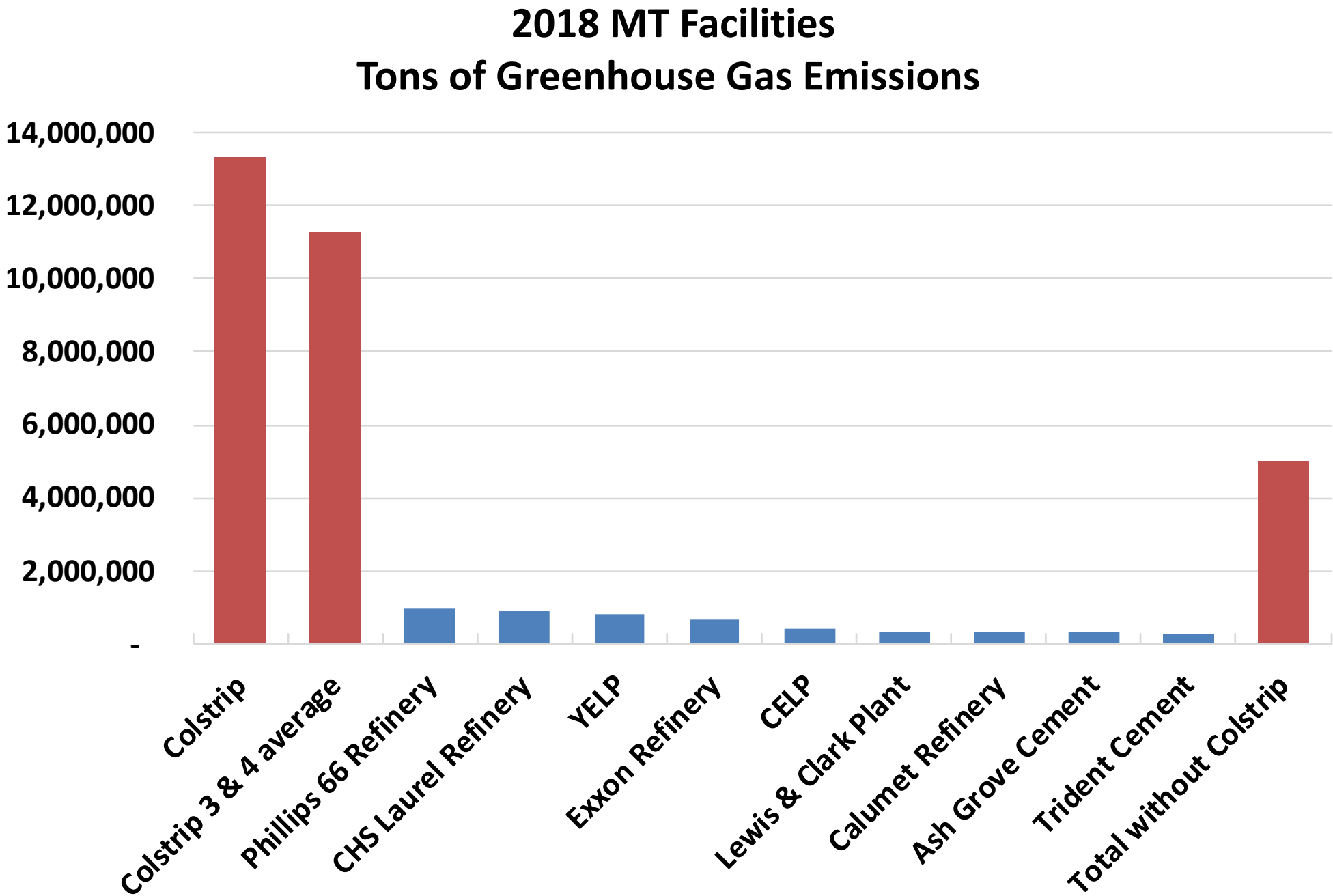


Talen Montana



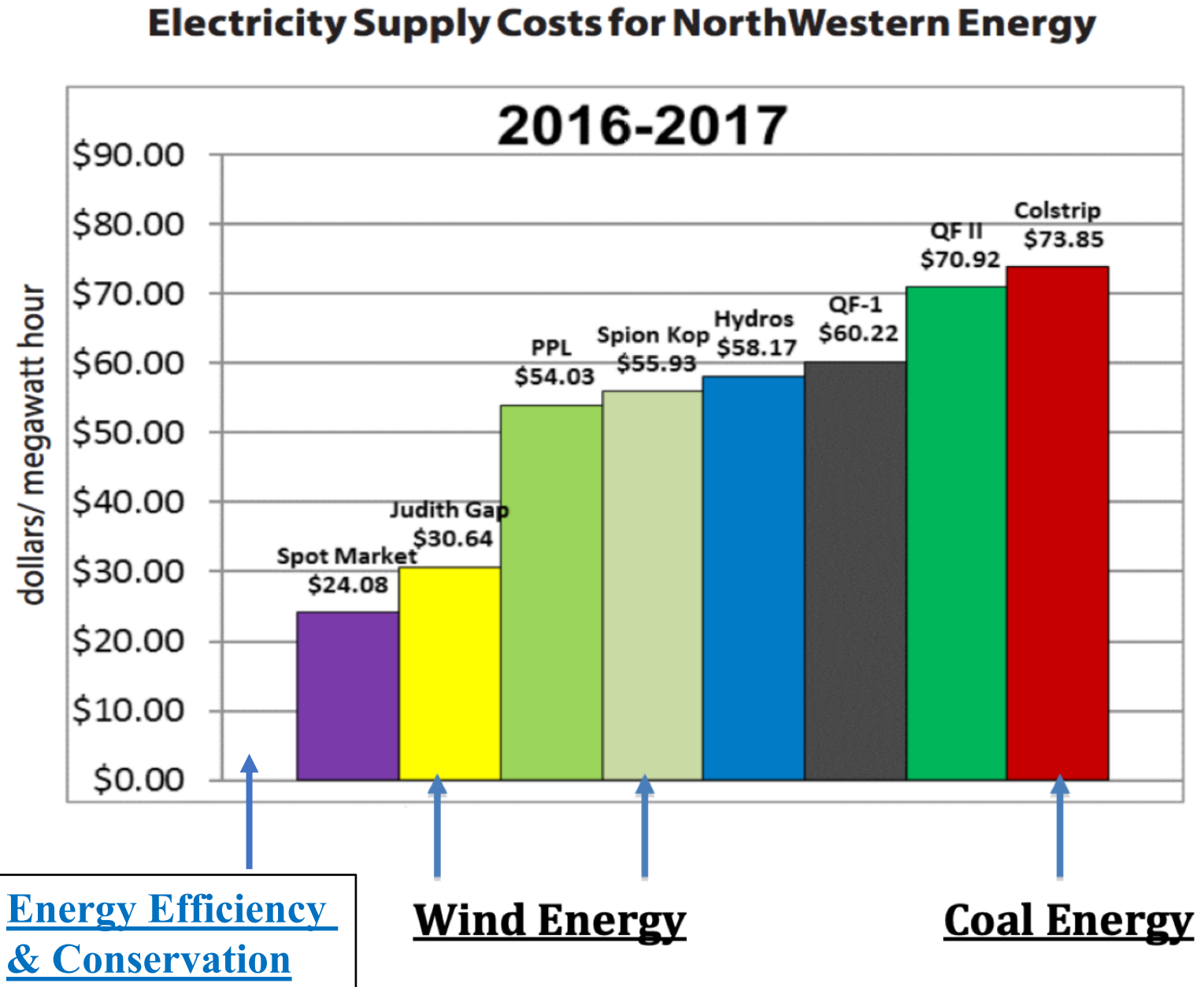
Colstrip Units 3 & 4 average greenhouse gases emissions equals:

- Over 1 billion gallons of gas burned
- Over 2 million vehicles on the road for 1 year
- Over 23 million barrels of oil burned





Colstrip is
Expensive



Source: Montana Consumer Counsel



What Makes Colstrip So Expensive?

1. The original sin

- 2007: NWE paid \$187 million for 30% of CU4 (220 megawatts)
- 2008: NWE *coaxes* PSC into requiring NWE's customers pay \$407 million at an 8.25% rate of return until 2043.

2. Day-to-Day costs.

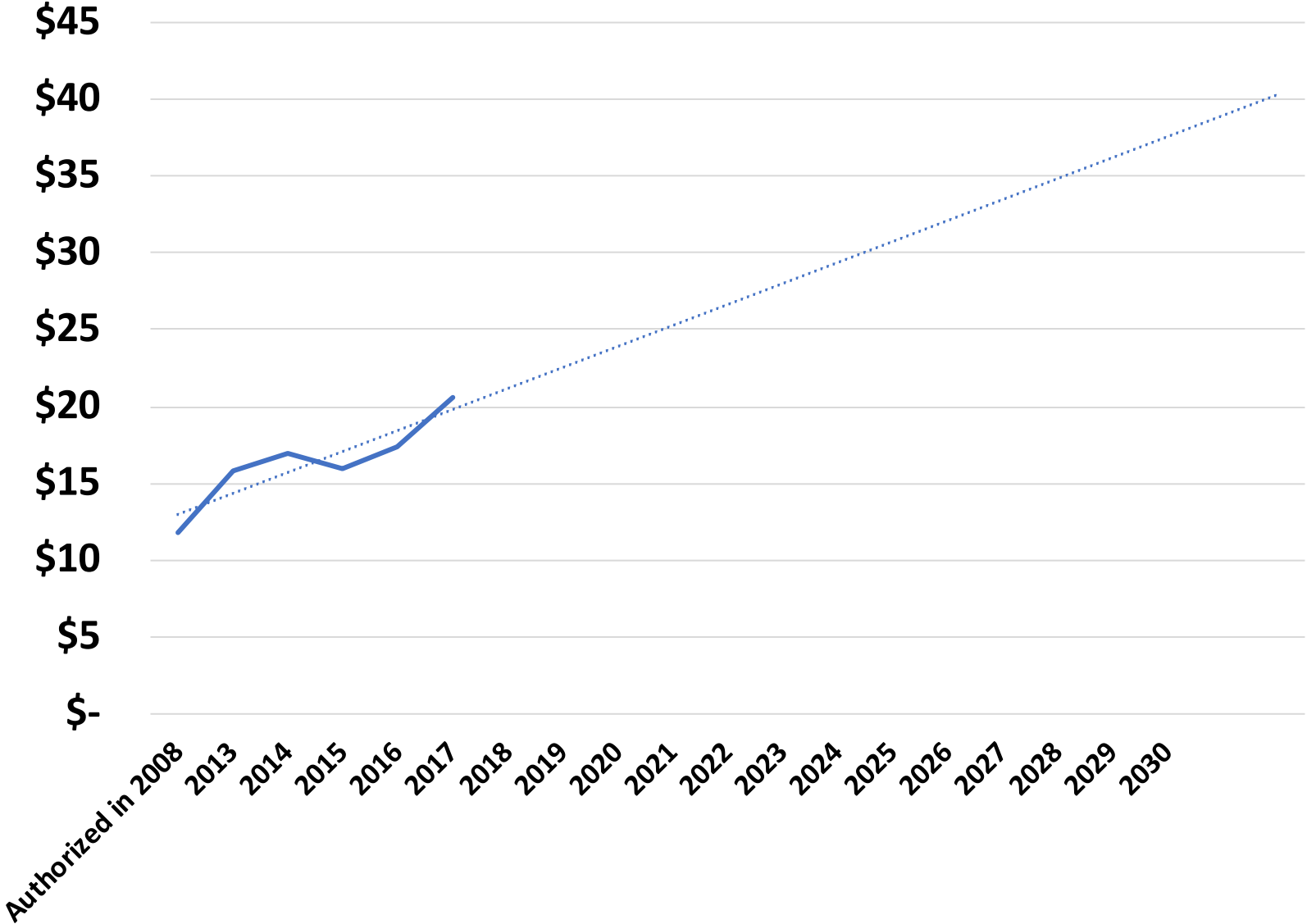


Shhhhhh. It's a secret!

- **2020 Coal Supply Agreement**
(NorthWestern Requested)
- **Colstrip Unit 4 Operations data**
(Talen Requested)
- **Colstrip budget**
(Talen Requested)
- **Colstrip capital expenditures projections**
i.e., \$20 million Superheater *(Talen Requested)*
- **Cost estimates for environmental compliance**
(Talen Requested)

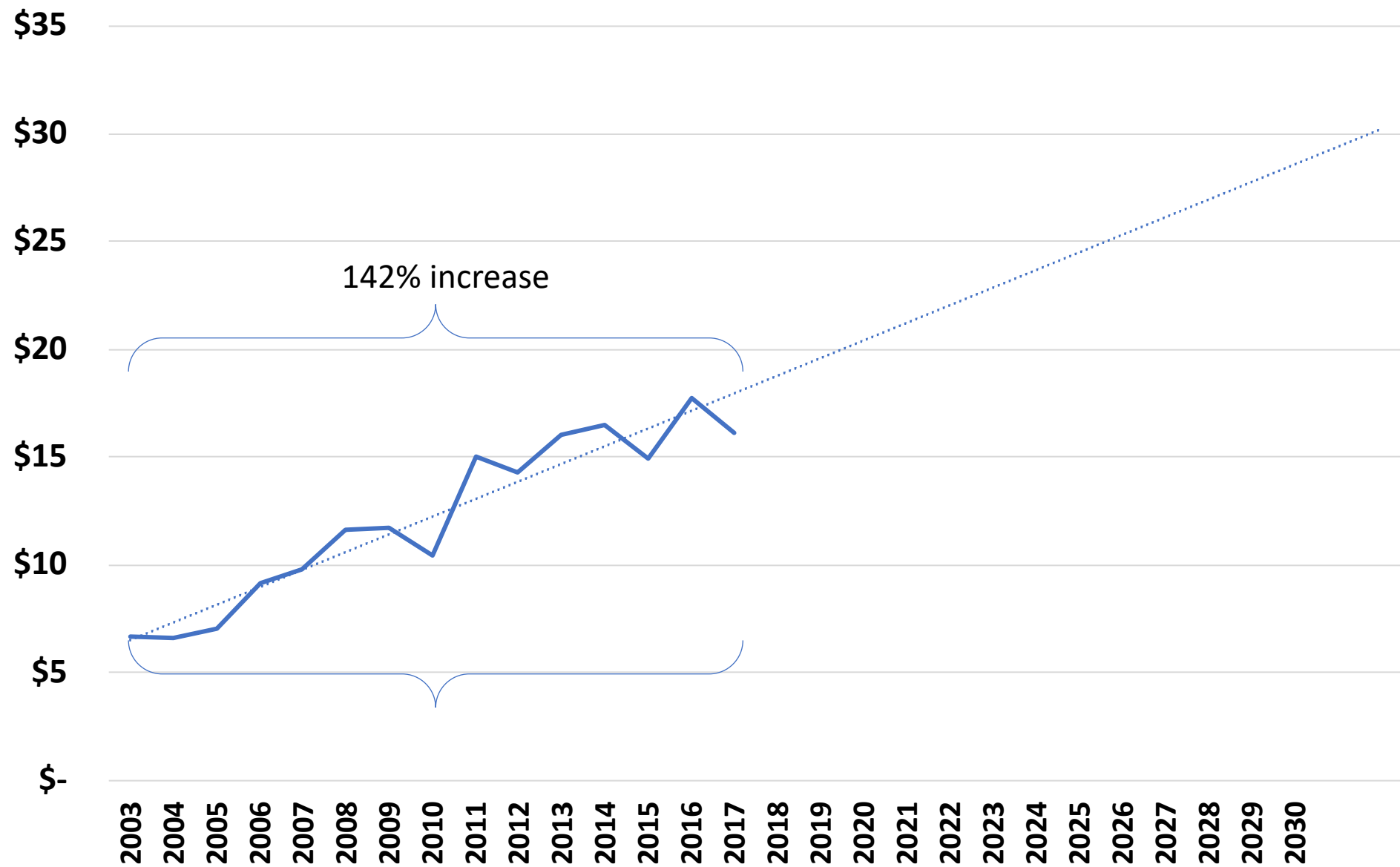


**NorthWestern's Annual Colstrip Fixed
Operation & Maintenance Costs
(Millions of Dollars)**





Average Annual Colstrip Fuel Prices (Dollars per Megawatt Hour)



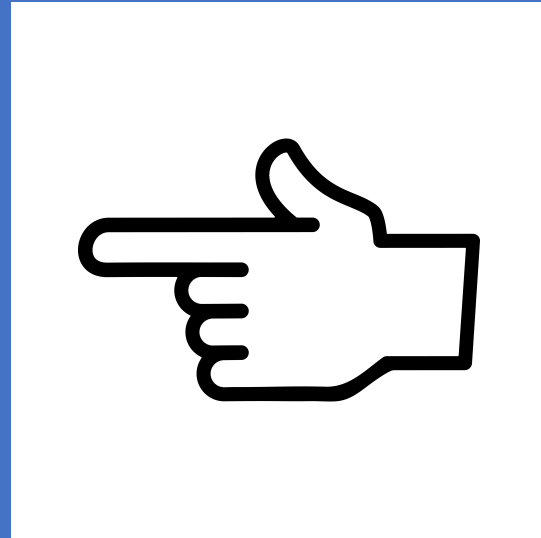
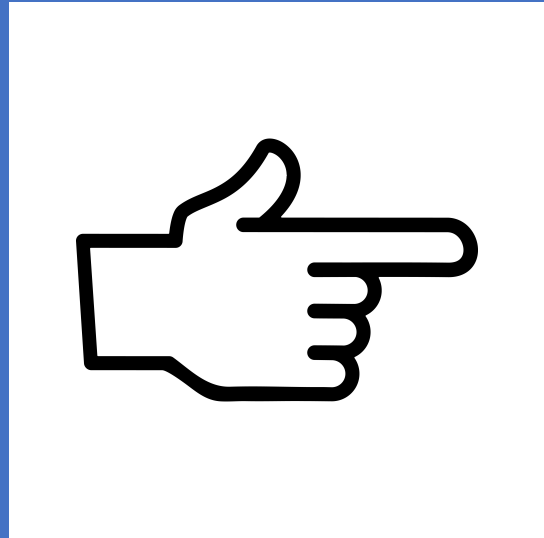


Coal Ash – Who Pays?



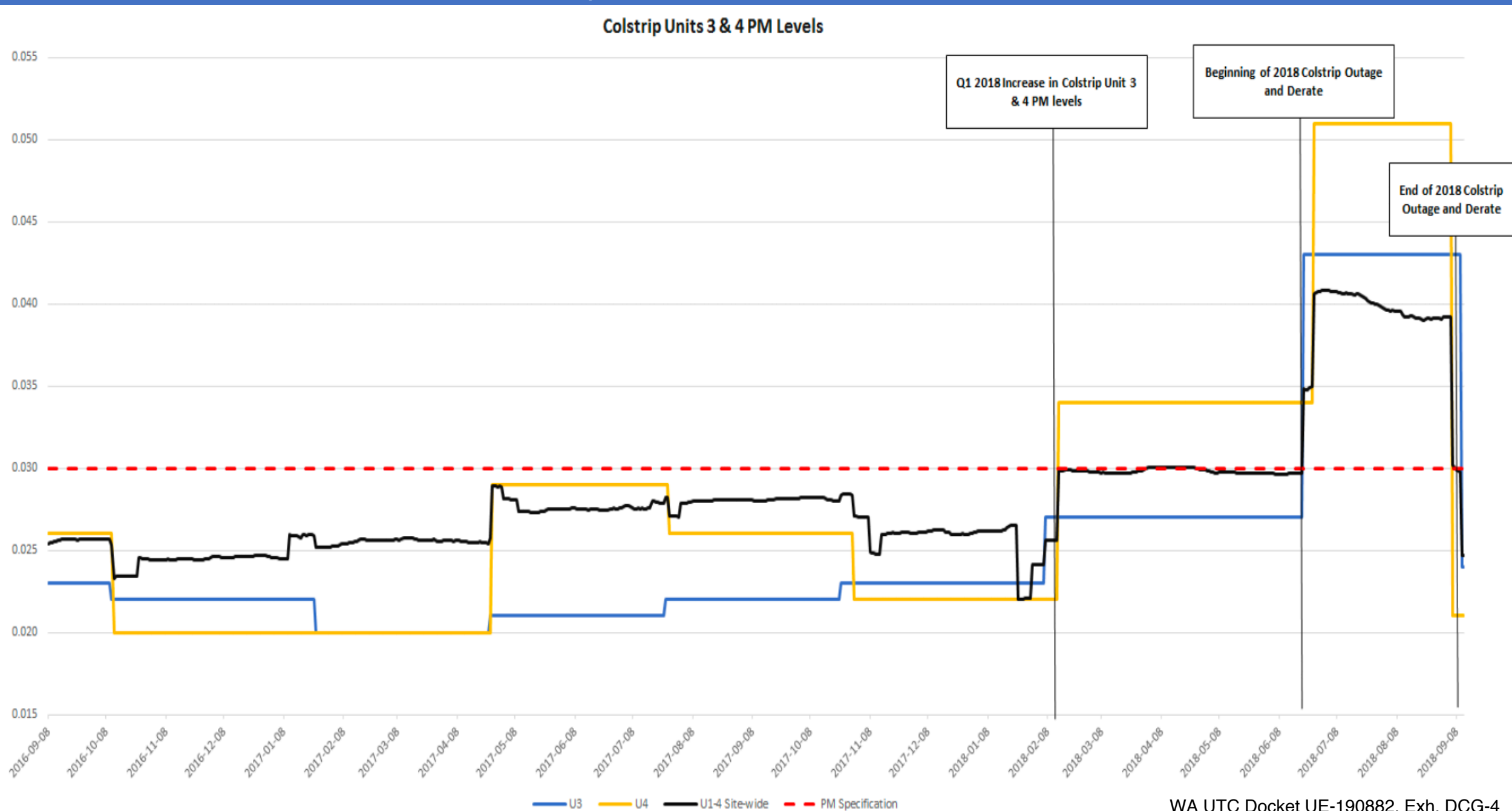


NorthWestern Energy v. Puget Sound Energy



- DEQ conditionally approved the CU3 & 4 Ash Ponds cleanup plan. Customers could pay millions more if Talen's deeply flawed plans fail.
- EPA is on its 6th rulemaking to weaken coal ash requirements.

Mercury and Air Toxics Pollution





Other Cost That Are More Than \$1

- **Increased Fixed Costs:**
 - increases when Units 1 & 2 closed
 - Increases when Unit 3 closes
- **New Coal Contract** = Increased Costs and minimum 4.25 million tons; \$27+/ton
- **Greenhouse Gas Regulations:** modest cost of \$10/ton = \$30 million/year for NWE's share of CU4
- ➔ **Capital Expenditures for Aging Infrastructure**
 - changed use from baseload to wind integration
 - Superheater Boiler Cost

Alternatives are cheaper (unless they're ignored)

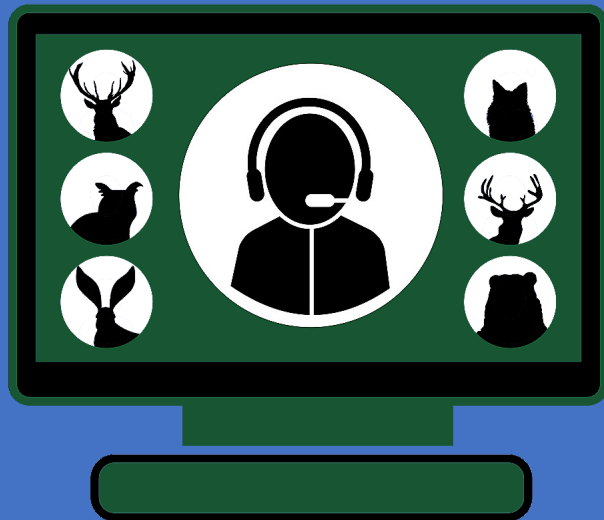




Questions & Answers

Using the “Chat” Function, please type in your question

For More Information or to join MEIC go to:
meic.org



Join us
Thursday, April 16th, 4 pm
for
Energy 303
From Colstrip to Clean Energy