



111(d) Plan Development

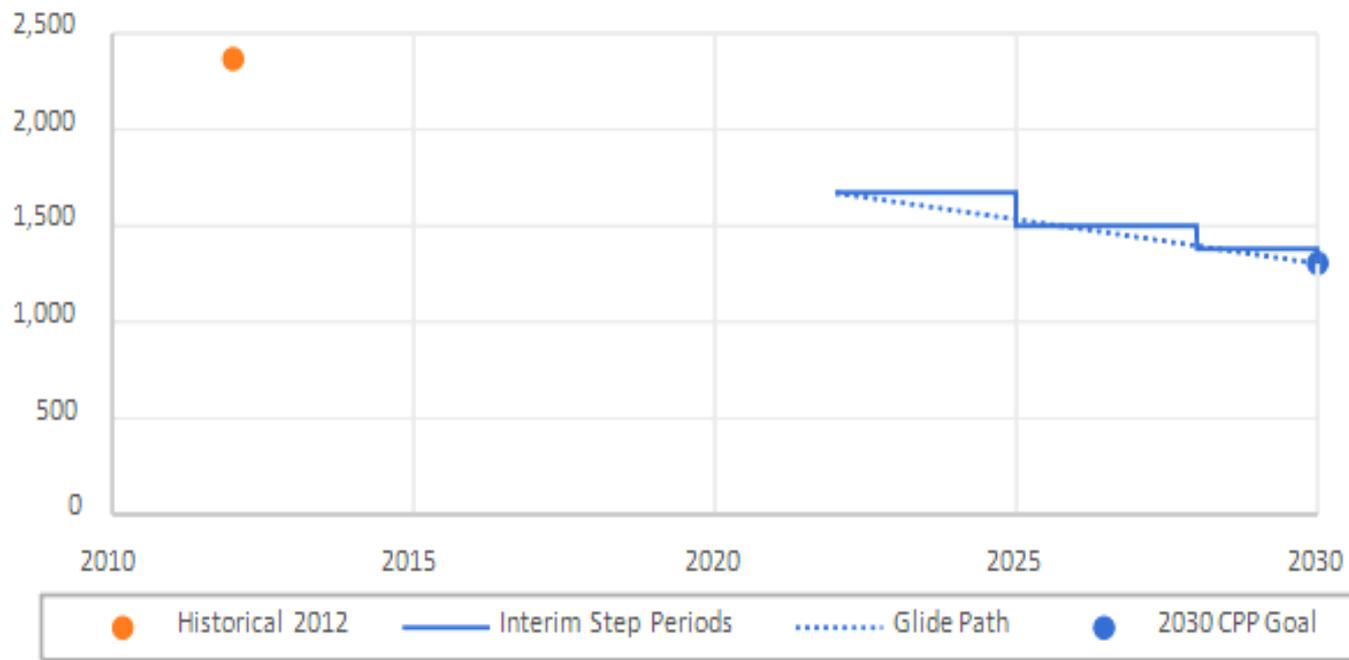
What is a 111(d) Plan?

- **A 111(d) plan must detail how reductions of carbon dioxide (CO₂) emissions from existing fossil fuel-fired power plants will be achieved.**
- **The plan is required by EPA's final Clean Power Plan rule (40 CFR 60, Subpart UUUU).**
- **It includes both state and federally enforceable requirements on the power plant operators to reduce CO₂ emissions.**

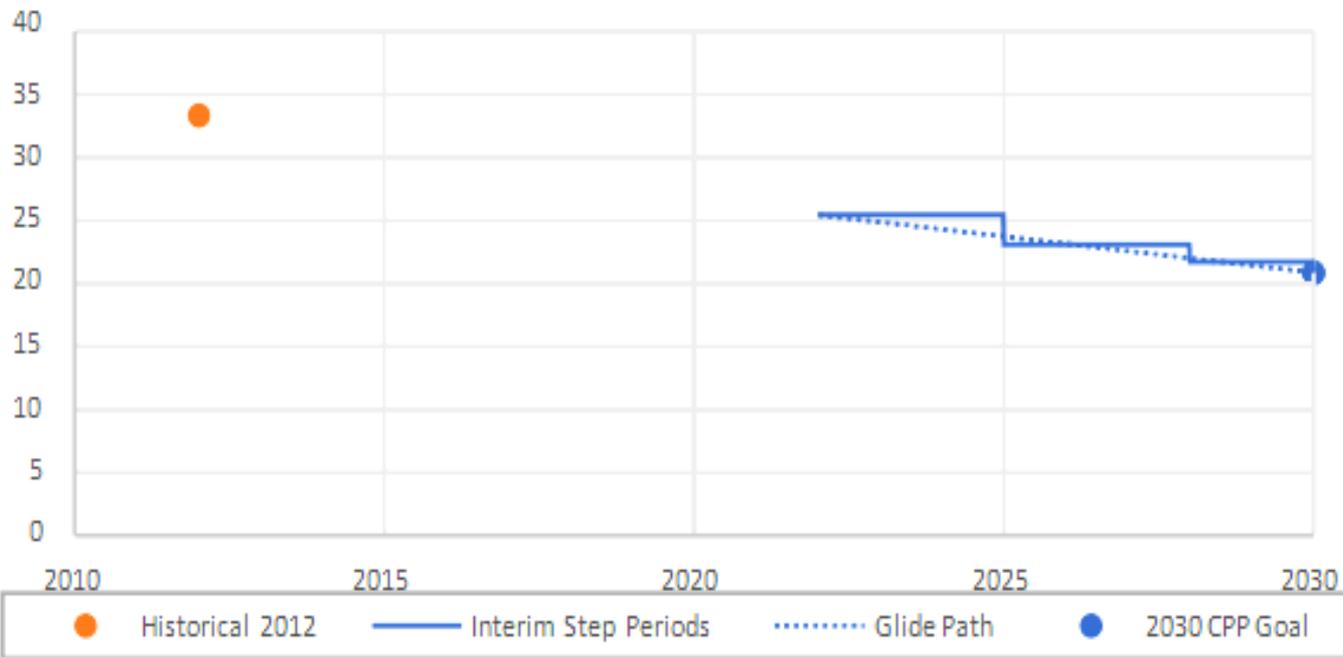
Proposed Rule vs. Final Rule

<u>ITEM</u>	<u>PROPOSAL</u>	<u>FINAL</u>
Start of Compliance	2020	2022
Compliance with Final Goal	2030	2030
Final Goal		
Rate	1,783 lb/MWh	1,305 lb/MWh
Mass	29,843,573 tons	20,883,232 tons
Interim Goal Period	2020-2029	2022-2029
Avg. Interim Goal		
Rate	1,817 lb/MWe-Hr	1,534 lb/MWe-Hr
Mass	30,403,643 tons	23,632,821 tons
Reduction Required		
Rate	24.7%	44.9%
Mass	10.5%	37.4%

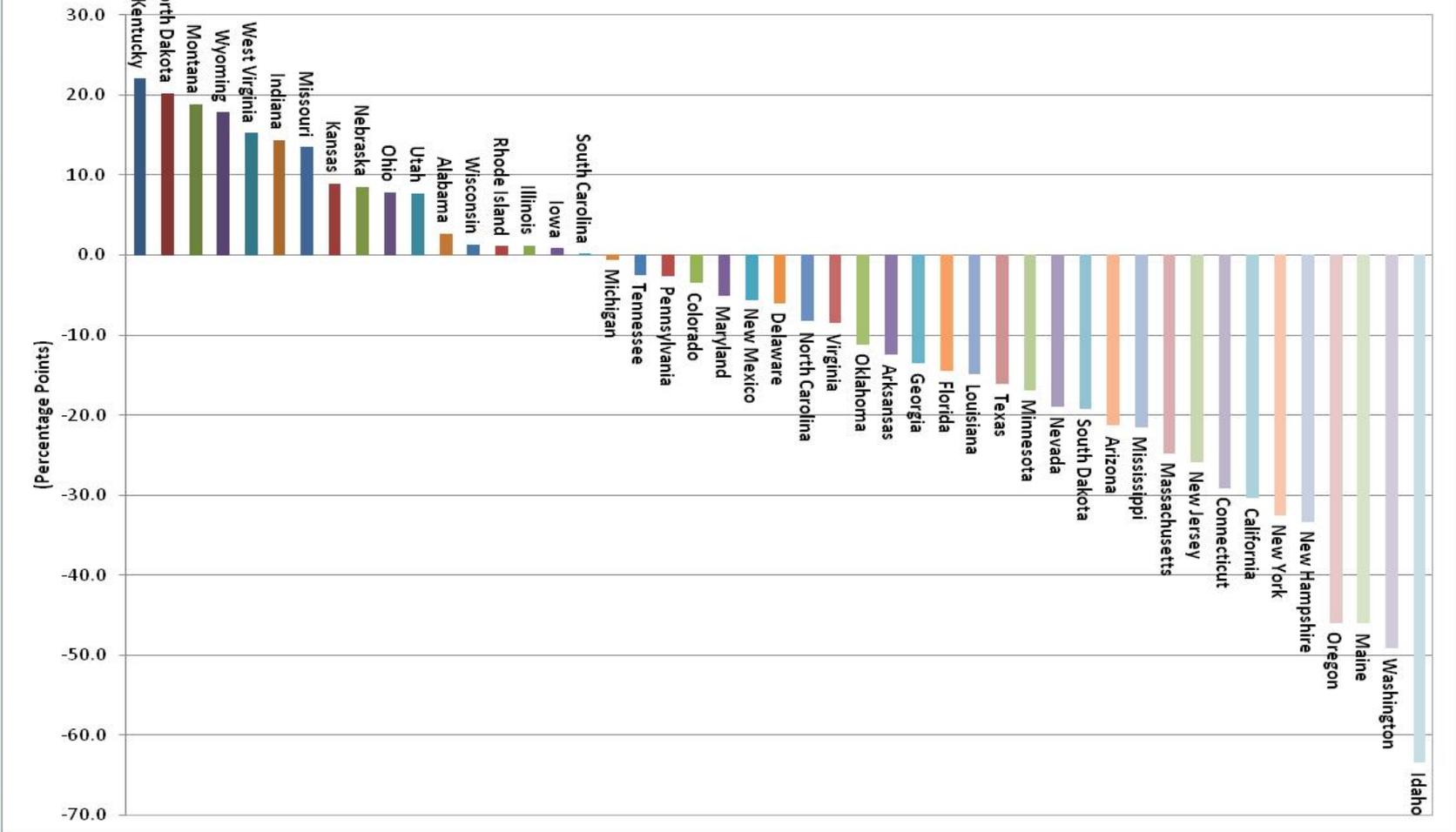
North Dakota CO₂ Rates (lbs/MWh)



North Dakota CO₂ Mass (million short tons)



Proposed vs. Final Rule Change in Percent Reduction



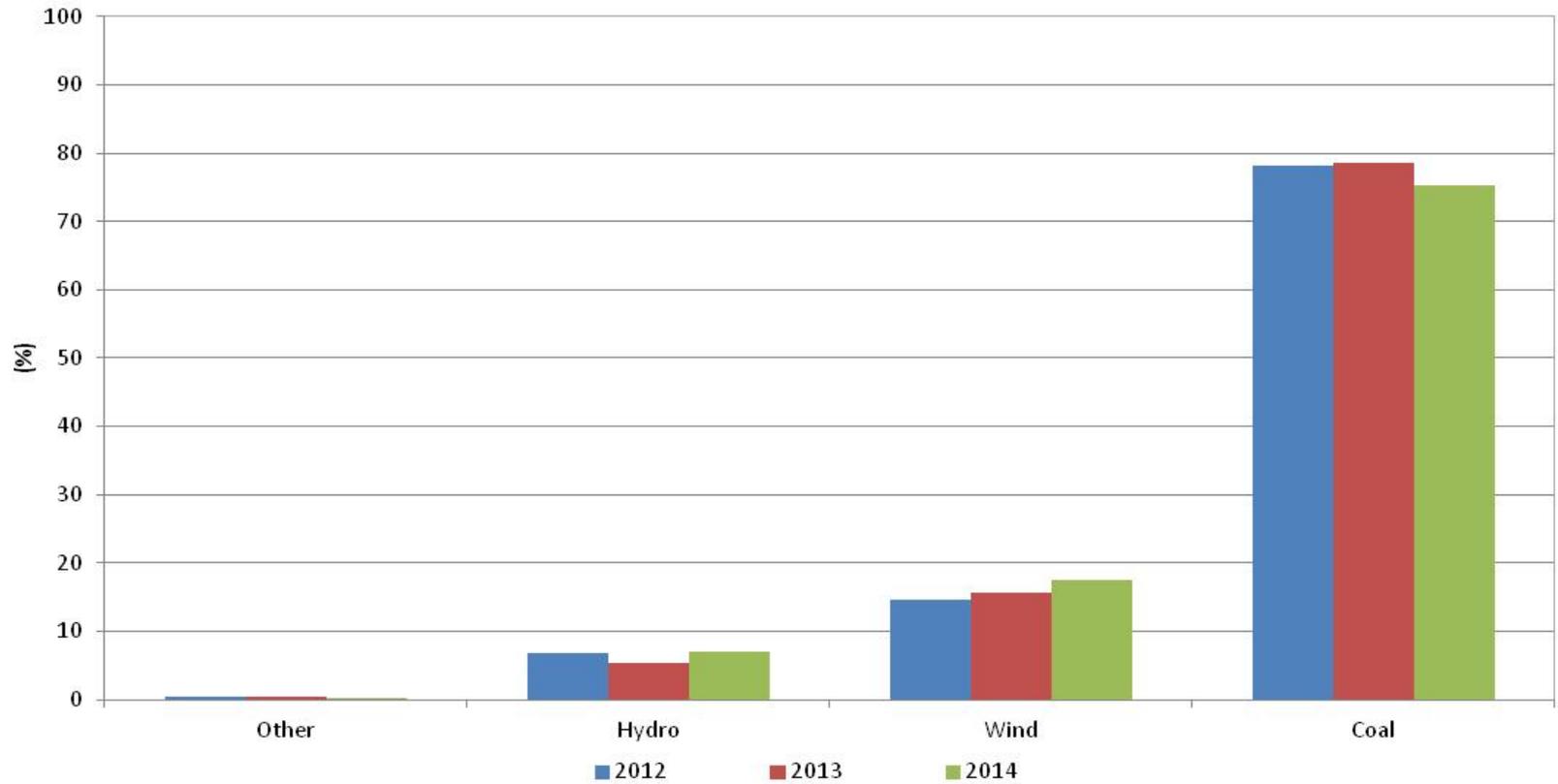
Proposed Rule vs. Final Rule

Nationwide Reduction from 2005 (mass)	30%	32%
Glide path	Single final number	Steps defined
Compliance	<p>Any existing wind generation could be used for demonstrating compliance</p> <p>Interstate trading allowed but up-front agreements between the states required</p>	<p>Only renewable energy (including wind) constructed after December 31, 2012 may be used for demonstrating compliance.</p> <p>Up-front agreements not required if trading ready rules in plan</p>
Incentives	None	Clean Energy Incentives Program
Reliability	No Safety Valve	Safety Valve included

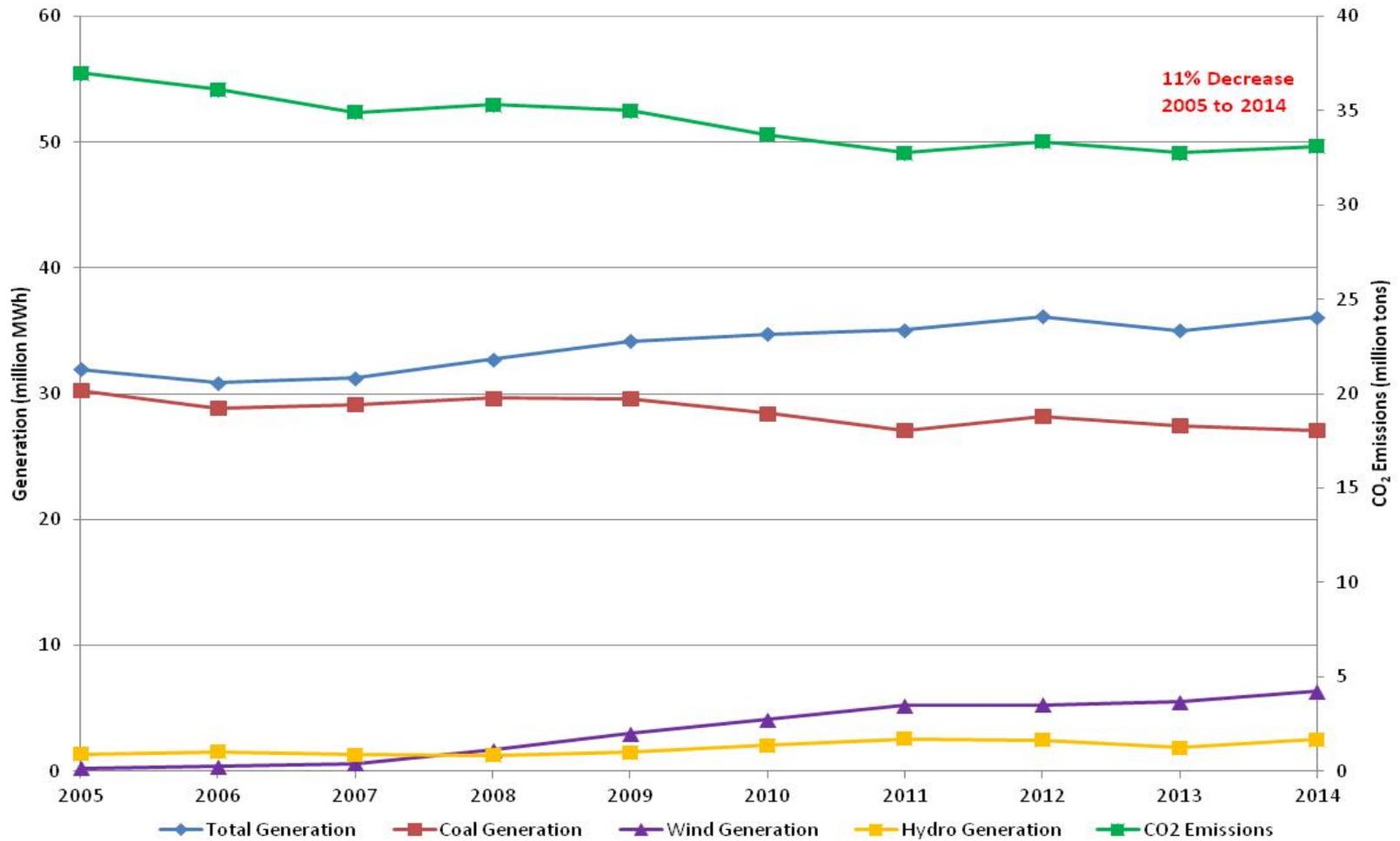
Federal (EPA) 111(d) Plan

- State and industry have no control**
- EPA plan to reduce CO₂ emissions in North Dakota**
- EPA will dictate rate or mass**
- EPA will define what sources or measures can create ERCs or allowances – fewer than a state may define**
- EPA will oversee and enforce the plan**

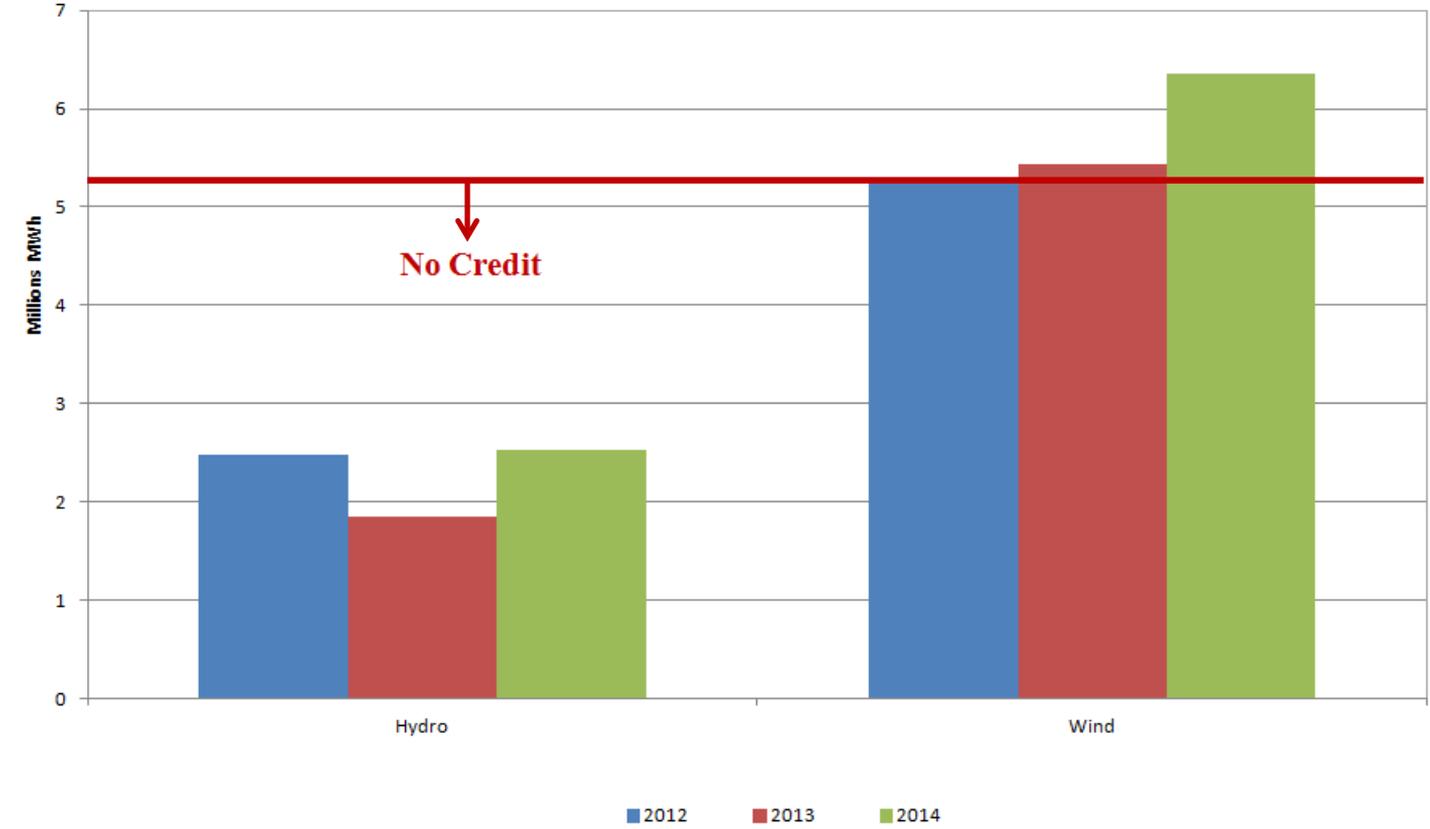
North Dakota Net Generation



North Dakota Electricity Generation



North Dakota Renewable Generation



Timing

Department's Comment Period Ends – December 18, 2015

Plan Due (without extension) – September 6, 2016

Plan Due (with extension) – September 6, 2018

Public Outreach

Four Public Input Meetings:

Williston

Beulah

Bismarck

Fargo

Estimated 1,500 people attended the meetings.

General Public Input

General Issues presented:

1. Regional and statewide economic impacts
2. Reliability and Cost of implementation
3. Remaining Useful Life of Facilities
4. Renewable Electric Generation Credit
5. Trading Ready Plan
6. State Plan not a Federal Plan
7. Pursue Legal Remedy
8. Request 2 year plan development time extension
9. Time lines for compliance unrealistic
10. PSC involvement needed
11. Keep all Plants and coal mines operational



Questions?

North Dakota Coal-Fired EGUs CO₂ Emissions

