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**A Comprehensive Summary of EPA's  
Clean Power Plan and the Interactions  
between the Clean Air Act and  
the Federal Power Act**

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## Notable Proposals in CPP

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- (1) Stringency of Building Block Applications
- (2) Justification for All Four Building Blocks as BSER
- (3) State Demonstrations of Infeasibility
- (4) Attributes of CO<sub>2</sub> & Electricity and the Portfolio Approach
- (5) EPA Construction of Ambiguous CAA Provisions
- (6) Artificiality of Inside/Outside Fence Proposal
- (7) Federal Enforceability and Portfolio Approach
- (8) Cost of Application of Each Building Block Measure
- (9) Remaining Useful Life
- (10) NGCC Utilization Rate of 70% Possible
- (11) Interactions Between CAA § § 's 111(d) and 111(b)

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Best System of Emissions Reduction (BSER)

Under CAA §111(d), state plans must establish *standards of performance* that reflect the degree of emission limitation achievable through the application of the “best system of emission reduction” that, taking into account the cost of achieving such reduction and any non-air quality health and environmental impacts and energy requirements, the Administrator determines has been adequately demonstrated.

## Stringency of Building Block Applications

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- Block 1- improving average heat rate of coal-fired steam EGUs by 6%
- Block 2 - displacing coal generation in each state by increasing generation from existing natural gas combined cycle (NGCC) capacity toward a 70% target utilization rate
- Block 3 - including projected amounts of generation achievable by completing all nuclear units currently under construction, avoiding retirement of about 6% of existing nuclear capacity, and increasing renewable capacity through state renewable generation targets consistent with renewable portfolio standards (RPS's) of states in the same region
- Block 4 - increasing state demand- side energy efficiency (EE) efforts to reach 1.5% annual electricity savings in the 2020–2029 period. (p. 34851)

## Justification for All Four Building Blocks as BSER

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- Each building block is a proven way to improve emissions rates at affected EGUs or reductions in EGU mass emissions
- Each is in widespread use and is independently capable of supporting significant CO<sub>2</sub> reductions from affected EGUs, either on an emission rate or mass-emissions basis, at a reasonable cost consistent with ensuring system reliability
- The combination of all four building blocks can achieve greater overall CO<sub>2</sub> emission reductions from affected EGUs, at a lower cost per unit of CO<sub>2</sub> eliminated, than the combination of building blocks 1 and 2. (p. 34878).

## State Demonstrations of Infeasibility

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- During comment period, a state may demonstrate that application of one of the building blocks to it would not produce the emission reduction target specified by EPA due to technical infeasibility or costs were higher than projected.
- However, the feasibility of ramping up other building blocks will be considered before accepting such arguments.
- For example, if a state demonstrates that its coal-fired EGUs could only achieve an average 4% heat rate improvement, instead of the 6% that EPA has proposed in Building Block 1, EPA would not adjust the state's goal unless the state also demonstrates that it could not get additional reductions from application of the other Building Blocks, or in related measures. (p. 34893).



## Attributes of CO<sub>2</sub> & Electricity and the Portfolio Approach

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Electricity regulation is unique due to

“the particular characteristics of carbon pollution, the interconnected nature of the power sector and the manner in which EGUs are currently operated...[s]pecifically, the operators...treat increments of generation as interchangeable between and among sources in a way that creates options for relying on varying utilization levels, lowering carbon generation, and reducing demand as components of the overall method for reducing CO<sub>2</sub> emissions.” (p. 34845).

## EPA Construction of Ambiguous CAA Provisions

- Senate amendment - CAA section 111(d)(1) excluded the regulation of any pollutant which is “included on a list published under [CAA section] 112(b).”
- House amendment - CAA section 111(d)(1) excluded the regulation of any pollutant which is “emitted from a source category which is regulated under section 112.” (p. 34853)
- Under Chevron U.S.A. Inc. v. NRDC, the courts ask whether the agency’s construction of the statute is permissible on the merits
- Step One - whether it is evident that “Congress has directly spoken to the precise question at issue;” and if so, the statute is unambiguous.
- Step Two – if ambiguous, court must uphold the agency’s interpretation of the statute “so long as it is based upon a permissible construction of the statute.



# Artificiality of Inside/Outside Fence Proposal

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## Artificiality of Inside/Outside Fence Proposal

EPA suggests artificiality of distinction because

- Neither the addition of RE nor the reduction of demand directly reduces the atmospheric emission of CO<sub>2</sub>
- Rather, they permit fossil EGUs to reduce their output and emissions, and are therefore “at the unit.”
- The real issue then is whether §111(d) authorizes the EPA to require EGUs to curtail their own output to comply with this rule. (p. 34889, fn. 237).

## Federal Enforceability and Portfolio Approach

- All measures relied on to achieve emission performance level should be included in state plan and inclusion in state plan renders those measures federally enforceable (p. 34901)
- “Portfolio Approach” – Allow state plans to include federally-enforceable measures that are not standards of performance, provided they reduce CO<sub>2</sub> emissions from affected sources. (p. 34903).
- Hinges on EPA’s interpretation of the word “for” - standards are reasonably considered to be “for” affected sources if they would decrease the amount of generation needed from affected EGUs.
- Renewable energy and demand-side EE requirements would be “for” fossil fuel-fired EGUs where such standards result in reduced CO<sub>2</sub> emissions from fossil fuel-fired EGUs, even if the standards do not apply directly to the EGUs. (p. 34903).

## Remaining Useful Life

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- CAA §111(d)(1) relieves states from strictly applying a standard of performance by taking into consideration, among other factors, “the remaining useful life of the existing source to which such standard applies.”
- EPA proposes that the flexibility provided in the state plan development process adequately allows for consideration of remaining useful life and therefore a separate application of the provision by states is unnecessary. (p. 34925).
- EPA’s 1975 implementing regulations contemplated deviations from the strict standards of performance when unreasonable cost of control resulting from plant age made less stringent standard more reasonable

## NGCC Utilization Rate of 70% Possible

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- the natural gas pipeline system already supports NGCC utilization rates of 60% or higher during peak hours
- even if constraints were placed on NGCC units in certain locations and hours, that would not prevent NGCC generation overall across a region in all hours
- pipeline and transmission planners have repeatedly demonstrated the ability to relieve bottlenecks and expand capacity; (pp. 34863-34864)

## Interactions Between CAA § § 's 111(d) and 111(b)

- An existing source subject to CAA 111(d) will continue to be subject to those requirements even after it undertakes a modification (p. 34903)
- An “existing source” that commences modification after the EPA has proposed or finalized a CAA 111(b) standard of performance applicable to it becomes a “new source.”
- It is unclear whether requirements imposed under CAA 111(d) continue for a source that ceases to be an existing source because it modifies
- Regulation under CAA §111(d) is predicated upon affected sources falling under CAA §111(b) *were they new sources.* (p. 34852)
- Treatment of new NGCC in state plans. (p. 34924)

# FERC – EPA Interactions

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## 2012 Policy Statement on MATS (Docket No. PL12-1-000, May 17 2012)

- Compliance extension request through Administrative Order (AO)
- Operator submits an AO request for EGUs that may affect reliability due to (1) deactivation and (2) delays related to installation of controls.
- Operator must provide copy of request to FERC ¶17
- FERC review will examine whether there might be a violation of a FERC-approved NERC Reliability Standard ¶17
- FERC will review the Planning Authority's analysis to ensure that it was reasonable and sufficiently supported by the information supplied ¶20
- FERC will advise the EPA by submitting written Commission comments to the EPA based on review of the information provided in the filing ¶21

## Clean Power Plan

- In light of EPA's proposal to rely on increased capacity factors for natural gas fired generation resources, gas pipeline adequacy should be considered from a regional perspective, not just a national perspective, due to existing constraints on the system.
- FERC staff provided input regarding the general timeline for the construction of transmission to remote resources and identified specific studies that explored questions about dependence on a significant amount of renewables to ensure adequate ancillary services.
- In order to promote efficient compliance with the Clean Power Plan, the EPA should not only allow but also encourage regional compliance.



# Future NRRI CPP Analyses

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## November/December 2014

- Interaction of §111(b) proposals and §111(d) proposal
- Interaction of Federal Power Act provisions and CPP

## February/March 2015

- Examination of comments from States and Stakeholder groups
- Update on Survey of state actions on compliance

## May/June 2015

- Legal Analysis of CPP proposal

# Legal Challenges

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## **Legal Challenges**

Murray Energy Corp. v. EPA, No. 14-1112 (D.C. Cir., filed June 18, 2014)

Murray Energy Corp. v. EPA, No. 14-1151 (D.C. Cir., filed Aug. 15, 2014).

West Virginia v. EPA (D.C. Cir., filed Aug. 1, 2014).

## **Kentucky House Bill 388 (April 2, 2014)**

- Includes maintenance of service as BSER
- Prohibits efficiency measures that limit utilization of EGU
- Requires consultation with PSC



# EPA Proposal

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## Timelines

- Finalization of Rule: June 1, 2015
- Submittal of State Plans: June 30, 2016
- Single-State Plan Extension: June 30, 2017
- Multi-State Plan Extension: June 30, 2018

State Plan design resources:

[www2.epa.gov/carbonpollutionstandardstoolbox](http://www2.epa.gov/carbonpollutionstandardstoolbox)