

The Alternatives Analysis under Nonattainment NSR (and PSD???)

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Outline

- Why does it matter?
- Statutory and Regulatory Basis
- Nonattainment NSR Examples
- PSD Examples
- Best Practices

Why does it matter?

- Most requirements for an NNSR or PSD permit have bounds
 - ◆ Demonstrate acceptable air quality impacts (PSD)
 - ◆ Offset adequate emissions (NNSR)
 - ◆ Show usage of the best control strategy to achieve a low emission rate (both)
 - ◆ Show other sources in state are in compliance (NNSR)
- In contrast, the alternatives analysis is essentially boundless, and the determination can turn on highly subjective comparisons
- The “no build” option is often considered

Statutory Basis – NNSR

- Clean Air Act Part D, Subpart I
173(a) – Permit Requirements
 - ◆ (1) Offsets
 - ◆ (2) LAER
 - ◆ (3) Statewide compliance demonstration
 - ◆ (4) Applicable NA SIP being adequately implemented
 - ◆ **(5) Alternatives Analysis**
- 173(a)(5) was added in the 1990 Clean Air Act Amendments, while (1)-(4) date to 1977 (with minor modifications to some in 1990)

173(a)(5)

- To obtain a permit, a source must provide *(5) an analysis of alternative sites, sizes, production processes, and environmental control techniques for such proposed source demonstrates that benefits of the proposed source significantly outweigh the environmental and social costs imposed as a result of its location, construction, or modification.*
- Not just an alternative siting analysis – far more holistic – a justification for the entire proposed project

Statutory Basis – PSD

- Clean Air Act Part C, Subpart I
 - 165(a) – Preconstruction Requirements
 - ◆ (1) Meet Part C, Subpart I (160- 169)
 - ◆ **(2) Public notice, review and comment**
 - ◆ (3) NSPS, NAAQS, Increment
 - ◆ (4) BACT
 - ◆ (5) Class I Impacts
 - ◆ (6) Additional Impacts

165(a)(2)

- The proposed permit has been subject to a review in accordance with this section,
- The required analysis has been conducted in accordance with regulations promulgated by the Administrator, and
- A public hearing has been held with opportunity for interested persons including representatives of the Administrator to appear and submit written or oral presentations on the air quality impact of such source, alternatives thereto, control technology requirements, and other appropriate considerations;
- Not just an alternative siting analysis – far more holistic – a justification for the entire proposed project

Regulatory Basis

- 173(a)(5) only manifests into regulations at a state SIP level – not in the Code of Federal Regulations (CFR)
- 165(a)(2) results in a CFR regulation instructing states on requirements for their PSD SIPs
 - ◆ 40 CFR 51.166(q)(2)(v) Public Participation
Provide opportunity for a public hearing for interested persons to appear and submit written or oral comments on the air quality impact of the source, alternatives to it, the control technology required, and other appropriate considerations.
 - ◆ 40 CFR 52.21's parallel refers to 40 CFR 124

NNSR Examples

- Campo Landfill
 - ◆ San Diego area on an Indian reservation
 - ◆ 1996 EAB ruling
 - ◆ Brief alternatives analysis largely referencing EIS prepared by Bureau of Indian Affairs
 - ◆ Upheld by EAB – deference to Region decisionmaking
- Borden Chemical
 - ◆ Baton Rouge nonattainment area – Geismar
 - Many examples in this area
 - ◆ 2000 Title V petition response (Browner)
 - ◆ LDEQ uses 3-step “IT Requirements” to meet alternatives requirements – named after 1984 state supreme court decision
 - ◆ EPA found LDEQ’s approach met the alternatives analysis requirements

NNSR Alternatives Guidance

- No federal guidance
- Some state guidance
 - ◆ Louisiana “IT Requirements”
 - ◆ Georgia EPD – attempt to quantify weighting of different sites for new power generation
 - ◆ Illinois – example for VOC sources
- Must be submitted with application
- Wide deference given to agency approval as long as all components addressed

PSD Examples

- Three EAB examples
 - ◆ 1997 – Eco Electrica
 - ◆ 1999 – Rockgen Energy Center
 - ◆ 2006 – Prairie State (2)
- Recent state-issued PSD permit
 - ◆ December 2009, Consumers Energy – Karn-Weadock

Eco Electrica

- Petitioner argued
 - ◆ There was no need
 - ◆ Demand-side and energy conservation would suffice
 - ◆ The “no build” argument
- Region II and Office of General Counsel agree in principle that these should be contemplated
- But, Region II said need should be considered by Puerto Rico given federal/territory relationship
 - ◆ May have reached different conclusion had single state controlled both
- Petition denied

Rockgen

- Petitioner argued
 - ◆ WDNR abused its discretion by failing to consider demand-side alternatives to constructing the facility
 - ◆ Again, the “no build” option
- Petition was rejected since petitioner did not raise issue with reasonable specificity during the public comment period

Prairie State - Arguments

■ Petitioners argued

- ◆ That the public comments urged IEPA to consider whether there is a “need” for Prairie State’s proposed Facility and that limits on the size of the facility should be established based on consideration of alternatives, including wind and solar power and the alternatives of energy conservation and demand management.

■ OAR replied

- ◆ Unlike Eco Electrica and Rockgen, we now believe that alternatives such as energy efficiency and demand management advocated as a basis for questioning the need for a facility are outside the scope of section 165(a)(2) of the Act and need not be considered.

Prairie State – EAB

(1 of 2)

- We are unable to reconcile OAR's new view that consideration of need for a facility is outside the scope of section 165(a)(2) of the Clean Air Act with the text of the statute and prior decisions.
- IEPA was mistaken in its assertion in its response to comments that it does not have the authority to consider need when evaluating the permit application.
- However, a permit issuer is only required to consider the analysis submitted during the public comment period, and it may engage in additional analysis as it sees fit, provided that the permit issuer's response to comments is sufficient to demonstrate that all significant comments were considered

Prairie State – EAB

(2 of 2)

- IEPA's response to comments showed that even if it felt it could have considered need, it would have rejected petitioner's claim
- Previously recognized that it is appropriate for a permit issuer to refrain from analyzing whether a proposed facility is needed where the state has specifically tasked another state agency with authority to consider that issue
- Illinois decision to deregulate industry and allow IPP projects points to legislative decision for IEPA to rely upon as a factor not to exercise discretion to engage in a broad needs analysis.

Consumers Energy

- Governor directed Michigan DEQ to proactively consider need with help from the Public Service Commission (PSC)
- Detailed cost comparison on 40-year bus bar cost showed advanced SCPC to be least cost
- Permit condition
 - ◆ The Permittee shall permanently retire existing coal fired generating capacity in accordance with the Coal Fired Power Plant Retirement Plan and Schedule Agreement (“Plan”) attached as Appendix D. The Plan provides for the permanent retirement of up to 958 megawatts. [Clean Air Act § 165 (a) (2)]
 - ◆ Additional PSC interaction related to increased emphasis on energy conservation measures

Best Practices

■ NNSR

- ◆ Study past submittals and coordinate with agency on expectations and scope of the analysis. There are many issued permit statement of bases with alternatives analyses included.

■ PSD

- ◆ If you anticipate a 165(a)(2) challenge, consider addressing expected topics upfront, either via a voluntary 165(a)(2) submittal (or potentially Step 1 of BACT)
- ◆ As a power producer, be prepared to address the “no build” claim
- ◆ Expect current EPA leadership to support expansive 165(a)(2)
- ◆ Don't think you can avoid impact of EAB rulings by being in a SIP-approved state

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Questions?