

**Issues Suggested by Staff**

**Staff Issue b.** Analyze the impact of foreseeable emerging energy efficiency technologies throughout the 20-year planning period.

**Empire's Response:**

This issue was addressed in Empire's 2014 annual update report (File No. EO-2014-0063). In that docket, Empire asked the Commission for clarification regarding previously addressed issues. The Commission responded: "If it believes that it has already adequately addressed any of the identified special contemporary issues in an earlier filing, Empire need only establish that fact in its [2014] annual update filing to comply with the Commission's directions."

If this issue remains in the Commission's list for Empire's 2015 annual update report, Empire plans to revisit the previous response and provide any updates.

**Staff Issue d.** Analyze and document the future capital and operating costs faced by each Empire coal-fired generating unit in order to comply with the following environmental standards:

- 1) Clean Air Act New Source Review provisions;
- 2) 1-hour Sulfur Dioxide National Ambient Air Quality Standard;
- 3) National Ambient Air Quality Standards for ozone and fine particulate matter;
- 4) Cross-State Air Pollution Rule, in the event that the rule is reinstated;
- 5) Clean Air Interstate Rule;
- 6) Mercury and Air Toxics Standards;
- 7) Clean Water Act Section 316(b) Cooling Water Intake Standards;
- 8) Clean Water Act Steam Electric Effluent Limitation Guidelines;
- 9) Coal Combustion Waste rules;
- 10) Clean Air Act Section 111(d) Greenhouse Gas standards for existing sources; and
- 11) Clean Air Act Regional Haze requirements.

**Empire's Response:**

This issue was addressed in Empire's 2014 annual update report (File No. EO-2014-0063). In that docket, Empire asked the Commission for clarification on previously addressed

issues. The Commission responded: “If it believes that it has already adequately addressed any of the identified special contemporary issues in an earlier filing, Empire need only establish that fact in its [2014] annual update filing to comply with the Commission’s directions.” Empire sought further Commission clarification regarding the instructions and whether the Commission was requiring it to document the cost to comply with each of the eleven environmental standards separately. Empire explained that all of its air quality control projects are designed to satisfy multiple environmental standards at once. The Commission clarified as follows: “The Commission is interested in the cost associated with compliance by each coal-fired generating unit with the eleven environmental standards in total. Empire does not need to separately breakdown the cost to comply with each of the eleven environmental standards.”

If this issue remains in the Commission’s list for Empire’s 2015 annual update report, Empire plans to revisit the previous response and provide any updates.

**Staff Issue e.** Analyze and document the cost of any transmission grid upgrades or additions needed to address transmission grid reliability, stability, or voltage support impacts that could result from the retirement of any existing Empire coal-fired generating unit in the time period established in the IRP process, to the extent not already included in the 2015 IRP filing.

**Empire’s Response:**

This issue was addressed in Empire’s 2014 annual update report (File No. EO-2014-0063). In that docket, Empire asked the Commission for clarification on previously addressed issues. The Commission responded: “If it believes that it has already adequately addressed any of the identified special contemporary issues in an earlier filing, Empire need only establish that fact in its [2014] annual update filing to comply with the Commission’s directions.”

If this issue remains in the Commission’s list for Empire’s 2015 annual update report, Empire plans to revisit the previous response and provide any updates.

**Issues Suggested by DE**

**DE Issue 1.** Investigate and analyze opportunities to encourage the uptake of combined heat and power (CHP) projects in Empire’s service territory. Specifically describe any barriers to the diffusion of CHP over which Empire has control and could remove, as well as the implications this removal would likely have on Empire’s load.

**DE Issue 2.** Consider and document what role CHP could play in complying with the EPA’s proposed regulations pertaining to carbon emission reductions from existing power plants (“Section 111(d”).

**DE Issue 3.** Describe and evaluate the various technologies and strategies (e.g., energy efficiency, renewables, CHP) by which Empire foresees complying with Section 111(d). Highlight their projected importance in achieving this compliance.

**Empire’s Response to DE Issues 1-3 (related to CHP):**

Empire has addressed CHP as a contemporary issue in each of the last two IRP filings (2013 IRP (File No. EO-2013-0547) and 2014 IRP annual update (File No. EO-2014-0063)). In the prior annual update docket, Empire asked the Commission for clarification on previously addressed issues. The Commission responded: “If it believes that it has already adequately addressed any of the identified special contemporary issues in an earlier filing, Empire need only establish that fact in its [2014] annual update filing to comply with the Commission’s directions.” If this issue remains in the Commission’s list for Empire’s 2015 annual update report, Empire plans to revisit the previous response related to CHP and provide any updates.

The IRP rule states that the utility shall evaluate supply-side resources “which the utility can reasonably expect to use, develop, implement or acquire...” 4 CSR 240-22.040 (1). CHP has been a topic in several of Empire’s Stakeholder Advisory Group meetings. CHP requires a partner or host facility, such as with a sewage treatment plant, hospital, nursing home, or colleges. It was discussed among the Advisory Group that Empire can continue to monitor CHP, but CHP cannot be a resource that Empire can reasonably be expected to use, develop, or acquire, since costs and other project details are very project specific and require a CHP partner. Empire reported that it will continue to look for CHP opportunities, but will not consider CHP as a supply-side candidate in its IRP process until it can reasonably expect to develop a project.