Objections to Sierra Club's Suggested SCIs

Sierra Club Issue 9: "Analyzing and documenting on a unit-by-unit basis the net present value revenue requirement of the relative economics of continuing to operate each [Empire] coalfired generating unit versus retiring and replacing each such unit in light of all of the environmental, capital, fuel, and O&M expenses needed to keep each such unit operating as compared to the cost of other demand side and supply side resources"

Empire's Objection: Empire objects to Sierra Club Issue 9 being included as a special contemporary issue on the bases of redundancy and burden. Pursuant to Commission Rule 4 CSR 240.22.070, Empire will be evaluating potential future resource plans as part of the integrated resource plan and risk analysis. Part of evaluating these plans will include studying potential early retirements of Empire's coal units and the cost to replace those units. The "unit-by-unit" analysis is thus duplicative of the integrated resource modeling. An issue should not be deemed a special contemporary issue if it is already explicitly or significantly covered or contemplated by the IRP Rules. It would be an unnecessary and costly burden to direct Empire to perform the analysis as requested by Sierra Club in addition to the analysis already required by the Commission's rules.

Sierra Club Issues 10, 11, 12: (10) "Analyzing and documenting the technical, maximum achievable, and realistic achievable energy and demand savings from demand side management, and incorporating each level of savings into [Empire's] resource planning process"; (11) "Analyzing and documenting the levels of combined heat and power and incorporating such achievable CHP into [Empire's] evaluation of demand side management"; (12) "Analyzing and documenting cost and performance information sufficient to fairly analyze and compare utility-scale wind and solar resources to other supply-side alternatives."

Empire's Objection: Empire objects to Sierra Club Issues 10, 11 and 12 being included as special contemporary issues on the bases of redundancy and burden. Pursuant to Commission Rules 4 CSR 240.22.040 – Supply-Side Resource Analysis and 4 CSR 240.22.050 – Demand-Side Resource Analysis, Empire will be evaluating potential supply-side and demand-side resources. "Technical, maximum achievable and realistic achievable" demand-side management will be evaluated as part of the DSM analysis, and potential combined heat and power, utility-scale wind and solar will be evaluated as a potential supply-side resource. An issue should not be deemed a special contemporary issue if it is already explicitly or significantly covered or contemplated by the IRP Rules. It would be an unnecessary and costly burden to direct Empire to perform the

analyses as requested by Sierra Club in addition to the analyses already required by the Commission's rules.

Objections to NRDC's Suggested SCIs

NRDC Issue 1: "In addition to the exercise prescribed in 4 CSR 240-22.045, Empire should analyze integrated distribution planning as a way to manage the distribution grid in a manner that reduces peaks and fills valleys in load profiles and lowers overall system costs with a combination of energy efficiency, demand response, electric vehicles, distributed generation, storage, advanced metering, and pricing strategies such as time-of-use rates (TOU) and inclining block rates (IBR)."

Empire's Objection: Empire objects to NRDC Issue 1 being included as a special contemporary issue on the bases of redundancy and burden. The Commission's IRP Rule already contains a section dedicated to the study of the transmission and distribution system, 4 CSR 240-22.045. Additionally, Empire plans to address energy efficiency, demand response, electric vehicle infrastructure, distributed generation, and storage as part of IRP Rule 4 CSR 240.22.040 – Supply-Side Resource Analysis. Additionally, pricing strategies such as time-of-use rates and inclining block rates are incentives primarily related to demand-side management (DSM) programs. As part of 4 CSR 240.22.050 – Demand-Side Resource Analysis, Empire plans to study the cost-effectiveness of potential DSM programs as part of its resource plans. It is only after cost-effective DSM programs are identified that Empire can consider the appropriate marketing and delivery approaches by which these methods can be achieved.

NRDC Issue 3: "Analyze and document the prospects for using securitization to advance the retirement of coal generation assets and channel the savings into more economical investments such as demand-side management, building wind and solar generation, and satisfying corporate renewable energy goals to attract new business to the service territory. Securitization is essentially a lower cost, long-term loan that ratepayers take out and pledge to repay using a portion of their future electricity bills using a long-term, lower-cost bond that will save customers money, some of which can be used as new capital."

Empire's Objection: NRDC requests that the Company provide a commentary on securitization as it relates to financing early retirement of its coal plants. As discussed in Empire's Customer Savings Plan docket, Commission Case No. EO-2018-0092, there are significant

investments of time and costs associated with dedicated utility rate bonds, i.e. securitization. It is a very complex process, and rating agencies have strict structural requirements. Based on the information learned in the Customer Savings Plan docket, Empire submits that study on this issue related to coal plant retirements is not warranted. As such, Empire objects to NRDC Issue 1 being included as a special contemporary issue, as it would create an unnecessary and costly burden.

Objections to DE's Suggested SCIs

DE Issue 1: "Evaluate the need to upgrade and enhance the utility's delivery infrastructure in order to ensure and advance system resiliency, reliability, and sustainability. In this evaluation, describe and document the potential job growth that utility investments in delivery infrastructure could create."

Empire's Objection: Empire objects to DE Issue 1 being included as a special contemporary issue on the basis of redundancy. The IRP Rule contains a section devoted to Transmission and Distribution Analysis - 4 CSR 240-22.045, and, as such, it would be redundant to include DE Issue 1 as a special contemporary issue. An issue should not be deemed a special contemporary issue if it is already explicitly or significantly covered or contemplated by the IRP Rules. Further, it would be inappropriate to require Empire to study and document potential job growth, thus placing the financial burden for this endeavor on Empire's customers.

DE Issue 8: "Describe, document, and evaluate potential DSM programs which could address the needs of customers that have or might otherwise "opt out" of participation in MEEIA. In this evaluation, describe and document potential participation and savings (both energy and demand), as well as program costs and cost-effectiveness. Additionally, please describe and document the impacts of additional customer "opt-outs" on the MEEIA charges to customer classes and the ability to achieve estimated savings targets."

Empire's Objection: Empire objects to the premise of DE Issue 8 which posits that there are DSM programs that may be designed that will benefit only Commercial and Industrial Opt-Out customers, without also benefitting other potential participants. While Empire's DSM Potential Study will, of course, account for customers who have opted out of participation in its estimation of DSM potential, it is also unclear how Empire, which does not currently have a MEEIA Demand-Side Investment Mechanism ("DSIM"), could, "describe and document the impacts of additional customer 'opt-outs' on the MEEIA charges to customer classes and the

ability to achieve estimated savings targets." Because the MEEIA charges themselves would theoretically be determined in a subsequent case proceeding, speculating on potential impacts of further potential opt-outs would be speculating upon speculation, and likely could not be done with enough precision to add value to the study.

Objections to OPC's Suggested SCIs

OPC Topic 1 (Additive Manufacturing ("AM" or "3D Printing")) – Requests 1-3: "Analyze and document the feasibility and cost saving implications (if any) in adopting AM technology to maintain present-day and future supply-side [and transmission, distribution] investments."

Empire's Objection: Empire objects to OPC Topic 1 being included as SCIs for Empire. IRP Rules 4 CSR 240.22.040 and 4 CSR 240.22.045 require that Empire, among other things, evaluate the cost-effectiveness of various supply-side, transmission and distribution investments. These costs rely on a robust set of assumptions developed by Empire as part of its IRP process.

OPC's request in this issue describes a very new and still emerging technology – namely, the use of 3-D printing for the creation of spare parts and tooling. OPC suggest that 3-D printing could enable construction of wind turbines (blades and tower segments) at the site of construction of a wind farm, which OPC alleges could result in increased financial savings. Given the early stages of this type of technology, it would be an unnecessary burden to direct Empire to perform the analysis as requested by OPC.