GT GreenbergTraurig

Doreen Unis Saia
518.689.1430
saiad@gtlaw.com

November 8, 2013

VIA ELECTRONIC MAIL

Ms. Deborah Eckels
Committee Support-Management Committee
New York Independent System Operator, Inc.
10 Krey Boulevard
Rensselaer, NY 12144

Re: 2013 Demand Curve Reset Process
Brattle Report

Dear Debbie:

In accordance with the deadline set forth in the New York Independent System Operator, Inc.'s November 1, 2013 e-mail, enclosed are the "Initial Comments of Entergy Nuclear Power Marketing, LLC in Response to the Brattle Report."

If you have any questions, please call or e-mail me.

Very truly yours,

GREENBERG TRAURIG, LLP

Doreen Unis Saia

DUS/aaw
Enclosure
ALB 1734234v1

COMMENTS OF ENTERGY NUCLEAR POWER MARKETING, LLC IN RESPONSE TO THE BRATTLE REPORT

Entergy Nuclear Power Marketing, LLC ("ENPM") hereby provides these comments in response to the November 1, 2013 Brattle Report[1] which purports to reassess and confirm the economic viability of the Frame + SCR option to serve as the NYC, LI and LHV proxy unit for this reset cycle.[2] The Brattle Report was provided to stakeholders via e-mail at 6:58 p.m. on November 1, 2013.[3] At that time, stakeholders were provided with the limited information that the NYISO Board had requested that Staff undertake further due diligence regarding the economic viability of the Frame + SCR.[4] NYISO Staff, apparently on its own initiative, translated "undertake further due diligence" to mean retain another consultant, Brattle, outside the Services Tariff-authorized RFP process which gave that consultant just two weeks to comprehensively review this issue, form conclusions and draft a report.[5]

---

[1] *See* Brattle Group, "Independent Evaluation of SCR Systems for Frame-Type Combustion Units" (dated November 1, 2013) (hereinafter, "Brattle" and "Brattle Report," respectively). Licata Energy & Environmental Consulting, Inc. ("Licata") is also listed as an author of the report. No information about Licata was provided other than Brattle retained them "to provide engineering expertise and support."

[2] The "Frame + SCR" option entails the construction of a simple cycle gas turbine, in this case a Siemens SGT6-5000F(5), equipped with a selective catalytic reduction system.

[3] Stakeholders were afforded no prior notice that the Brattle Report was being prepared; the e-mail set a deadline for comments of close of business, November 8, 2013.

[4] Section 5.14.1.2 of the NYISO's Services Tariff specifies that the proxy unit must be "the unit with technology that results in the lowest fixed costs and highest variable costs among all other units' technology that *are economically viable*." (*See* Services Tariff, Section 5.14.1.2 (emphasis added).) The FERC expounded on the meaning of the term "economically viable" in its order addressing the last demand curve reset process where it explained that the selected proxy unit must be "the only reasonably large scale, standard generating [unit] that could be practically constructed in" the particular locational zone under consideration. (*See* New York Independent System Operator, Inc., 134 FERC ¶ 61,058 (2011), P 37.) From the outset, the Demand Curve Consultants applied these standards in evaluating the various technologies to be considered as the proxy unit in this reset process. For example, at the December 3, 2012 ICAP Working Group meeting, S&L explained that it would evaluate each facility type based on several screening criteria that were designed to satisfy the Commission's approach.

[5] In its Final Recommendations, NYISO Staff accorded Brattle's work with respect to the PJM demand curve processes no weight based on NYISO Staff's finding that this work was not sufficiently rigorous to be credible. (*See*

ENPM has reviewed, and supports, the comments of the Independent Power Producers of New York, Inc. ("IPPNY") being submitted contemporaneously herewith. ENPM submits these comments to highlight the procedural and substantive flaws in the approach that the NYISO has taken at this late stage in the reset process – flaws that have resulted in a report that lacks credibility. As established herein and in the IPPNY Comments, the Brattle Report cannot be given any weight. Thus, ENPM joins IPPNY in requesting that the Board adopt the recommendations of the Demand Curve Consultants,[6] subsequently endorsed by NYISO Staff, to designate the LMS-100 + SCR as the NYC, LI and LHV proxy unit for this reset cycle.

Turning first to the procedural flaws, this reset process began last winter when the Demand Curve Consultants were retained in accordance with the RFP requirements. It has entailed numerous meetings and the issuance of a draft and final report by the Demand Curve Consultants and draft and final recommendations by NYISO Staff. During the course of this process, the Demand Curve Consultants extensively analyzed the specific issue of whether the Frame + SCR was an economically viable technology and conclusively determined that it was not based on, inter alia, its professional experience advising clients and the catastrophic failures that resulted when past attempts were made to couple these two technologies. When load interests cited to the recent installation of the Marsh Landing facility which entered commercial operations in May, 2013, the Demand Curve Consultants conducted a second complete analysis. Given the past operational issues with this technology, current experience working with developers and the very limited Marsh Landing operational data available, the Demand Curve

---

NYISO Staff September 6, 2013 Final Recommendations, p. 14). Thus, it is particularly perplexing that NYISO Staff would choose to retain this consulting firm for a second independent analysis of this issue.

[6] NERA Consulting, Inc. and Sargent & Lundy (jointly, "Demand Curve Consultants") conducted the independent review of the Demand Curve issues in this reset process. The NYISO has retained them for the last three reset processes (2007, 2010 and 2013).

Consultants ultimately concluded that there was inadequate evidence to determine that the Frame + SCR was a proven technology, and thus, it did not qualify for proxy unit consideration.[7] NYISO Staff thoroughly reviewed the Demand Curve Consultants' work in this area and concurred. Endorsing the Demand Curve Consultants' analyses, NYISO Staff recommended that the NYISO Board choose the LMS-100 + SCR for the NYC, LHV and LI proxy unit.

This reset process has been a comprehensive exercise that has been conducted in accordance with the twelve steps delineated in the Services Tariff. This process has been ongoing for nearly a year. The technology choice issues, including issues specific to the Frame + SCR technology, were among a small subset of issues that received the most extensive attention. The Demand Curve Consultants reviewed the available data concerning Frame + SCR operations over the course of a year and identified past failed applications and a new application that has not been in operation long enough for there to be data sufficient to confirm its viability. As the Demand Curve Consultants established, to gain industry acceptance, at least a full year of data is required to have adequate information to understand such factors as the technology's forced outage rate and other operating considerations.[8]

These circumstances surrounding the Frame + SCR technology are neither unusual nor an obstacle to the completion of this reset process. Rather, the demand curve reset process is functioning exactly as designed by ensuring thorough expert review, on a triennial basis, of data

[7] The Demand Curve Consultants based this determination, in part, on their finding that using SCRs in conjunction with Frame CTs "is problematic because exhaust gas temperatures" of such units "exceed 850°F, and that "[p]ast experience with SCR control . . . ha[s] shown that such high exhaust gas temperatures irreversibly damage the [SCR] catalysts." (*See* NERA Consulting, Inc., "Independent Study to Establish Parameters of the ICAP Demand Curve for the New York Independent System Operator" (dated August, 2, 2013), p. 25.)

[8] The Commission based its approval of the LMS-100 proxy unit in 2007 in large measure on the fact that the South Dakota facility had been operating for more than a year. Indeed, S&L was able to calculate a more conservative EFORd for the proxy unit because there was sufficient information about the technology's operating history. Here, no EFORd factor could even reasonably be determined because there is simply not enough information to calculate it.

for new technologies to determine whether they are capable of being constructed in the relevant capacity sub-zone and operated economically.[9] In particular, the complexity of the standard that is applied to define a proxy unit requires careful comprehensive analyses that take considerable time to perform. The integrity of the demand curve reset process is called into question when a different consultant retained without explanation and without notice hastily produces a result contrary to that which was the product of a thorough, careful, and data-driven analysis. Wishing cannot transform a nascent technology with insufficient operating data into a proven one.

The fact that Brattle had such limited time to complete its work[10] is a major factor that undoubtedly led to the substantive flaws that plague the Brattle Report.[11] There are several obvious shortcomings with the Brattle Report that appear on its face.[12] For example, Brattle forthrightly acknowledges that it relied primarily on a one-day site visit and conversations with Mitsubishi, an SCR manufacturer -- hardly a disinterested party -- to form its conclusions. It

---

[9] Basing demand curves on technologies that are not yet economically viable undercuts a core benefit of demand curves to produce stability and price certainty. In this regard, monitoring the viability of the Frame + SCR application and reassessing it in the next reset process is directly akin to the approach that NYISO Staff has proposed to take concerning the possible future development of new zero crossing point methodologies. (*See* NYISO Staff Final Recommendations, pp. 31-32, finding, "...there is insufficient information to demonstrate that a revised methodology would send a more accurate market price signal or otherwise better align the ICAP Demand Curves with the system reliability...Consistent with the requirement that each triennial Demand Curve reset review assess the zero crossing point, the NYISO will gather information and conduct additional analysis over the next two to three years and continue the assessment of the appropriate zero crossing methodology in the next-following Demand Curve reset.")

[10] This is the case even if Brattle were able to build off what NYISO Staff determined was a cursory review for the PJM demand curve process.

[11] The truncated review undertaken by Brattle cannot stand up when compared against the rigorous process by which the Demand Curve Consultants, with input from market participants and stakeholders, determined that the Frame + SCR lacked economic viability rendering it eligible for consideration as the proxy unit for this reset period. While S&L examined the economic viability of the Frame CT + SCR for almost a year, Brattle has examined the issue for apparently two weeks. Moreover, S&L already had reassessed its original determination based on new information regarding the Marsh Landing facility and reasonably concluded that the Frame CT + SCR simply did not have enough of a proven track record to be deemed a proven technology, and thus, satisfy the test for economic viability. After thoroughly reviewing S&L's analyses over the course of two sets of recommendations and input from stakeholders, NYISO Staff endorsed S&L's recommendations. In contrast, Brattle's determinations have not been subjected to review at all. Lastly, Brattle relied on essentially the same information as reviewed by S&L and the NYISO but paradoxically -- after just two weeks of consideration – reached a drastically different conclusion.

[12] These examples are being provided for illustrative purposes; they are not exhaustive.

appears that Brattle failed to vet its conclusions about the viability of the Frame + SCR technology with generation facility developers, such as by asking why this technology, with its lower fixed costs, has not been embraced by industry.[13] In addition, while Brattle reports that Marsh Landing operations have produced emissions apparently over the applicable limits, Brattle concedes that it was not able to secure the data necessary in the time afforded to determine Marsh Landing's compliance with its permit conditions and the data that it did use was "not generally suited for determining compliance with complex permit conditions." Likewise, Brattle's reviews of why past applications have failed are primarily comprised of conjecture.

In its Final Recommendations, NYISO Staff rejected Brattle's PJM demand curve work concerning the Frame + SCR technology finding that it lacked rigor. NYISO Staff focused on the fact that there was apparently little to no effort expended to "assess the technical feasibility of the technology."[14] NYISO Staff also raised the concern that no showing had been made that the "technology had been previously applied in a significant number of applications."[15] The same is true of the Brattle Report. While none of these shortcomings in the Brattle Report are particularly surprising given the time allotted, they do prevent the Board from being able to accord the Brattle Report any weight.

---

[13] Brattle seems to be swayed by its belief "that the likely performance and costs for frame-type combustion turbines with SCR will *encourage* more widespread adoption of this technology in the future . . ." (*See* Brattle Report, p. 17 (emphasis added).) However, Brattle does not identify a single new order or permit application to implement such a configuration. Indeed, the most Brattle could offer was that "Mitsubishi continues to develop and market the frame combustion turbine SCR combination, and has actively bid on several projects." (*Id.*, p. 16.) It cannot be ignored that the fact that Brattle had relied on "inquiries" and "budget requests" was one of the grounds that led NYISO Staff to reject the work that Brattle had done for PJM, characterizing its own New York process as "more rigorous." (*See* NYISO Staff Final Recommendations, p. 14.)

[14] *See* NYISO Staff Final Recommendations, p. 14.

[15] *Id.*

Thus, for the reasons set forth herein and at length in the IPPNY Comments, the Board should endorse the Demand Curve Consultants' recommendations and base the LHV, NYC and LI Demand Curves on the LMS-100 + SCR proxy unit.

CONCLUSION

The NYISO Board of Directors should adopt the Demand Curve Consultants' recommendation to calculate the LHV, NYC and LI Demand Curves based on the LMS-100 + SCR proxy unit.

Dated: November 8, 2013
Albany, New York

Respectfully submitted,

Doreen U. Saia
Robert M. Rosenthal
GREENBERG TRAURIG, LLP
Attorneys for
Entergy Nuclear Power Marketing, LLC
54 State Street
6th Floor
Albany, New York 12207
(518) 689-1430
saiad@gtlaw.com
rosenthalrm@gtlaw.com

ALB 1734207v1