

## **MMP Investigation of the Indeck-Oswego Energy Center**

### **Introduction**

The Indeck-Oswego Energy Center (“Energy Center”) is a combined cycle cogeneration facility with a maximum operating capacity of 58.7 MW. It has a 40 MW combustion turbine, a 172,000 pph dual pressure heat recovery steam generator, and a 16 MW extraction/condensing steam turbine. The complex was put into service in July of 1990. The gas turbine’s primary fuel is natural gas, but it can burn oil if natural gas supplies are interrupted. The unit is located east of the city of Oswego and on Lake Ontario. It is owned by the Indeck-Oswego Limited Partnership and operated by Indeck Operations, Inc. (together as “Indeck”). The NYISO investigated the following alleged market and environmental violations: “From March 8, 2002 through May 10, 2002 Indeck bid the Energy Center into the Day-Ahead Market but was incapable of operating, and the Energy Center conducted its March 1, 2002 Dependable Maximum Net Capability (“DMNC”) test with its pollution control system offline to maximize the power output of the unit”. The NYISO initiated its investigation into these allegations on December 4, 2002.<sup>1</sup>

The Resource Reliability Department and the Market Monitoring and Performance Department (“MMP”) conducted the NYISO’s investigation into these allegations. Resource Reliability investigated Indeck’s ICAP obligation and its generation portfolio. The MMP team’s task was to verify the unit was capable of running between March 8 and May 10, 2002 and that the pollution control system was in operation during the DMNC test conducted on March 1. The team’s investigation included a site visit, review of documents supplied by Indeck, and interviews with Indeck and City of Oswego personnel. An outside consultant was contracted by the NYISO to review various aspects of the investigation.

### **Site Visit**

The NYISO team conducted a site visit on Thursday, December 19, 2002 at the Indeck-Oswego Energy Center (Appendix I). The team interviewed site personnel and reviewed relevant documents. From the interview, the team learned that, when the complex was originally built, Indeck contracted with Hammermill Paper Company, who owned the adjacent paper mill, to connect into their wastewater discharge system. On March 8, International Paper Company, the current owners of the paper mill, closed the mill. Construction of a permanent discharge pipe tying the complex directly into the city’s wastewater system was completed on May 15, 2002. During the interim, Indeck staff indicated that they had two temporary options available to them to handle the unit’s wastewater had the unit been scheduled to run. These methods were:

1. Rent trash pump hoses and extend them the length of the Energy Center property, connecting the Energy Center’s discharge line to the city’s wastewater system
2. Store wastewater on site and have it periodically trucked away.

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<sup>1</sup> The topic of the pending site visit was discussed with Operations in a formal meeting.

Thereafter, review of the plant's logs for the month of March indicates that the plant was being managed as if it were capable of running (Appendix II). In addition, officials with the City of Oswego Wastewater Department were contacted and asked if arrangements had been made with the Energy Center regarding the handling of its wastewater. The team was told that Indeck had contacted the city regarding its wastewater situation and had made arrangements to access the city's wastewater system via hoses run from the plant, the length of the property, and into the system. The Department officials insisted that the unit at the Energy Center would have been available to run during that period had it been scheduled. Based on the interviews and the logs, the NYISO team concluded that, had the unit been called on, it would have been capable of running.

During the same site visit, the team reviewed Trace Summary Reports for the Energy Center's DMNC test (Appendix III). The reports show the actual hourly pollution output of the unit and the Department of Environmental Conservation's ("DEC") limits for this type of unit. Based on this information, the team concluded that the pollution control system was in operation during the DMNC test.

The Indeck representatives presented an additional issue for review during the site visit. From April 4, 2002 through April 24, 2002, steam safety valves had been removed from the unit (Appendix IV). In addition, during a three-day period, between April 8 and April 11, the valves were removed from the Energy Center for routine annual testing at a repair shop in Buffalo, New York. Throughout the time the steam safety valves were off the unit, the unit bid into the Day-Ahead Market ("DAM") and was never accepted. It is standard industry practice to perform short duration maintenance tasks and testing for a unit that has bid in the DAM and has not been accepted. Under these circumstances and based on the unit's bid startup time, the unit would not have been available had it been called on through the Supplemental Resource Evaluation ("SRE") process for short-term reliability. However, since the unit had not been selected in the DAM, these conditions do not violate any of Indeck's ICAP obligations. The NYISO team concluded that the steam safety valves could have been reinstalled, such that the unit would have been available to meet its DAM commitment at any time during the maintenance work, including that period when the valves had to be brought in from Buffalo.

### **Market Analysis**

The NYISO review of Energy Center's ICAP obligation showed that its ICAP obligation was lower than its DMNC rating. In addition, in Indeck's Portfolio, the total capacity of all its units is greater than its total ICAP obligation. Based on this information, the NYISO team concluded that Indeck had no reason to violate DEC pollution levels in an attempt to maximize the output of the Energy Center for ICAP obligations.

The NYISO review of Indeck's bidding pattern for the Energy Center showed that Indeck had raised its bids during the period that the unit did not have permanent direct access to the city's wastewater system. The amount being bid into the Day-Ahead Market was not enough to trip conduct but was higher than the average LBMP for their zone; other commitment parameters were examined and found to be reasonable. The NYISO team questioned Indeck during its site visit regarding the increase in its bids for the Energy Center. They informed the NYISO team that this was to reflect the anticipated additional operational cost incurred implementing either of their interim wastewater management solutions. Since conduct was not tripped, the NYISO team did no further follow-up on Indeck's bids for the Energy Center.

**Summary:**

The site visit, interviews, and review of Indeck-Oswego Energy Center documentation confirm that the Energy Center was capable of operating to meet its reliability obligations. The MMP found no evidence that the Energy Center violated DEC pollution standards during its DMNC test, and determined that the DMNC test was performed in accordance with standard industry practices.

The MMP investigation into the Energy Center's ICAP found that Indeck followed NYISO ICAP rules and obligations. Indeck bid the unit in accordance with its ICAP requirements, and its bids increased during the investigation period to take into account its extraordinary operational conditions.

## **List of Documents Reviewed**

- I. Site visit report
- II. Plant Logs
- III. Trace Data Summary Report
- IV. Indeck letter copied to NYISO General Counsel (December 18, 2002)