



H.1 R4 Report

A report from the New York Independent System Operator

Event Date: July 18, 2019

August 16, 2019

Executive Summary

On 7/18/19 between 16:36 and 16:38, the NYISO primary ICCP server lost connectivity to all ICCP partner entities. Connections with a majority of those entities automatically re-established by 16:40. The NYISO had intermittent drops of overall connectivity between 16:40 and 17:08 as NYISO resources performed troubleshooting steps to restore Long Island, Con Ed, and Hydro Quebec. Long Island, Con Ed, and Hydro Quebec did not automatically re-establish and remained disconnected until 17:13, 17:17, and 17:49 respectively until additional actions were taken by those entities.

Pursuant to H.1 R4, this report describes the disruption and its relationship to the control of the NYS Bulk Power System, and identifies the cause of the disruption and the corrective actions taken.

1. Problem and Relationship to the NYS Bulk Power System

On 07/18 at 16:37, all ICCP links dropped from ICCP server “A” at NYISO’s Krey Blvd site. ICCP Server “B” automatically became primary, as designed, and the majority of the remote entity connections re-established on “B”. Remote connections from Long Island, Con Ed, and Hydro Quebec did not automatically re-establish on “B”. At 16:41 the NYISO Enterprise Operations Center (EOC) initiated a triage call at the request of NYISO Operations. By 16:45, NYISO resources began analyzing network, server, and application status to determine the root cause of the remote connection issues.

Between 16:56 and 17:04, multiple systems were restarted in an attempt to re-establish those connections. At 17:06 NYISO Operations requested that a site switch of NYISO’s EMS/BMS software, which was completed at 17:08. At that time remote ICCP links began to re-establish at the NYISO’s Carman Rd site, but Con Ed, Long Island, and Hydro Quebec still remained disconnected. NYISO resources reached out to their counterparts at those entities to request restarts of their ICCP systems. At 17:13, Long Island’s connection re-established. At 17:17, Con Ed’s connection re-established. At 17:49, Hydro Quebec’s connection re-established.

At 19:25, NYISO EOC, Operations, and IT support coordinated an EMS/BMS site switch back to the NYISO’s Krey Blvd site to ensure that ICCP connectivity was again available at both sites. This site switch was successful and confirmed the redundancy was available; all remote ICCP connections re-established by 19:31.

The NYISO continued to monitor the system and run State Estimator and Contingency Analysis based on independent metering sources.

2. Cause of Incident

The NYISO is working with its EMS/BMS system vendor to determine what caused the initial drop of all ICCP connections. They have identified some resource contention issues at a system level that may have contributed to this problem. We will continue to look for a root cause and implement any fixes identified by the vendor.

3. Corrective Actions

The NYISO has reviewed the details of this event and has made modifications to the NYISO’s existing internal procedure to address this situation if it were to occur again. The NYISO has shared information with the entities that did not reconnect as designed to assist them in addressing any issues on their systems.