June 18, 2012

Alan Adamson  
New York State Reliability Council, LLC  
1907 Evva Drive  
Schenectady, NY 12303

Re: NPCC Response to a Request for Criteria Interpretation on Regional Reliability Directory# 8 System Restoration.

Dear Mr. Adamson:

In accordance with the NPCC Directory Development and Revision Manual the Task Force on Coordination of Operation (TFCO) has considered your Request for Criteria Interpretation and has provided the attached response.

The subject request, which seeks clarification of certain criteria within Directory#8 System Restoration, was initially reviewed by the NPCC Restoration Working Group (CO-11) and was further revised and approved by the TFCO on June 6th, 2012.

Please find attached the TFCO response along with the original Request for Interpretation and the TFCO transmittal letter.

In the future NPCC will archive these documents and other such requests in the Directory section of the NPCC website.

Please let me know if I can provide any further assistance in this matter.

Thank you.

Gerry Dunbar  
Northeast Power Coordinating Council, Inc.  
212.840.1070 (p)  
gdunbar@npcc.org
NPCC Request for Criteria Interpretation

**Note:** an Interpretation cannot be used to revise a Directory.

<table>
<thead>
<tr>
<th>Request for an Interpretation of a Directory</th>
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<tbody>
<tr>
<td>Date submitted: May 25, 2012</td>
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<tr>
<td>Date revised version submitted:</td>
</tr>
<tr>
<td><strong>Contact information for person requesting the interpretation:</strong></td>
</tr>
<tr>
<td>Name: Alan Adamson</td>
</tr>
<tr>
<td>Organization: New York State Reliability Council (NYSRC) Reliability Rules Subcommittee</td>
</tr>
<tr>
<td>Telephone: 518-355-1937</td>
</tr>
<tr>
<td>E-mail: <a href="mailto:aadamson@nycap.rr.com">aadamson@nycap.rr.com</a></td>
</tr>
<tr>
<td><strong>Identify the Directory that needs clarification:</strong></td>
</tr>
<tr>
<td>Directory Number: 8</td>
</tr>
<tr>
<td>Directory Title: System Restoration</td>
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<tr>
<td><strong>Identify specifically what portion of the Criteria needs clarification:</strong></td>
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<tr>
<td>Text of Requirement: Requirement 5.7.2.1</td>
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<tr>
<td>“The Generator Owner having generating facilities designated as having black start capability shall annually verify the facilities’ black start capability without dependencies on power sources unavailable during a partial or complete system blackout... The number of units within a generating facility that shall be black started for this test is determined by the...&quot;</td>
</tr>
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</table>
Reliability Coordinator and Transmission Operator as needed by their respective system restoration plans.”

Clarifications requested by the NYSRC:

1. NPCC Requirement: Designated black start facilities shall be tested annually. Is a power plant considered a facility or could there be more than one facility in a power plant? For example, if a power plant has two steam units and four gas turbines, and all six units are designated as black start units: (1) Are all six units defined collectively by NPCC as a single facility? or (2) Could there be more than one facility in the plant, say three units in one facility and three units in the other? If NPCC interprets that all six units make up one facility in this example, does this mean that, at a minimum, only one of the six black start units needs to tested each year? (We recognize that the RC and TO can determine to test more than the minimum number of units required by NPCC.)

2. Is the subject NPCC criterion applicable to required black start facility actions necessary for implementing a local Transmission Owner’s system restoration plan?

Identify the material impact associated with this interpretation:

Identify the material impact to your organization or others caused by the lack of clarity or an incorrect interpretation of this Directory:

NYSRC policy requires that the NYSRC must be assured that the NYISO complies with NPCC standards and criteria. Also, NYSRC Reliability Rules must, at a minimum, be consistent with NPCC requirements, although they may be more stringent or specific.

An incorrect interpretation of NPCC requirements could result in incorrect conclusions regarding NYISO compliance with NPCC requirements, or NYSRC reliability rules that are inconsistent with NPCC requirements.
The following interpretation of Directory #8 System Restoration was developed by the Task Force on Coordination of Operation (TFCO)

**Directory Number:** Directory #8

### 1. Question 1:

NPCC Requirement: Designated black start facilities shall be tested annually.

Is a power plant considered a facility or could there be more than one facility in a power plant? For example, if a power plant has two steam units and four gas turbines, and all six units are designated as black start units: (1) Are all six units defined collectively by NPCC as a single facility? or (2) Could there be more than one facility in the plant, say three units in one facility and three units in the other? If NPCC interprets that all six units make up one facility in this example, does this mean that, at a minimum, only one of the six black start units needs to tested each year? (We recognize that the RC and TO can determine to test more than the minimum number of units required by NPCC.)

**Response to Question 1:**

Response of the NPCC Task Force on Coordination of Operation:

A generating plant with Blackstart Capability may have black start generating units as well as generating units which are not black start capable. Citing Requirement 5.7.2.1:

“The Generator Owner having generating facilities designated as having blackstart capability shall annually verify the facilities’ blackstart capability without dependencies on power sources unavailable during a partial or complete system blackout. Once the facility has been started, it shall continue to demonstrate its capability to operate in a stable condition while isolated from the power system for a minimum of ten minutes. The number of units within a generating facility that shall be blackstarted for this test is determined by the Reliability Coordinator and Transmission Operator as needed by their respective system restoration plans.”

### Question 2:

Is the subject NPCC criterion applicable to required black start facility actions necessary for implementing a local Transmission Owner’s system restoration plan?
Response to Question 2

Response of the NPCC Task Force on Coordination of Operation:

No. The requirements of NPCC Directory 8 are limited to Black start Capability at designated Key Facilities as identified by the Reliability Coordinator in accordance with the following definitions as found in the NPCC Glossary of Terms:

“Black start Capability — The ability of a generating unit or station to go from a shutdown condition to an operating condition and start delivering power without assistance from the electric system.”

“Basic Minimum Power System — Consists of one or more generating stations, transmission lines, and substations operating in the form of an island. Such a system can be restarted independently and later synchronized to other islands or the main grid. The transmission elements included in the basic minimum power system connect the units which have black start capability to those units without black start capability which have been designated in the restoration plan to be restarted in the first stages of the restoration process. Also included are selected tie lines and corresponding substations, which are considered essential to the formation of a larger power system. The intent is to focus on the ability to create smaller electrical systems or islands, which can be expanded and synchronized to other such islands and the main grid.”

“Key Facilities — Facilities required to establish a basic minimum power system following a system blackout. These facilities are essential to the restoration plan of the Control Area and include generating stations having black start units and other selected generating stations, transmission elements which are part of the basic minimum power system, control centers and telecommunication centers and telecommunication facilities which are necessary to support protection and control facilities, voice and data between and within control centers and voice and data between control centers and key generating / transmission substations.”