



Manual Changes Clarifying Impacts of Operationalizing Gas Contingencies on Reserves

Natalie Tacka

Engineer, Applied Innovation

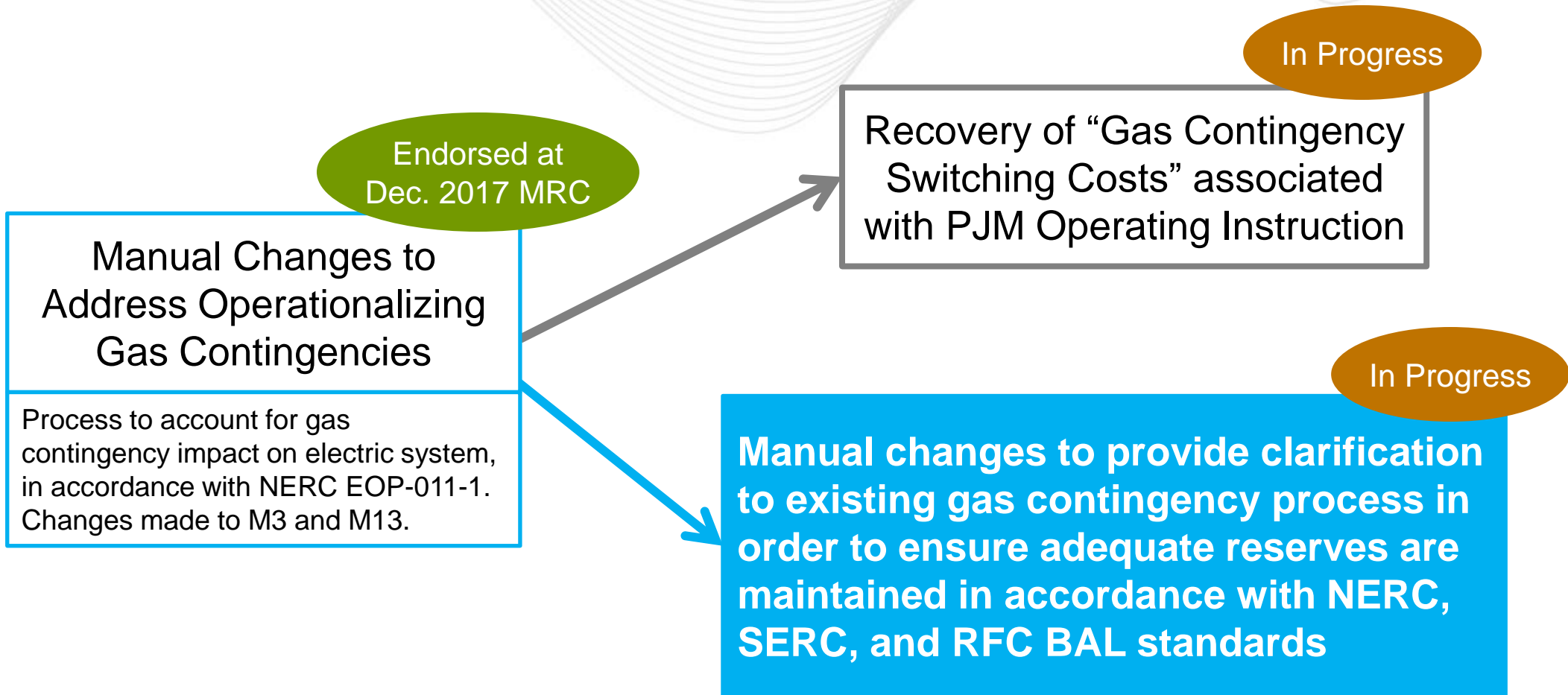
System Operations Subcommittee

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Action Required	Deadline	Who May Be Affected
Notify staff about updates to M11 and M13 for clarifying of impacts of gas contingencies on reserves	4.25.2019	Market Buyers, Market Sellers



Day-Ahead Scheduling Reserve (DASR) Requirement

Current	Changes	Manual Sections Impacted
<p>For a gas contingency, carry additional reserves to mitigate deficit between 30 minute reserves and contingency generation loss as needed. (M13, Section 3.9)</p>	<p>Language to address a credible gas contingency(s) in the calculation for increasing the Day-Ahead Scheduling Reserve Requirement</p>	<ul style="list-style-type: none"> Manual 13, Section 2.2 Reserve Requirements Manual 11, Section 11.2.1 Day-Ahead Scheduling Reserve Market Reserve Requirement



In the event PJM forecasts a credible natural gas contingency(s):

DASR Requirement = **Greater of** [DASR Requirement as calculated today, including any adjustments under Hot / Cold Weather Alerts **OR** \sum (**EcoMax of units part of largest credible gas contingency**)]

Settlement of Increase in DASR Requirement

Current	Clarification	Relevant Manual Section
<p>Base Requirement = the requirement defined in PJM Manual M-13, Section 2, plus any additional reserves scheduled to account for operational uncertainty</p>	<p>A gas contingency(s) is included in the universe of events settled when DASR Requirement is increased</p>	<p>Status quo settlement as defined in Manual 28, Section 19.3 Charges for Day Ahead Scheduling Reserve</p>



Any increase in the DASR Requirement due to a credible natural gas contingency(s) will be settled as “Base Requirement”

Current	Changes	Manual Sections Impacted
<p>If a credible gas contingency is triggered, units impacted are still eligible to provide reserves</p>	<p>Language added to clarify the reserve market eligibility of resources impacted by a credible gas pipeline contingency(s)</p>	<ul style="list-style-type: none"> Manual 13, Section 3.9 Assessing Gas Infrastructure Contingency Impacts on the Electric System Manual 11, Section 4.2.1 Synchronized Reserve Market Eligibility Manual 11, Section 4b.2.1 Non-Synchronized Reserve Resource Eligibility Manual 11, Section 11.2.2 Day-Ahead Scheduling Reserve Market Eligibility



In the event PJM forecasts a credible gas pipeline contingency(s), resources that are part of the credible gas pipeline contingency(s):

- Are not eligible to be a Day-Ahead Scheduling Reserve Resource
- May be ineligible to provide Synchronized and Non-Synchronized Reserve, as determined by PJM Dispatch, depending on the severity of the contingency and other system conditions in order to ensure system reliability is maintained

- First Reads
 - SOS: 4.4.2019
 - OC : 4.9.2019
 - MIC: 4.10.2019
 - MRC: 4.25.2019

- Second Reads / Endorsement
 - SOS: 5.2.2019
 - OC: 5.14.2019
 - MIC: 5.15.2019
 - MRC: 5.30.2019