M-01 Changes Related to COM-002-4
Operator Communications

SOS, OC Meeting
• COM-002-4 approved by NERC Board (5/7/14) and filed with FERC (5/14/14)
  – Becomes enforceable 1 year following FERC approval
• Requires changes to M-01 Section 4.2.4 – Three Part Communications
• COM-002-4 applies to BA, DP, RC, TOP, GO
  – Will require updates to TO/TOP matrix to reflect changes
• COM-002-4 requires development of Communications Protocol
  – PJM Communication Protocol will be documented in M-01
• Operating Instruction - A command by operating personnel responsible for the Real-time operation of the interconnected Bulk Electric System to change or preserve the state, status, output, or input of an Element of the Bulk Electric System or Facility of the Bulk Electric System.

• 3-Part Communication

• All-Call
1. Use name and company name when answering/initiating phone calls
2. Use English (required by COM-002-4)
3. Use 3-Part Communications for Operating Instructions in normal and emergency operations (required by COM-002-4)
4. PJM shall confirm receipt of All-Call by at least one party (required by COM-002-4)
5. For Operating Instructions that are issued with a time reference, time identification shall be in 24 hour format and include appropriate time zone.
6. For Operating Instructions that reference:
   a. transmission lines, the line identification shall include Terminal to Terminal designation, voltage level and line number
   b. Other substation equipment, designation shall include substation name, equipment number and equipment type
   c. Generating units, designation shall include the generating station name and unit number

7. For Operating Instructions that reference alphanumeric information, phonetically correct alphanumeric clarifiers can be used, if needed, to minimize misinterpretation
Communications Protocols Training Requirements

• Initial training on Communications Protocols and definitions required of all applicable operators prior to issuing and/or receiving Operating Instructions
  – PJM will utilize LMS to track completion
  – Task verification for all PJM, TO and GO operators on new protocols required per PER-005
• Assessment of the *individual operator adherence* to the Communication Protocols must be performed at least once every 12 months
  – Provide feedback to operators
  – Tack corrective actions as necessary

• Assessment of the effectiveness of these Communication Protocols at least once every 12 months
  – Utilize SOS to perform this assessment as an annual agenda item
Implementation Plan

- Obtain SOS, OC and MRC endorsement – August/Sept 2014
- Publish in M-01 (along with existing language)
- Develop online training – Sept 2014
- Perform operator task verifications – late Fall 2014
- Begin operator communication assessments – Jan 2015
- Review communication protocols at 2015 Spring Seminar
- Remove existing M-01 language upon enforcement date of COM-002-4
  - Enforcement date will be deadline for all training and task verification completion