

Proposed Updates to Manual 14A Language

Brinda Malladi

Interconnection Analysis

Planning Committee

Brindavani.malladi@pjm.com

03/08/18

www.pjm.com PJM©2018



- 1. Review Manual 14A language updates.
- 2. Sections with proposed updates:
 - Sec 2.1.6: Generation and Transmission Interconnection Feasibility Study Analysis and Results
 - Sec 2.2.2: System Impact Study Analysis and Schedule
 - Sec 2.3.2: Generation or Transmission Interconnection Facility Study Results
 - Sec 2.3.3: Generation or Transmission Interconnection Facility Study Results
 - Sec 2.3.4: Generation or Transmission Interconnection Facility Study Results
 - **B.3.2**: Short Circuit Cost Allocation Method
 - **B.3.5**: Stability cost Allocation Method



Updates to Sec 2.1.6

(Generation and Transmission Interconnection Feasibility Study Analysis and Results)

- The base case year to be used and network upgrade modeled for load flow and short circuit studies for specific queues
- The process implemented to perform the load flow studies
 - DC contingency analysis and the projects in a queue are studied as a group
- The process implemented to perform the short circuit studies
 - Breaker duty analysis and the projects are studied sequentially



Updates to Sec 2.1.6 contd:

(Generation and Transmission Interconnection Feasibility Study Analysis and Results)

- The queue projects less than 20 MW may request combined Feasibility/Impact study
- Non-PJM transmission owner areas are screened for potential impacts due to the New Service Request(s) and affected system is notified of the impacts



Updates to Sec 2.2.2

(System Impact Study Analysis and Schedule)

- the types of analyses included in system impact study process –
 AC power flow, short circuit, and stability analysis
- the load levels the studies are performed for summer peak, light load, and winter peak
- summer peak analysis procedure
 - generation deliverability, load deliverability, NERC P3 and P6 "N-1-1" analysis



Updates to Sec 2.2.2 contd:

(System Impact Study Analysis and Schedule)

- light load analysis procedure
 - dispatch details and the faults tested
- winter peak analysis procedure
 - generation deliverability, load deliverability, NERC P3, and P6 "N-1-1" analysis
- short circuit analysis procedure
- stability analysis procedure



Updates to Sec 2.3.2: Changing the heading:

Current

Generation or Transmission Interconnection Facilities Study Agreement New

Generation and Transmission Interconnection Facilities Study Agreement

Updates to Sec 2.3.3: Changing the heading:

Current

Generation or Transmission Interconnection Facilities Study Cost

New

Generation and Transmission Interconnection Facilities Study Cost



Updates to Sec 2.3.4:

(Generation and Transmission Interconnection Facilities Study Results)

Updates to identify changes requiring re-study of projects in facility study phase

Updates to Sec B.3.2:

(Short Circuit Cost Allocation Method)

Additional language defines the short circuit cost allocation method:

- New Service Requests causing or contributing to a fault current have cost responsibility
- If the addition of load flow or stability upgrade in short circuit case causes breaker(s) to exceed their applicable rating, the breakers identified will be allocated based on load flow or stability cost allocation rules



Updates to Sec B.3.5:

(Stability Cost Allocation Method)

Language added to clarify how PJM conducts stability cost allocation

- For a new interconnection request, PJM will assign costs proportional to the MW impact of the constraint the stability study identifies
- The MW impact is the margin between the requested MFO and the MW quantity at which the system stability is restored without the need for the Network Upgrade



- PC 2nd First Read 3/8/2018
- MRC First Read 3/22/2018
- Request for PC Endorsement 4/5/2018
- Request for MRC Endorsement 4/19/2018