

## Section 2 – Step 10 (pg42)

### PJM Member Actions

- Generation dispatchers suspend remaining regulation, when directed by PJM prior to shedding load.
- Transmission dispatchers / DPs shed an amount of load equal to or in excess of the amount requested by PJM dispatcher (Mid-Atlantic Region operators refer to Attachment E for specific allocation) within 5 minutes of the issued directive. The load shed plan must consider/recognize provisions as documented priority/critical load as described in the Note below.
- Transmission / Generation dispatchers notify management of the emergency procedure.
- Transmission dispatchers / DPs consider the use (or continued use) of public appeals to conserve electricity usage and consider the use of public announcements of the emergency.
- Transmission dispatchers notify governmental agencies, as applicable.
- Transmission dispatchers / DPs maintain the requested amount of load relief until the load shed order is cancelled by PJM dispatcher.
- Transmission Owner may coordinate with BtMG facility interconnected to the transmission system, or through the relevant electric distribution utility, during expected prolonged emergency load dump/shed or as otherwise necessary to help mitigate a grid emergency. As BtMG facilities do not participate in the wholesale energy market, any request to operate for the purpose of helping to mitigate a wholesale market issue is on a voluntary basis at the discretion of the BtMG owner, other than the existing Non-Retail BtMG provisions. Any request to operate to mitigate a wholesale market issue will be communicated to the BtMG as a voluntary request at the discretion of the BtMG owner, other than the existing Non-Retail BtMG provisions. Refer to Manual 14D Appendix A for more information regarding BtMG.
- Transmission dispatchers report the amount of load curtailed / restored upon implementation to the PJM Power Dispatcher.

#### Note:

Member Load shed plans must recognize priority and critical load including: Essential health and public safety facilities such as hospitals, police, fire facilities, 911 facilities, wastewater treatment facilities; Facilities providing electric service to facilities associated with the Bulk Electric System including off-site power to generating stations, substation light and power; Critical gas infrastructure used to supply gas pipeline pumping plants, processing and production facilities; and Telecommunication facilities.

#### Member Load shed plans must recognize:

- Provisions to minimize the overlap of circuits that are designated for manual load shed and circuits that serve designated critical loads;
- Provisions to minimize the overlap of circuits that are designated for manual Load shed and circuits that are utilized for underfrequency load shed (UFLS) or undervoltage load shed (UVLS); and;
- Provisions for limiting the utilization of UFLS or UVLS circuits for manual Load shed to situations where warranted by system conditions.<sup>1</sup>

Plans should be reviewed and updated at least annually including Attachment F of M-13.

Consider using automated programs in member's EMS to facilitate shedding the specified amount of load with the required timeline.

<sup>1</sup> Underfrequency load shedding circuits should only be used for manual load shed as a last resort and should start with the final stage (lowest frequency).

Rotate load that is shed when feasible to reduce impact to end use customers.

## Attachment F: PJM Manual Load Dump Capability

### Note:

Control Zone Under Frequency Load Shed (UFLS) Settings as follows:

Mid-Atlantic: 59.3, 58.9 and 58.5 Hz @ 10% increments

Western Control Zone: 59.5, 59.3, 59.1, 58.9 and 58.7 Hz @5% increments

ComEd: 59.3, 59.0 and 58.7 Hz @ 10% increments

Dominion: 59.3, 59.0 and 58.5 Hz @ 10% increments

EKPC: 59.5, 59.3, 59.1, 58.9, 58.7 and 58.5 Hz @ 5% increments.

All Member Load shed plans are to minimize the overlap of circuits that are designated for manual Load shed and circuits that are utilized for UFLS.

### Section 5: Transmission Security Emergencies

#### Step 10 (Real-time): Manual Load Dump Action

The Manual Load Dump Action is an Operating Instruction from PJM to shed firm load when the PJM RTO cannot provide adequate capacity to meet the PJM RTO's load and tie schedules, or critically overloaded transmission lines or equipment cannot be relieved in any other way

#### PJM Member Actions

- Generation dispatchers suspend remaining regulation, when directed by PJM prior to shedding load.
  
- Transmission dispatchers/DPs promptly shed an amount of load equal to or in excess of the amount requested by PJM dispatcher (Mid-Atlantic Region operators refer to Attachment E for specific allocation). The load shed plan must consider/recognize priority/critical load. must recognize:
  - Provisions to minimize the overlap of circuits that are designated for manual load shed and circuits that serve designated critical loads;
  - Provisions to minimize the overlap of circuits that are designated for manual Load shed and circuits that are utilized for underfrequency load shed (UFLS) or undervoltage load shed (UVLS); and;
  - Provisions for limiting the utilization of UFLS or UVLS circuits for manual Load shed to situations where warranted by system conditions.<sup>2</sup>

<sup>2</sup> Underfrequency load shedding circuits should only be used for manual load shed as a last resort and should start with the final stage (lowest frequency).

- Transmission/Generation dispatchers notify management of the emergency procedure.
- Transmission dispatchers/DPs consider the use (or continued use) of public appeals to conserve electricity usage and consider the use of public announcements of the emergency.
- Transmission dispatchers notify governmental agencies, as applicable.