

# Load Shed Program

November 20, 2014

VELCO as a Transmission Operator (TOP) and Transmission Owner (TO) is required by NERC and NPCC to have a Load Shed Plan, pursuant to

- [NERC Reliability Standard EOP-003-2 — Load Shedding Plans](#)
- [NPCC Directory #2 – Emergency Operations](#)

As a Local Control Center (LCC) and Market Participant (MP), VELCO has the responsibility and authority to direct emergency actions, to include Load Shed pursuant to

- [ISO-NE OP7 - Action in an Emergency](#)
- [ISO-NE OP13 - Standards for Voltage Reduction and Load Shedding Capability](#)

- VELCO has no end-use customer load and therefore relies entirely upon the state's distribution utilities to satisfy its load shed obligations.
- The Vermont Distribution Utilities (VDUs) are Market Participants (MPs), and as such must comply with ISO-NE Operating Procedures.
- ISO-NE OP13 requires that MPs be capable of manually shedding at least fifty (50) percent of load in ten (10) minutes or less.
- Currently, VELCO directs only those VDUs with a 24/7 staffed control center to shed load.

- ISO-NE conducts a monthly load shed simulation by directing VELCO to shed a percentage of its system load within 10 minutes.
- VELCO in turn directs each VDU with a 24/7 control center to simulate shedding that same percentage of their system load within 10 minutes.
- The total simulated load-shed is reported to ISO-NE for program adherence review.

- **PROBLEM:** There is a discrepancy of up to 80MW between VELCO's system load and the load being reported by the VDUs. ISO-NE has requested VELCO to coordinate the resolution of this discrepancy.
- **CAUSE:** The VDUs without a 24/7 control center are not being directed to shed load.
- **SOLUTION:** VDUs unable to shed load in 10 minutes or less must have in place agreements with other VDUs to shed load on their behalf pursuant to ISO-NE OP13.

- VDUs without 24/7 control centers include:
  - VPPSA (VPPSA is an MP)
    - Member Utilities including WEC
      - \*Note: The Village of Swanton has a 24/7 control center and participates in the load-shed program.
  - Stowe
- Options
  - VPPSA and/or VPPSA members enter into agreements with other VDUs that provide them their service.
  - VELCO could perform load-shedding at the “subtransmission level” where there is direct radial connections.
    - Lyndonville (VPPSA member)
    - Stowe
    - Chelsea (WEC)
  - \*Note that load-shedding is preferred at the distribution level for selective tripping in preserving critical customer load.

- All agreements must be coordinated with VELCO.
- VELCO must have copies of all VDU load shed plans so to evaluate their effectiveness.