National Association of State Energy Officials

Preparing for and Responding to Emergencies

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2019 New England Daily (Native) Generation by Fuel Type (MWh)

Daily generation by fuel type roll-up data (MWh) 2019 (Jan 1 – Dec 29).

Source: ISO-NE

Creating a Clean, Affordable and Resilient Energy Future for the Commonwealth
New England Natural Gas Infrastructure

5 Interstate Pipelines Serve New England

1. **Everett LNG**, Everett, MA: 0.7 Bcf/d, 3.4 Bcf storage (Exelon Generation/Constellation)
2. **Northeast Gateway**, off Cape Ann, MA: 0.4 to 0.8 Bcf/d; no storage (Exelrate Energy) [in operation as of May 2008]
3. **Neptune LNG**, off Cape Ann, MA: 0.4 Bcf/d; no storage (Exelon) [in service as of summer 2010 but not operative]
4. **Canaport LNG**, Saint John, NB: 0.75 to 1 Bcf/d, 9.9 Bcf of storage (Repsol, Irving Oil) [in operation as of 6-09]
Gas vs. Electricity
NEGA Gas Supply Task Force

• During peak demand and supply & delivery issues:
  o Monitors deliverability of gas supplies
  o Coordinates gas industry activities
  o Information clearinghouse to coordinate supply deliveries
  o Collects and distributes gas supply information - to members & state regulatory & policy officials
  o Maintains confidential contractual information - for use in a gas supply emergency
  o Coordinates dissemination of public information
  o Coordinates exchange of gas supply and deliverability information with members/gas industry

• During heating season – Task Force meets monthly & provided state officials with updates/meeting notes

• Conducts “bridge” calls with state officials should a supply situation emerge with implications for regional gas supply sufficiency
An Act Relative to Public Utility Companies
Chapter 133 of the Acts of 2009

• Applies to EDCs and LDCs
• Requires annual filing of emergency response plan (ERP) before May 15
• Department of Public Utilities (DPU) - review & approval process
• Sets performance standards for:
  – emergency preparation,
  – restoration of service, and
  – Reporting (after-action)
• DPU Chair in a declared emergency may “issue operational & management
directives and order expenditures or other measures by any investor-owned
utility ... necessary to respond to the state of emergency”.
• ERPs outline response, communications and mutual aid agreements.
• Gas curtailment part of the ERP
Gas Curtailment Planning

• DOER & DPU – coordinate on emergency planning as it relates to gas curtailment
• Currently working on overall understanding of plans and potential “asks” or actions in an emergency incident
• 2018 Lawrence gas incident - Long duration outage in 3 communities (Lawrence, Andover, North Andover)
  • Significant response and recovery lift:
    – 8,570 impacted meters (10K residential units)
    – 1 fatality
    – 4 home explosions; 19 uninhabitable;
    – Hundreds of basement fires
    – ~ 700 businesses impacted (685 business meters)
    – Significant temporary housing effort
• 43.3 miles of gas pipeline/5,086 service lines replaced
• $1.1 BB cost (+) to Columbia Gas/NiSource
Curtailment Plans – Sample Actions

• Curtailments could be system-wide or more limited in impact (localized).
• Sample LDC Actions:
  1. Identify & obtain external supply sources – pipeline suppliers or adjacent systems
  2. Reduce company use of gas
  3. Utilize internal sources of supply (LNG or CNG) to mitigate impacts
  4. Work through Gas Supply Task Force to obtain additional supply
  5. Public appeal to customers
  6. Curtailment of supply to large interruptible customers (typically large C&I)
  7. Reduce gas demand at public/state facilities
  8. Reduce system pressure
  9. Curtailment of large non-interruptible C&I customers & other businesses
  10. Residential customers (prioritize)

• Response actions are typically dictated by the scope of the incident
• States can take actions to LDCs: i.e. public appeal, reduce demand at state facilities, implement mandatory restriction on C&I operations, mandatory interruption of selected firm customers.
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