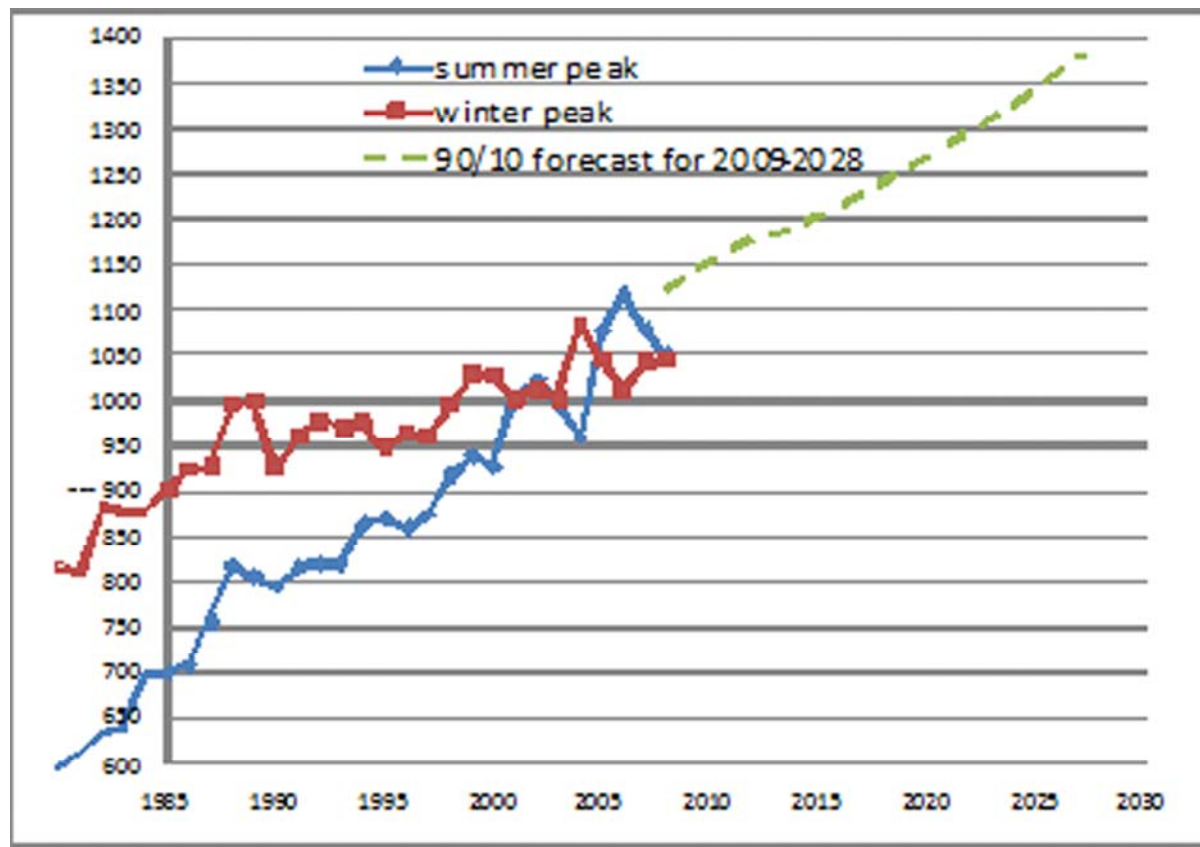


Vermont Peak Demand

Actual from 1985 to 2008, forecast through 2028



Source: Historical data from VELCO. 2009-2028 forecast based on an analysis from ITRON (an independent consulting firm) and represents a 90/10 forecast (90 percent change the actual peak will be at or below the forecasted peak).

Key Transmission Planning and Operating Criteria

- **Mandatory national reliability standards.** Federal Energy Policy Act of 2005.
- **Financial penalties for failing to meet standards.** June 4, 2007, financial penalties became effective for failing to meeting Federal Energy Regulatory Commission standards.
- **Three key tests** of the transmission system required by the standards:
 - **“N-0”** – The system operates as designed under **normal operating conditions** for a given set of components.
 - **“N-1”** – The system can withstand a **“single contingency,”** such as the failure of a transformer, the loss of a generator or lightning strike on a transmission line.
 - **“N-1-1”** – The system can withstand **two or more concurrent equipment failures.**
- **Demand forecast “confidence level”** required:
 - New England Independent System Operator planning standard.
 - Transmission grid must be designed to handle electric demand under extreme weather conditions.
 - Referred to as the “90/10 load” meaning 90 percent of the time the load will be at or less than the forecast level on annual peak demand hour.