

**City of Nashua Local Emergency Planning Committee (LEPC)
July 13, 2023 Meeting Notes**

City of Nashua Energy Update - Doria Brown, City of Nashua Energy Manager

- Have achieved multiple climate goals for the city
- City has been investing in renewable energy
 - 5 solar installations in the city (schools & city buildings)
 - 2 Hydroelectric dams
 - Working on creating a microgrid powered by the city's landfill gas
 - Will power the new DPW building
- Transportation
 - Switched to hybrid electric busses
 - Decreased emissions by 29%
 - City departments are now required to research electric alternatives when looking at purchasing replacement vehicles
- Community Power
 - In 2019 a bill was created to allow residents to negotiate their electric rates & provider
 - City is working with the state and other renewable energy sources for the city
- Sustainability plan
 - Have never had a formal plan so we are working on it - weave resiliency themes into plan

Extreme Heat Outlook - Donny Dumont, Meteorologist NWS Gray Maine

- Heat programs
 - 3 heat products, watch, advisory, warning
 - Use different tools to assess heat: heat index, wet bulb globe temp, western region heat risk prototype
 - Heat index most common
- Wet Bulb Globe Temperature (WBGT) and heat risk
 - Estimate the effect of temp, humidity, wind, & solar radiation on the human body
 - Heat risk is currently only being used out west - it is not available for our area at the moment but it is coming soon (hoping for the end of the year)
 - Specific for local climate
 - Doesn't really factor humidity but when daily minimum temp is factored in it works pretty well
 - In 2018 the criteria for a heat advisory was lowered from 100 to 95 based on hospital data
 - This is why we have had an increase in heat advisories since then
- Heat/Climate trends
 - Southern NH is the hottest in the state
 - General upward trend in temp
 - Generally don't get above 95

- Last summer we had 2 heat wave streaks in the top 10 of all time (8 days in August, 6 days in July)
- Additional heat training/resources
 - <https://www.weather.gov/gyx/EMhome#Heat>
 - <https://www.heat.gov/>
 - <https://www.cpc.ncep.noaa.gov/products/predictions/threats/threats.php>
 - <https://toolkit.climate.gov/>
 - <https://livingatlas.arcgis.com/assessment-tool/home>

New England Grid Resilience - ISO New England

Eric Johnson, Director, External Affairs

Nathan Raike, New Hampshire Liaison, External Affairs

- 3 main missions
 - Operate bulk power grid
 - Administer wholesale electricity market
 - Plan transmission system
- Our power grid, Eastern interconnection, goes from the rocky mountains, to FL, to the east coast. TX is its own power grid and there is a third one on the west side of the Rocky Mountains
- 350 generators to dispatch (instructions given to them - turn on/off)
- Largest power stations in NE are Seabrook in NH and Mystic in Boston
- 31,500 MW total generating capacity
- Summer peak tends to be on the hottest and most humid days
 - Demand in NE has gone down because of energy efficiency
 - Record demand has been 28,130 MW in the summer
 - Winter peak record is 22,818 MW
- Prepare for summer by looking at the weather and trying to forecast the demand
- 100+ government agencies at the state level, work with FEMA and DOE as well
- If demand for power goes above supply then load shedding needs to occur to prevent a blackout from happening
- External notifications for power emergency
 - Power caution
 - No public appeal
 - Power watch
 - Possible ask for energy conservation
 - Power warning
 - Urgent appeal for conservation
 - Governor's appeal
 - Also urgent - Appeal comes from the governor
 - Usually doesn't get to this point
- 21 day energy forecast - mostly applicable in the winter
 - Shows the daily energy surplus
- Download the ISO to Go app - real time wholesale electricity pricing

Energy Grid Preparedness - Eversource

Donald Stokes, Eversource Community Liaison

David Cloutier, Director of Electric System Operations

Peter DiMatteo, Community Relations ERP Readiness

- Don't anticipate energy deficiency this summer with the current forecast
- Actions escalate based on situation severity
 - Appeals for conservation are critical and can prevent everyone's power from being shut off
- Must be able to shed 50% of the load within 10 mins
 - Will do rotating outages if the outage is expected to be long lasting
 - Can turn off customers in blocks of 0.5%-1.5% of the total load; total of 87% (138 circuits) from the control room. The rest is larger power plants and other locations that would be detrimental to be turned off
 - Local facilities normally considered "critical" during storm restoration will be impacted
 - Circuit shutoff process is pre-planned
 - If a very large shutdown is planned, the state and local governments will be involved
- Municipal hub is used by emergency services and other local government contacts to help manage and report outages