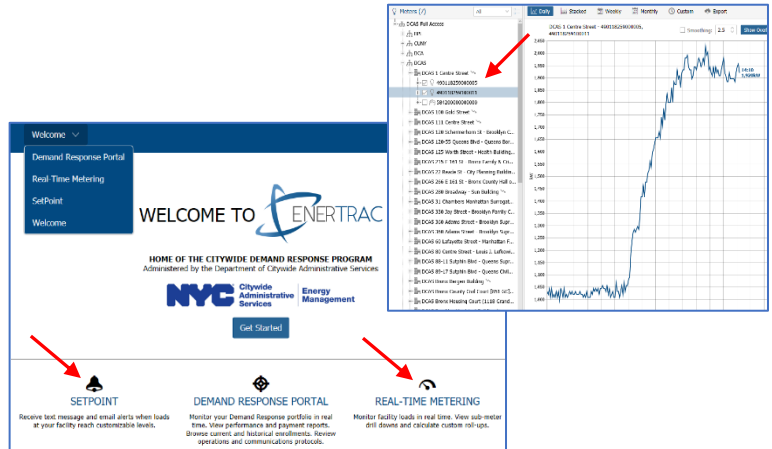


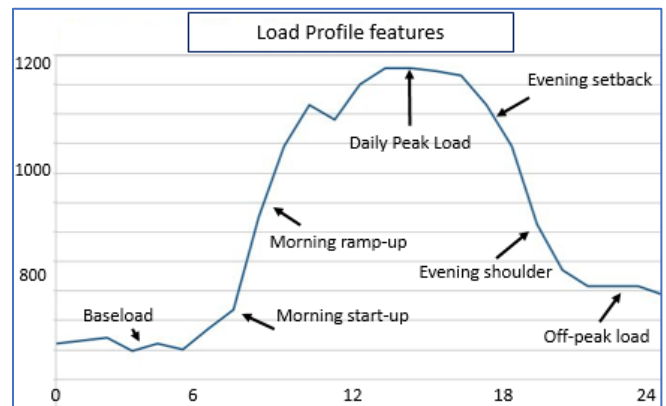
MONITORING-BASED LOAD MANAGEMENT QUICK START GUIDE

1. **LOG IN TO ENERTRAC** <https://et.nuenergy.com>
 - a. Log in credentials (username and password) available on request from izolotarev@dcas.nyc.gov
 - b. Select **REAL-TIME METERING** section to view real time and historical load profiles at selected facilities.
 - c. Select **SETPOINT** section for creating/editing user-customized alerts based on KW thresholds at selected facilities.
 - d. Find your facility on facility portfolio tree.
 - e. View data by facility, utility account or meter.
 - f. View load profiles by **Daily, Stacked, Weekly, Monthly** or **Custom** (select **TO** and **FROM** dates) view.



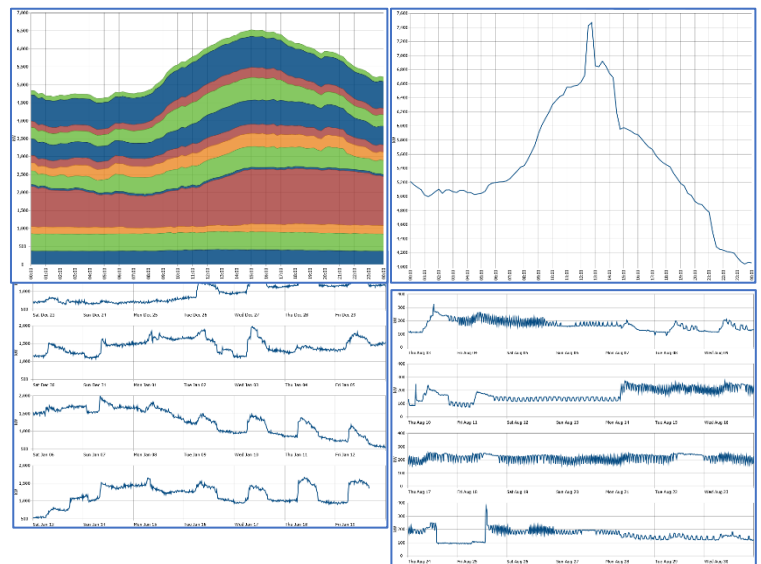
2. GETTING TO KNOW A LOAD PROFILE

- a. Identify the main features of a daily load profile: **start-up, ramp-up, daily peak, setback, shoulder, baseload.**
- b. Identify how load profile changes daily, weekly, monthly and seasonally.
- c. Identify seasonal peak loads and baseloads; typical days/months when peaks/baseloads occur.
- d. Identify seasonal peak loads to baseload ratios.



3. HOW DAILY FACILITY OPERATIONS IMPACT A LOAD PROFILE

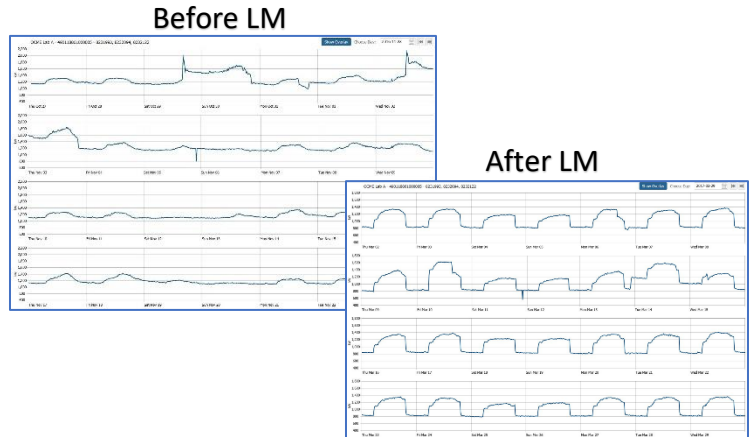
- a. Determine if a load profile is consistent with facility's occupancy schedules. Consider expected differences for day/night; weekday/weekend; seasons.
- b. Review load profiles for recent cooling (Jun-Sep), heating (Dec-Mar) and shoulder (Oct-Nov, Apr-May) seasons; determine if consistent with typical seasonal occupancy schedules.
- c. Review major equipment lists, operational procedures; link energy use to equipment operation; determine if seasonal load profiles are consistent. If applicable, disaggregate loads by assigning equipment/spaces to accounts/meters (meters can be renamed in **ENERTRAC**).
- d. Identify load spikes, sharp drops, high baseloads/offpeak loads and determine potential causes.



MONITORING-BASED LOAD MANAGEMENT QUICK START GUIDE

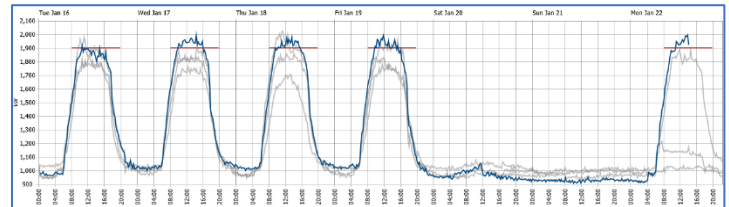
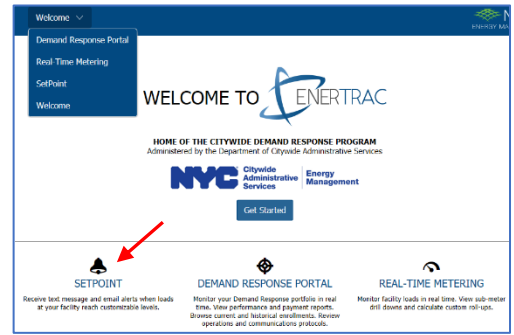
4. HIGH IMPACT/LOW COST MEASURES TO CONSIDER

- Occupancy – explore equipment shut-down, setback, setpoints, occupancy zone control.
- Setpoints – raise or lower setpoints based on seasonal occupancy patterns/requirements
- Start-up/shut-down – examine sequence of operations, staging equipment, scheduling.
- Optimize design intent – explore operation at design Delta T, at part load; using VFDs if applicable; prevent simultaneous heating & cooling.



5. FINDING SAVINGS “SWEET SPOTS”

- Cause & Effect – understand what causes load profiles to change and evolve over time. Investigate profile anomalies or something that doesn’t make sense (example: high evening/night load when all systems are dialed back).
- Trial & Error – experiment with finding what works and what doesn’t. Try different combinations of equipment settings for various spaces during different seasons and see how it reflects in your load profile. Learning and observing is key.
- Set goals – develop targets for baseload and peak load. Targets should reflect occupancy patterns and seasonal loads. Different target sets are recommended for day/night, weekends/weekdays, heating/cooling/shoulder seasons. Use **ENERTRAC’s SETPOINT** feature to set alerts.



6. MAINTAINING SAVINGS

- MONITOR – the best approach for sustainable success. A facility exists in a constantly shifting environment – tweaks might be needed to address changes.
- Keep an open mind – effective solutions for improving efficiency will come over time. Keep mining load profiles for ideas and to “keep the house” in order.
- Involve your agency's energy team, help set the tone for other facilities and share success stories! Reach out to DCAS DEM for help in translating your energy savings into cost and greenhouse gas emissions savings.

