Implementing a demand-response program with Fort Collins Utilities

Key highlights
- Fort Collins Utilities sought to implement a demand-response (DR) program to decrease energy usage during forecasted peak events that accounted for over 25% of all electricity costs.
- The utility needed to find a vendor partner that could meet its program requirements for the complete DR program life cycle—from implementing a DR management system and marketing the program to selecting and installing the devices.
- E Source led the vendor-selection process and provided total project management guidance, allowing the client to implement its ideal DR program on time and within budget.

Challenges
Fort Collins Utilities, the electric and water utility for the city of Fort Collins, Colorado, needed a way to decrease energy usage during system peak events, which were occurring one hour per month and accounted for over 25% of all electricity costs. The utility decided to launch a DR program to accomplish this goal and received a Smart Grid Investment Grant to support the project. With specific targets in mind, along with a strict budget and tight schedule, Fort Collins Utilities knew it needed help in finding the right vendor for its comprehensive program.

Solution
To ensure success, Fort Collins Utilities consulted with E Source. Our team of experts guided the utility through the request-for-proposal process—from helping define its requirements and selecting a vendor to negotiating contracts for advanced metering infrastructure (AMI) and DR. We also served as the utility’s project implementer with responsibility for project management, solution architecture, business process design, and testing support during the implementation phase.

Outcomes
With our solution in place, Fort Collins Utilities was able to confidently choose the right vendor to successfully implement and launch its DR program on schedule and within budget. The negotiated contract met all of the utility’s DR needs, which consisted of a DR management system, device installation services in customer homes, marketing services, water heater control switches (two-way, using cellular), and programmable thermostats (two-way, using customers’ Wi-Fi).
With the DR program now successfully in place, our client can monitor the DR devices’ telemetry data after every event to track how much load customers can shed. Fort Collins Utilities continues to evolve its approach to DR based on the needs of the market and its relationship with its power supplier.