

# Cover Slide – U.S. Department of Energy’s Digitizing Utilities

**Project title:** The Data Wave of the Future

**Team name:** Cadmus

**Track:** Track 1 – Load Modeling

**Short description:** Cadmus Group, LLC (Cadmus), is a leading provider of technical and strategic expertise to governments, energy utilities, and private sector companies worldwide. Cadmus created a software solution that combines several data models to generate tangible insights on how weather, building type, and time of year impact load estimates. The final model is 85% accurate and can be used for explaining the relationship between different climate related effects, different building stock related effects and different substation level effects on load. It also uses the percent of homes with electrification as a factor to prediction substation load. Cadmus enhances this open-source model to help the utility industry anticipate energy consumption variations based on weather patterns, optimizing energy generation and distribution, reducing costs. The interpretable model identifies key building features affecting energy consumption, enabling targeted energy-saving initiatives. Transparency fosters trust among stakeholders and aligns with sustainability. Our software solution will optimize load forecasting, enhancing grid stability, and preventing blackouts or overproduction of energy.

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