

Safe Haven Microgrid™ for Windham Schools

A project of the Town of Windham, Windham Public Schools,
Windham Energy Commission and DERP-Tech



WHAT:

- “First of the First in America,” winner of a CT – DEEP Round 1 Micro-grid Funding Award
- 250 kw solar photovoltaics plus natural gas generators and batteries and/or combined heat/power at Windham Middle School and Sweeney School
- Providing almost 100% of the electricity needs for the Windham Middle School annually
- Providing emergency electric power generation 24/7 for up to 4 weeks
- First of 3 Rounds offered by State DEEP bringing solar and micro-grids to Windham to potentially include High School, Eastern, Main Street, Hospital and other Critical Infrastructure
- Platform for K-12 STEM curricula
- 1st of 3-phase development of micro-grid providing for electric power and revenue for Windham

WHY:

- Community energy resiliency: Energy assurance, independence/security and public safety¹ - with sheltering for community and first responders
- Stabilized and lowered electric power costs for 20+ years
- Reduces carbon footprint
- Reliable power is quality of life and economic advantage for municipality, residents, businesses
- Energy “demand management” contracting may provide revenue to town and power to CL&P utility during shortages
- Advanced energy applications enhance educational settings

HOW:

Timetable through April 2015, Round 1:

- CT DEEP Micro-Grids Program awards Windham a Microgrid Project Development and Engineering Grant for \$709,000; contract to proceed
 - \$1,831,000 total investment for Round 1 assets
 - 3 options for financing: optimize ownership, lease, or power purchase agreement
 - Next approvals: Board of Finance and Town Meeting, March/April 2014
 - Contract with DERP immediately after Town signs contract with DEEP: DERP begins campaign to raise funds for soft costs, ie. microgrid maintenance jobs training, LEAP for Schools.
- Apply for Round 2 Microgrid from DEEP to expand to other locations

¹ Recommendations by “The Two-Storm Panel”, appointed by Governor Malloy