

William Stanley Business Park

Microgrid Feasibility Expansion – Phase II

BASIC INFORMATION

Organization:

Berkshire Innovation Center (BIC)
45 Woodlawn Avenue
Pittsfield, MA 01201
Nonprofit Organization

Project Contact:

Ben Sosne
Executive Director
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Authorized Representative:

Ben Sosne, Executive Director

TECHNICAL INFORMATION

Project Name

William Stanley Business Park – Microgrid Feasibility Expansion (Phase II)

Concise Description of Proposed Project

In 2020, MassCEC supported a microgrid feasibility assessment in Pittsfield that provided important insights into technical and structural constraints associated with district-scale microgrids in a downtown setting.

Since that time, conditions have evolved significantly at the William Stanley Business Park (WSBP) — a 54-acre remediated brownfield site undergoing redevelopment for advanced manufacturing and technology uses. While site preparation has advanced, the park remains without installed utility infrastructure.

The Berkshire Innovation Center (BIC), located within WSBP, has been designated a Massachusetts Tech Hub focused on advanced manufacturing and is expanding facilities to support commercialization activities. As interest in potential buildout of the site increases, questions around long-term energy cost stability, electrification pathways, peak demand impacts, and resilience have become more immediate.

This proposal seeks to build directly on MassCEC’s prior support by conducting a focused expansion of microgrid feasibility work within a defined and infrastructure-ready zone (Zone 3) of the Business Park. The scope is structured to allow either a focused electric microgrid update or a more comprehensive integrated electric + thermal assessment, depending on available funding.

Objectives, Anticipated Results & Alignment

Objectives

The objective of this Phase II effort is to update and refine prior microgrid analysis using:

- Actual interval load data from identified anchor facilities
- Current electric tariffs and market price assumptions
- Updated Distributed Energy Resource (DER) cost curves
- A defined geographic zone (Zone 3) with clearer infrastructure parameters

The assessment will evaluate microgrid scenarios incorporating PV, wind, battery energy storage (BESS), controllable loads, and coordinated thermal strategies to assess impacts on peak demand, resilience, and electrification pathways.

The work remains feasibility-focused and will clarify whether technical and economic conditions warrant deeper development planning.

Alignment with MassCEC & Commonwealth Objectives

This effort aligns with MassCEC's Net Zero Grid priorities by:

- Evaluating distributed energy deployment within a redeveloping industrial cluster.
- Modeling electrification-driven electric and heating load growth.
- Assessing peak demand mitigation opportunities through distributed generation and storage.
- Screening coordinated electric-thermal load management strategies to reduce electric peak impacts.
- Identifying distribution-level interconnection considerations in advance of infrastructure buildout.

The project will generate updated, site-specific insights relevant to other Massachusetts industrial parks facing electrification and redevelopment challenges.

Scope of Work

Core Scope – Electric Microgrid Feasibility Update

Estimated: \$20,000–\$25,000

1. Collection and analysis of 12+ months of electric load data from anchor facilities.
2. Incorporation of projected electric load growth associated with planned buildout and electrification pathways.
3. Updated economic modeling of microgrid scenarios (PV + Wind + BESS + controllable loads) under current and projected conditions.
4. Evaluation of phased configurations scalable within Zone 3.

5. Identification of regulatory and distribution-level interconnection constraints.

Deliverable:

Concise feasibility memorandum identifying updated economic viability thresholds, resilience implications, key constraints, and clear go/no-go criteria.

Expanded Integrated Scope – Coordinated Electric + Thermal Assessment

Additional \$10,000–\$15,000 (Total \$30,000–\$40,000)

Includes all elements of the Core Scope, plus:

6. Assessment and incorporation of projected heating loads associated with redevelopment and electrification.
7. Integrated modeling of electric microgrid and Thermal Energy Network (TEN) scenarios.
8. Preliminary evaluation of coordinated electric-thermal load management strategies to reduce electric peak demand and improve system resilience.
9. High-level screening of thermal network infrastructure compatibility to preserve long-term flexibility and avoid duplicative future analysis.

Deliverable:

Expanded feasibility memorandum evaluating coordinated electric and thermal system performance under projected buildout conditions.

Funding Flexibility

We believe the integrated assessment provides a more comprehensive and efficient evaluation of long-term infrastructure pathways, particularly given the interaction between electrification and thermal load planning. If full funding for the expanded scope is not available through this opportunity, BIC intends to pursue complementary support to complete the integrated analysis. However, we are prepared to proceed immediately with the Core Scope should funding be limited to the electric microgrid update.

Project Personnel

Ben Sosne – Executive Director, Berkshire Innovation Center

Leads economic development, infrastructure coordination, and advanced manufacturing initiatives within WSBP.

Microgrid Initiatives (Consultant Team)

Engineering and techno-economic modeling specialists with prior experience conducting MassCEC-supported microgrid feasibility assessments in Pittsfield and across Massachusetts.

Estimated Cost & Funding Request

Core Scope Request: \$20,000–\$25,000

Expanded Integrated Scope Request: \$30,000–\$40,000

BIC will provide in-kind support including stakeholder coordination, load data aggregation, and project management oversight.

SUPPORTING INFORMATION

Proposed Duration

Estimated project duration: 3–4 months.

Organizational Background

The Berkshire Innovation Center is a nonprofit organization advancing innovation-led economic development in Western Massachusetts. Located within the William Stanley Business Park, BIC anchors advanced manufacturing and technology commercialization activity and coordinates infrastructure planning aligned with state and federal economic development priorities.

Additional Relevant Information

Since the 2020 MassCEC-supported feasibility assessment, the Business Park has experienced:

- Increased advanced manufacturing interest and projected load growth
- Expanded electrification planning
- Updated tariff structures and DER economics
- Continued brownfield redevelopment progress

This Phase II effort will ensure distributed electric and thermal infrastructure options are evaluated in advance of full site buildout, supporting disciplined planning and alignment with grid transition objectives.

The work remains feasibility-focused and does not commit to capital deployment.