

ComEd Beneficial Electrification Plan Pilots: Evaluation Process and Criteria

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Table of Contents

THE BE PLAN PILOTS	3
Purpose.....	3
Team Structure.....	4
Planning Collaboration	4
SELECTION.....	5
Criteria	5
Process Operational Activities.....	8
RFI Development and Distribution.....	8
RFP Development and Distribution.....	9
Proposal Review	9
Pilot Project Plan.....	9
Project Execution and Reporting.....	10

The BE Plan Pilots

Purpose

The Final Order in ComEd’s Beneficial Electrification Plan (“BE Plan”) proceeding, Illinois Commerce Commission (“Commission” or “ICC”) Docket Nos.22-0432 and 22-0442, Cons., dated March 23, 2023, and Amended May 8, 2023 (“Final Order”), specifies a budget of \$77 million annually over the three-year period of the BE Plan, 2023 through 2025. Of this \$77 million total, the Commission allocated \$5 million annually to implement eight pilot programs, referred to collectively as the BE Pilots.

The eight BE Pilots are:

- School Bus Vehicle to Grid
- Residential Optimized Charging
- Curbside Charging
- Ridesharing (or other pilot program aimed at providing electric vehicle (EV) access to low-income and EJ/R3 customers for whom car ownership is not an option)
- Backup Power Capabilities
- EV EMS
- Submetering
- Air Quality Mapping

Final Order at 87-88

Pursuant to the Final Order, ComEd is required to determine an evaluation process and criteria for reviewing and scoring BE Pilot ideas and proposals. *Id.* at 87. And, as set forth in ComEd’s BE Plan Compliance Filing dated May 25, 2023: “to evaluate pilot proposals, ComEd will use a process and criteria modeled after the existing Energy Efficiency R&D Program, adapted for the BE Plan. As discussed, more details on this revised BE Pilot Program process can be found online 60 days after the Plan is approved and sample review and approval documentation for existing pilots can be provided, as requested. ComEd will meet with interested parties and Staff, to discuss any feedback on this proposed pilot process and/or criteria and potential adjustments, shortly after the Plan is approved and file the agreed upon pilot process and criteria as a compliance filing in Docket Nos. 22-0432/22-0442.” BE Plan Compliance Filing at 43.

This document outlines the BE Pilot process and criteria for pre-screening, reviewing requests for information (“RFIs”), reviewing requests for proposals (“RFPs”) and assessing pilot success. This document will be shared on the public ComEd Innovation website:

<https://innovate.comed.com/bepilots>

¹ <https://www.icc.illinois.gov/docket/P2022-0432/documents/338224>

Team Structure

The BE Pilots will be implemented by the ComEd BE Pilot team which is a cross-functional team that includes staff from both the Customer Innovation and the Smart Grid departments. The members of the ComEd BE Pilot team serve as subject matter experts (“SMEs”) and are responsible for all BE Pilot-related activities.

The Customer Innovation departmental program administrator, currently ILLUME Advising (“ILLUME”), serves to implement the Customer Innovation initiative, engage with project vendors, and plan and support program operations. Additionally, ILLUME provides subject matter expertise, technical expertise and project management support. ILLUME will additionally provide this same level of support for select BE Pilots.

For the purposes of the BE Pilot planning process, the ComEd BE Pilot team refers to both the program administrator and ComEd staff.

Central to the BE Pilot planning and development is the role of other ComEd and Illinois energy sector stakeholders, including Illinois Income Eligible (“IE”) Advisory Committee members, ComEd customers and other ComEd BE market actors (Service Providers, program implementation contractors, distributors, etc.). The needs and interests of these stakeholders play a significant role in the strategic planning efforts for BE Pilot implementation. To facilitate active stakeholder participation, the ComEd BE Pilot team has leveraged the existing energy efficiency R&D program processes for greater transparency and stakeholder engagement.

Planning Collaboration

The ComEd BE Pilot team will meet with Commission staff and other interested stakeholders in April 2024 to walk through the 2023 annual report, answer questions and share thoughts on changes or additions under consideration for the 2026-2028 BE Plan, including its ideas for subprogram-level budgets. The ComEd BE Pilot team will solicit input from stakeholders on its suggested BE Plan changes and additions, including subprogram-level budgets, as well as any new ideas from stakeholders. A description of the BE Pilot activities related to each BE Pilot undertaken during the previous calendar year will be included in the BE Plan Annual Report. The ComEd BE Pilot team will hold follow-up meetings with stakeholders to resolve issues leading up to the BE Plan Update filing, consider stakeholder feedback and work collaboratively in advance of the BE Plan Update filing.

Additionally, after the detailed designs of any of the eight pilots are completed, ComEd will submit planning details to the Director of the Commission’s Integrated Distribution Planning Division and to other stakeholders to review and discuss at least 30 days before the company plans to commence the proposed pilot.

Selection

This section describes the criteria and operational activities that will be used to shape and execute the BE Pilots.

Criteria

The ComEd BE Pilot team has developed an initial set of high-level criteria to screen proposals, score RFIs and RFPs and describe overall pilot goals. These criteria will establish the set of initial considerations that will be used for all pilots, and more specific criteria will be developed for individual pilots during the RFP and planning processes to fully consider the needs and benefits of those pilots.

The ComEd BE Pilot team will collect additional criteria through the RFI process, which will be completed for each pilot. Through this process, interested parties will be able to determine additional benefits that may be realized through the pilot and which are not included in the initial criteria. This will allow stakeholders another avenue to provide input on potential criteria, including criteria that assess benefits to parties other than ComEd, including customers and communities.

Separate from the RFI process and release schedule, the ComEd BE Pilot team will review and update BE Pilot criteria once per plan cycle in the year before a new cycle begins. ComEd will review criteria and consider the success of previous BE Pilots and stakeholder input collected through the RFI and RFP processes. ComEd will refine these criteria with the aim of creating a set of criteria that are agreed upon by participating stakeholders. This will allow BE Pilots to remain responsive to changing policy, market and stakeholder needs.

The ComEd BE Pilot team will draw from the following high-level criteria to screen ideas, review RFIs and RFPs and assess the success of the BE Pilots:

Vision and Compliance

- **Alignment with the objectives of the BE Pilots specified within the BE Plan Final Order.** Assesses whether the proposed initiative furthers the objectives of the BE Pilots as defined in ComEd's May 25, 2023, BE Plan Compliance Filing in Docket Nos. 22-0432/22-044.
- **Promotes beneficial electrification.** Assesses whether the pilot/program promotes beneficial electrification by producing overall benefits to society, including environmental benefits, cost savings or more efficient operation of the electric grid.
- **Advances electrification technologies.** Increases Technology Readiness Level (TRL) of widely applicable beneficial electrification technology.

- **Research and measurement.** Assesses whether the pilot/program has clear research questions, ways to monitor success and representation for a wide variety of other candidate sites and use cases.
- **Relevance of expertise and DEI.** Examines the vendor's presented experience with testing or implementing similar concepts and depth of diverse experiences and perspectives.

Implementation Potential

- **Cost-effectiveness.** Assesses potential for the pilot/program to deliver benefits in a cost-effective and efficient matter, considering all administration, design, implementation, permitting, construction, operation and maintenance costs considering program benefits and the anticipated program scale.
- **Life of investment.** Assesses the lifetime impact of the proposed technology or intervention.
- **Budget rightsizing.** Examines the proposed budget to determine if it is appropriate for the type, impact and expected benefits, and it is sufficient to meet the pilot/program objectives.
- **Leveraged resources.** Assesses whether the proposed pilot will leverage resources or could leverage resources (such as external funding or grants) in addition to ComEd funding.
- **Program burdens.** Reviews customer, utility and community costs, and other concerns associated with implementation.

Concept Potential

- **Suitable technology readiness.** Assesses whether there is a product commercially available at scale, utility grade, market-ready and validated to meet the proposed objectives of the pilot/program.
- **Scalability.** Estimates the size and saturation of the market and the scope of the opportunities to deploy the technology considering cost-effectiveness, risk of unanticipated maintenance costs, operational impact, supplier competition and standards.
- **Expected likelihood of success.** Assesses whether the pilot/program has clearly stated goals, objectives and metrics for success and whether the pilot/program is likely to meet those goals and objectives.
- **Delivery strategy.** Assesses the pilot/program design and its ability to address market barriers, drive adoption and support customers.
- **Ease of adoption.** Assesses adoption for customers, as compared to current technologies and programs. Barriers may include upfront costs,

awareness/information, transaction costs, installation difficulty, contractor availability and split incentives.

- **Adoption acceleration.** Assesses how quickly adoption can be achieved through pilot/program implementation.

Operation and Safety

- **Operation & Maintenance (O & M) considerations.** Estimates the monetary value of anticipated O&M costs needed to complete the pilot/program, the certainty of those costs and the size of those costs relative to the anticipated impacts for grid operators and customer reliability.
- **Construction and permitting costs.** Estimates anticipated construction costs for the pilot/program, the certainty of those costs and the size of those costs relative to the anticipated program scale.
- **Communications cost and performance.** Assesses cost-effectiveness, value stacking, customer benefits, reliability and constraints in the implementation of communications infrastructure supporting the pilot/program.
- **Standardization.** Uses design standards and open communication and control systems to promote interoperability and reduce stranded asset risk for customers and utilities.
- **Safety.** Assesses technology to ensure safe customer- and grid-side operations.
- **Cyber security.** Assesses potential adverse impact on cyber security and/or ability to reduce cyber security risk.

Grid Impact

- **Operational effectiveness.** Assesses the ability of technology to integrate into existing grid operations and to sustain a long-term implementation with managed operational cost and performance impact given available resources.
- **Grid capacity.** Assesses potential impact on grid capacity (both kW peak and peak-day kWh demand) and/or ability to support improved grid capacity through peak shifting and shaving.
- **Resiliency.** Assesses potential impact on resiliency and/or ability to support improved grid resiliency.
- **Reliability.** Assesses potential impact on reliability and/or ability to support improved reliability performance.
- **Power quality.** Assesses potential impact on power quality and/or ability to support improved power quality.

Customer Impact

- **Customer economic benefit.** Assesses pilot/program affordability benefits in terms of energy costs, non-energy benefits and other direct savings.
- **Energy efficiency benefits.** Assesses expected energy savings, including fuel savings, as compared to other delivery strategies or technologies for similar applications.

Community and Environmental Impact

- **GHG emissions reductions impact.** Assesses climate change mitigation capacity with respect to pilot/program measured in terms of total potential (tons CO2 equivalents) and cost per ton.
- **Income Eligible (IE) customer/ Equity Investment Eligible Communities (EIECs) focus.** Assesses the amount of benefits the proposed pilot/program will provide to targeted communities.
- **Ensures equitable electrification benefits.** Identifies and addresses meaningful and impactful needs or barriers that are relevant to IE customers and EIECs, including Justice 40 benefits categories.
- **Community stakeholder inclusion and participation.** Assesses the extent to which community stakeholders are actively engaged in pilot and guiding pilot development to define benefits and shape outcomes.

As discussed in earlier sections, specific or additional criteria may be identified through the RFI process and may be considered as part of the pilot scoring process, based on the specific needs of each pilot, as well as stakeholder input.

Process Operational Activities

RFI Development and Distribution

The ComEd BE Pilot team will develop RFIs for the eight identified BE Pilots to solicit ideas from interested parties. Each RFI will outline the pilot's purpose, goals and key context, as well as submission instructions and selection criteria. ComEd may issue RFIs to inform initial understanding of the BE Pilot. For areas where ComEd has completed and/or has ongoing related programs or efforts, ComEd may issue RFIs to enhance and/or build upon ComEd's understanding of a BE Pilot. The ComEd BE Pilot team will also develop a targeted distribution list for each RFI, using their program networks and contact databases. Additionally, the ComEd BE Pilot team will post the RFI and all related information to the relevant public ComEd Customer Innovation website [<https://innovate.comed.com/bepilots>] used to share and solicit feedback on innovative

initiatives and pilots with vendors and stakeholders. The intention in the RFI process is to be as inclusive and open as possible to seek both community and supplier input.

RFI responses will inform the next steps taken by the ComEd BE Pilot team. Some RFIs follow an RFP process (see below). In other cases, ComEd will use internal resources to initiate the pilot. Where ComEd already has programs or efforts in place, and where an RFI is intended to provide information to enhance ComEd's understanding and approach, it is unlikely that ComEd will issue an RFP for that BE Pilot.

RFP Development and Distribution

The RFP process is a common vendor selection business process that relies upon established supplier management procedures to ensure fair competition, effective performance and cost-effective solutions. Any RFP process must adhere to formal, established protocols, regardless of the eventual management of the pilot.

Proposal Review

Following established procedures, RFPs will be scored and pilots will be initiated with selected suppliers. The review, scoring and selection of proposals for all submissions to the RFP will be undertaken by a small group of SMEs within the ComEd BE Pilot team with relevant technical knowledge and/or experience with targeted customer segments or project delivery type.

Scores and comments on each submission to the RFP will be documented in a score sheet that the ComEd BE Pilot team creates, and the sheet will be used to compile and compare scores for each submission. The ComEd BE Pilot team may request additional information from responding organizations as required to fully assess the proposed concept. The ComEd BE Pilot team will come to an agreement on whether to move forward with an RFP for that pilot concept if there is enough information and criteria met to make a strong selection without another solicitation.

Pilot Project Plan

The ComEd BE Pilot team will create a pilot project plan for each BE Pilot. This plan will address, at a minimum, the:

- Expected outcome(s) and applicability to the BE Plan and/or P.A. 102-0662 objectives
- Projected timeline and duration of the project
- Initial cost estimate for the project
- Leveraged resources (e.g., partnership with other organizations, past pilot projects to provide lessons learned) to reduce costs and project duration.

The ComEd BE Pilot team will share this plan with the Director of the Commission's Integrated Distribution Planning Division and other stakeholders at least 30 days before ComEd plans to commence the proposed BE Pilot.

Project Execution and Reporting

Once a BE Pilot project is planned, ComEd or its supplier will execute the plan. ComEd will be responsible for tracking and managing each pilot to:

- Ensure the pilot's scope is structured to support the research question(s)
- Ensure pilots run as planned and on budget
- Review the pilot results and measure the success of the pilots against the established success metrics
- Where relevant, integrate evaluation activities to establish technical and/or market feasibility and viability

Upon conclusion, a description of the BE Pilot activities, including a high-level summary of results and takeaways, related to each BE Pilot undertaken during the previous calendar year will be included in the BE Plan Annual Report.