

Integrated Energy Data Resource (IEDR) Stakeholder Use Case Survey Template

Comments Due: July 23, 2021 to iedr@nyserda.ny.gov

Background and Overview:

The Integrated Energy Data Resource (IEDR) concept has developed through several years of prior work that ultimately led to the New York Public Service Commission's IEDR Order¹ on February 11, 2021. As the resulting IEDR program begins, NYSERDA asks stakeholders to help by identifying, characterizing, and prioritizing a preliminary set of potential IEDR use cases.

The IEDR is intended to eventually support many use cases, but development will begin with an initial set of five to ten priority use cases. These first use cases need to have practical value, urgency, and reliability that a novel data platform can deliver. At the outset, the descriptions of the initial IEDR use cases may be high-level, but specifications will become much more detailed as development proceeds. Also, to achieve a successful launch of the IEDR, we will consider how the initial set of IEDR use cases functions as a portfolio.

To aid our investigation of potential IEDR use cases, NYSERDA is asking stakeholders to use the form provided below to profile use cases that will be most valuable to them. To arrive at consistent profiles of potential use cases, stakeholders, together with the Program Manager and later with the participation of the Solution Architect, will subsequently discuss overlaps, similarities, and differences across their submissions.

Individuals and organizations comprising an industry sector and/or including multiple industry sectors are strongly encouraged to collaborate in the preparation of use case profiles.

The stakeholders' use case profiles will serve as a starting point for specifying and prioritizing IEDR use cases. As the IEDR program progresses, stakeholders may be asked to provide additional details. As potential use cases become better understood, stakeholders should expect their specifications to evolve through peer review.

In preparing these initial profiles, stakeholders should keep in mind that in its Order, the Commission stated that the IEDR is intended to enable use cases that materially improve and/or accelerate investment, operational, or regulatory decisions related to DERs, energy efficiency, environmental justice, or electrification strategies for transportation and buildings thereby facilitating one or more of New York State's REV and CLCPA objectives to accelerate New York's progress toward the climate and equity goals set for the state in the CLCPA and related legislation Orders issued by the Commission. IEDR use cases and their individual goals must be clearly aligned with these statewide commitments.

Instructions for Submitting Comments and Profiles:

Each submission of comments is to include:

- A cover sheet that contains
 - the name and contact information for each of the individual(s) or organization(s) on whose behalf the comments are submitted
 - what are your most immediate needs that the IEDR should address as soon as possible
 - what criteria should be used to prioritize initial use cases
 - if desired, a suggested definition of use case to be used for the IEDR
- A separate use case profile, consisting of responses to the topics below, should be completed for each potential use case presented by a stakeholder(s).
- Each profile should contain:

¹ See New York State Case 20-M-0082 – Strategic Use of Energy Related Data, (Order Instituting Proceeding) (March 19, 2020); and Case 16-M-0411, Summary Report: Distributed Energy Resource Market Enablement Data Needs (filed in the public comments section on January 6, 2020); and Recommendation to Implement an Integrated Energy Data Resource, Case 20-M-0082: Proceeding on Motion of the Commission Regarding Strategic Use of Energy Related Data, a New York Department of Public Service Staff Whitepaper (May 20, 2020).

- a name/description of the use case being profiled
- a response to each topic beginning with an indication of the topic being addressed, up to one page of narrative, and up to one additional page of diagrams, charts, tables, maps, and references (e.g., sources of key claims or evidence). Please specify dates, times, metrics, and quantities when they are essential.

Use Case Profile Form (using fillable form below is optional) :

1) Contributor Name & Contact Information

Enter the name(s), organization(s), and contact information for the contributor(s) of this profile form.

2) Use Case Category

Select and enter one of the use case categories listed at the end of this form.

3) Use Case Sub-Category

Select and enter one of the use case sub-categories listed at the end of this form.

4) What Question(s) Does the Stakeholder Seek to Answer with This Use Case?

Enter the questions that this IEDR use case could answer with information that would be useful to the Stakeholder.

5) What Information Should the Use Case Produce for the Stakeholder?

Describe the type(s) of useful information that the use case should produce.

(a) How Will the Stakeholder Use the Information Produced by This Use Case?

Explain how the Stakeholder will use each type of information produced.

(b) What are the Minimum Necessary Attributes for Each Type of Information Produced?

For each type of information produced, specify the minimum necessary information attributes (i.e. precision, accuracy, granularity, etc.).

6) How Should the IEDR User Interface Present the Information Produced by the Use Case?

Identify one or more useful ways to present the output information to the user (i.e. list, table, graph, bar chart, pie chart, map, ... , etc.). For example, a bar chart that shows the number of electric customers on each of several rates within a zip code.

7) What Type(s) of Data Does the IEDR Need to Analyze for This Use Case?

Identify the one or more types of data - from utilities and/or other sources - that the IEDR will need to analyze to produce useful information. See Appendix B of the Staff IEDR Whitepaper for a preliminary list of data types that could be collected and analyzed by the IEDR.

(a) What are the Minimum Necessary Data Attributes for Each Type of Data Collected and Analyzed?

For each type of data analyzed, specify the minimum necessary data attributes (i.e. precision, accuracy, granularity, age, ... , etc.).

8) What Data Relationships Does the IEDR Need to Analyze for This Use Case?

Identify the one or more data relationships, if any, that must exist in the IEDR to enable the analyses needed for this use case. For example, the user may want to identify EV registrations and electric utility customer accounts that share the same street address.

9) What Data Analysis Function(s) Does the IEDR Need for This Use Case?

Identify the one or more analytic functions that the IEDR must apply to each type of data used in this use case. For example, the use case may require the determination of averages, maximums, minimums, durations, and values greater/lesser/equal/between variables set by the user.

(a) What are the Minimum Necessary User Input Variables Needed to Enable a Useful Analysis?

For each analytic function, specify the one or more input variables that the user must provide (if any) to enable the desired analysis. For each type of input variable needed, specify the type(s) of condition to be applied in the analysis (i.e., greater than, equal to, less than, between, not between, etc.).

10) How Often Does the Stakeholder Expect to Employ This Use Case?

For example: sub-daily; daily; weekly; monthly; quarterly; semi-annually; annually ...

11) How Does This Use Case Benefit the Stakeholder?

Describe how this use case would benefit its Stakeholder(s) and explain how the use case would enable those benefits. Benefits described and explained could include reduced cost, reduced time, greater revenue, reduced risk, increased understanding, ... , etc.

12) Why Should This Use Case Be Prioritized From the Perspective of i) the Industry and ii) the Citizens of New York State?

***The IEDR use case profiles submitted will be shared, and should contain no proprietary information.**

The profiles are regarded as preliminary working papers, and may be revised based on subsequent analysis and discussion. Advocates submitting profiles of similar use cases will work together with the IEDR development teams to come to a consensus. For consistency in development, the IEDR team may elect to format use case submissions into a standardized format such as UML or BPMN.

Use Case Categories:

Enter one of the following use case categories in Part 2 of the survey form.

- DER Development and Use
- Transportation Electrification
- Building Electrification
- Energy Efficiency (EE)
- Electric Utility Function
- Gas Utility Function
- Local Government Function
- State Government Function
- Other (please describe)

Use Case Sub-Categories:

Enter one of the following use case sub-categories in Part 3 of the survey form.

- For DER Development and Use:
 - identifying, evaluating, and/or selecting potential DER locations;
 - identifying, evaluating, and/or engaging potential DER customers;
 - preparing and/or optimizing DER development plans;
 - preparing and/or optimizing DER operating plans;
 - designing, implementing, and/or operating DER aggregations;
 - monitoring and evaluating the deployment and use of DERs;
 - designing and implementing Community Distributed Generation (CDG) solutions; or,
 - other (please describe)
- For Transportation Electrification:
 - identifying, evaluating, and/or engaging existing EV owners/operators;
 - identifying, evaluating, and/or engaging potential EV owners/operators;
 - monitoring and/or evaluating EV acquisitions and uses;
 - identifying, evaluating, and/or selecting potential locations for EV charging facilities;
 - preparing and/or optimizing plans for developing EV charging facilities;
 - preparing and/or optimizing plans for operating EV charging facilities;
 - monitoring and/or evaluating the deployment and use of EV charging facilities
 - other (please describe)
- For Building Electrification:
 - identifying, evaluating, and/or engaging energy consumers and energy managers in existing buildings;
 - identifying, evaluating, and/or engaging energy consumers and energy managers in planned buildings;
 - monitoring and/or evaluating acquisitions and uses of building electrification solutions;
 - building energy benchmarking;
 - identifying, evaluating, and/or selecting opportunities for building electrification;
 - preparing and/or optimizing plans for developing building electrification solutions;
 - preparing and/or optimizing plans for operating building electrification solutions;
 - monitoring and/or evaluating the deployment and performance of building electrification solutions
 - other (please describe)

- For Energy Efficiency (EE):
 - identifying, evaluating, and/or engaging customers with existing EE solutions;
 - identifying, evaluating, and/or engaging potential EE customers;
 - monitoring and/or evaluating EE acquisitions and uses;
 - building energy benchmarking;
 - identifying, evaluating, and/or selecting EE opportunities;
 - preparing and/or optimizing plans for deploying EE solutions;
 - monitoring and/or evaluating the deployment and use of EE solutions;
 - designing and implementing Community Choice Aggregation (CCA) solutions
 - other (please describe)

- For Electric Utility Functions:
 - system planning;
 - DER interconnection;
 - system operations;
 - market enablement;
 - market operations;
 - customer programs and services;
 - regulatory/statutory compliance;
 - other (please describe)

- For Gas Utility Functions:
 - system planning;
 - system operations;
 - market enablement;
 - market operations;
 - customer programs and services;
 - regulatory/statutory compliance;
 - other (please describe)

- For Local Government Functions:
 - building energy benchmarking;
 - Community Choice Aggregation;
 - Community Distributed Generation;
 - facility siting and permitting;
 - environmental justice initiatives;
 - economic development;
 - planning and zoning;
 - other (please describe)

- For State Government Functions:
 - energy-related R&D;
 - regulatory research and planning;
 - regulatory oversight;
 - building energy benchmarking;
 - facility siting and permitting;
 - environmental justice initiatives;
 - economic development;
 - other (please describe)