

IEDR USE CASE TEMPLATE SUBMISSION "STATE OF DER DASHBOARD"

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COVER INFO

Representatives

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Representing

- Members and NYSEIA leadership
- Industry Members and NYS Interconnection Technical Working Group leadership, including estimated 50 active participants representing 1000+ employees
- Industry Members and NYS Interconnection Policy Working Group leadership, including estimated 50 active participants representing 1000+ employees
- Industry Members and PSEGLI Interconnection Working Group leadership
- Many other non-profit organizations, a list of which can be provided as required or requested
- Justin Belle of LIPA has also voiced support for this initiative, including the need to clean up existing queue/connected data.
- The list can and will grow rapidly.

What are your most immediate needs that the IEDR should address as soon as possible

PREFACE: SIMPLY STATED, THIS DASHBOARD SHALL SERVE AS THE OFFICIAL NYS CONNECTED DER REFERENCE FOR THE ENTIRE POPULATION OF NYS, FOREMOST SHOWING WHETHER THE DER INDUSTRY CAN CONTINUE TO OPERATE AND FOR HOW LONG. ADDITIONALLY THIS SHALL BE AN OFFICIAL REPRESENTATION OF WHETHER WE ARE HITTING THE BENCHMARKS OUTLINED IN THE CLCPA. PRESENTLY THIS CLEAR AND CONCISE INFORMATION IS NOT PROPERLY COLLATED, REVIEWED, NOR EXIST ANYWHERE.

Forward: All information in this submission is drawn and also represented in the industry [position](#) [whitepaper](#). Below is the first section.

Industry Position Summary

1. It is becoming increasingly challenging to connect DER to the grid, which will only increase at an increasing rate, evidenced by many things, including "closed" substations in various regions.
2. The DER industry is concerned that we are going to effectively run out of hosting capacity far sooner than any meaningful upgrades can be made via CLCPA processes, putting thousands of jobs and hundreds of companies at risk.
3. Baseline metrics are essential to understanding basic state of affairs and making informed decisions. Presently no NYS regional/global benchmarks are available.
4. Presently there is no ability to assess the rate of change or trending over time. Using rates and trending we can create a timeline and estimates for when we expect major issues to arise, and can respond accordingly.
5. We therefore request a joint industry & utility effort to produce a "State of DER Dashboard" as soon as possible. Industry requests data collection start of Q4, 1 October 2021, published on 1 November 2021.
6. The dashboard will provide critical data to inform all stakeholders of key areas of concern, trends, rates of change, and indications whether current or planned efforts are having any objective positive benefits.
7. This information is essential for influencing how and where to focus our collective efforts as interconnection challenges become more and more frequent.

What criteria should be used to prioritize initial use cases

With this dashboard we can know how long until we run out of hosting capacity, putting all of our jobs and all of the efforts by NYSERDA, industry, activists, etc, at risk. There is nothing more important in our opinion than this dashboard going live as soon as possible.

If desired, a suggested definition of use case to be used for the IEDR

As already titled in the [whitepaper](#):
"State of DER Dashboard" Initiative

FORM QUESTION RESPONSES

1) Contributor Name & Contact Information

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

Please see cover page information.

2) Use Case Category

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

We understand that the request is that we select one category, but the information on this dashboard is cross cutting, and does not necessarily fit into any single category.

We believe that all of the following use case categories are most applicable to the "version 1" dashboard being suggested in the [whitepaper](#). Below see the tie into each item:

- For DER Development and Use
- For Transportation Electrification
- For Building Electrification
- For Energy Efficiency (EE)
- For Electric Utility Functions
- For Local Government Functions
- For State Government Functions

3) Use Case Sub-Category

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

- For DER Development and Use
 - Other example use case: The DER dashboard provides an estimate of how much longer until there is no more hosting capacity in a particular utility region.
 - Other example use case: If a utility has a high quantity of substations "closed to DER", then this is informative of serious concerns and heightened focus on that utility.
 - (many others)
- For Transportation Electrification
 - (the general numerical information provides a guide for what transportation electrification activities or development is most applicable in that region)
- For Building Electrification
 - (the general numerical information provides a guide for what building electrification activities or development is most applicable in that region)
- For Energy Efficiency (EE)
 - (the general numerical information provides a guide for what building electrification activities or development is most applicable in that region)
- For Electric Utility Functions
 - EVERY SUB CATEGORY USE CASE is informed by this general numerical information. This provides the general barometer to inform investment and how urgent that investment should be.
- For Local Government Functions

- Please see yellow highlighted preface section above.
- EVERY SUB CATEGORY USE CASE is directly or indirectly informed by this general numerical information. This provides the general barometer to inform how difficult it is to perform any grid connected DER activities.
- For State Government Functions
 - Please see yellow highlighted preface section above.
 - EVERY SUB CATEGORY USE CASE is directly or indirectly informed by this general numerical information. This provides the general barometer to inform how difficult it is to perform any grid connected DER activities.

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.

1. How much DER is currently connected to the grid?
2. What is the rate of change of DER being connected to the grid?
3. What types of DER are being connected to the grid?
4. How much more DER can be connected to the current state of the grid?
5. Are investments being made to the grid keeping up with new DER connections to the grid? Or in other words, are the upgrades increasing hosting capacity?
6. What regions are most strained and cannot accept any more DER?
7. Are any regions "shut down" from connecting any more DER and why?
8. etc.

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

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

See exact request and formatting of information outlined in the whitepaper in these two sections:

[Sample Website, "State of DER Dashboard" Metrics & Output](#)
[Benchmark Metrics List -- Definitions, Notes & Analysis of Each](#)

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

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

Please see previous statements throughout this document.

(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.).

Please see exact information requested, as already outlined in the two headings linked and highlighted above. The exact calculator methodology would be specified once key excerpts from the whitepaper are converted into an official procedural document.

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.

Please see exact information requested, as already outlined in the two headings linked and highlighted above. The exact calculator methodology would be specified once key excerpts from the whitepaper are converted into an official procedural document.

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 hypothetical quarterly update process is outlined in this section of the whitepaper:

[Hypothetical Quarterly Update Process](#)

The IEDR could act as the aggregator/webmaster. The exact location of hosting this website is up for discussion and could also be hosted on the JU or DPS website. Industry has been trying to hold a meeting with leadership including NYSERDA, DPS, LIPA, & Industry to discuss this exact topic.

(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.).

Please see exact information requested, as already outlined in the two headings linked and highlighted above. The exact calculator methodology would be specified once key excerpts from the whitepaper are converted into an official procedural document.

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.

The IEDR would namely act as the aggregator/webmaster as outlined in this section of the whitepaper:

[Hypothetical Quarterly Update Process](#)

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.

Please see exact information requested, as already outlined in the two headings linked and highlighted above. The exact calculator methodology would be specified once key excerpts from the whitepaper are converted into an official procedural document.

(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.).

Please see exact information requested, as already outlined in the two headings linked and highlighted above. The exact calculator methodology would be specified once key excerpts from the whitepaper are converted into an official procedural document.

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

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

It is expected that, once this dashboard is known, it will be accessed daily by perhaps hundreds of people daily, especially after a quarterly update.

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.

Please see previous responses.

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

Please see previous responses.