

Paris Session 2022



Extending and replicating microgrid success with data

Study Committee 6

Preferential Subject 3

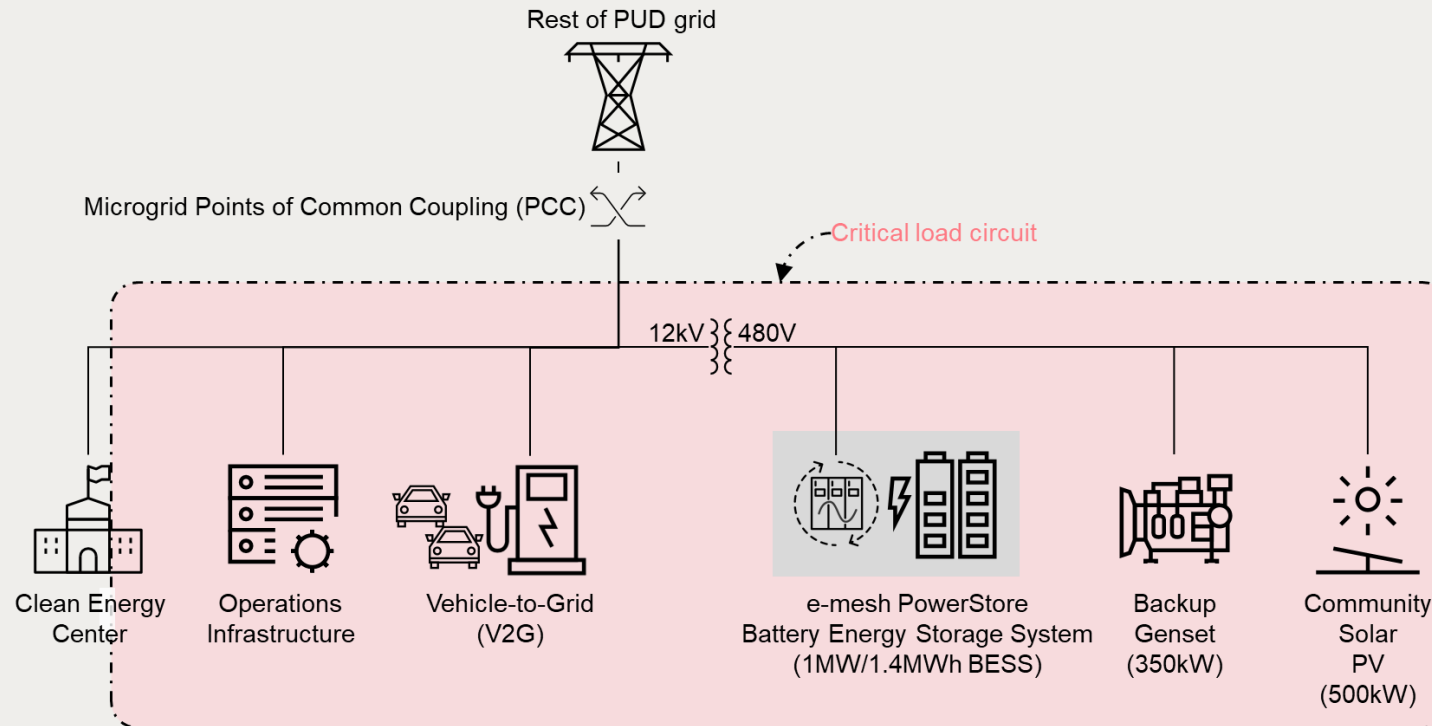
Question 3.10: The reporting on the experiences and lessons learned from realized microgrid projects is an important contribution to the knowledge base. What kind of information and data need to be collected to properly document best practices? How can those lessons learned be shared with potential stakeholders and users (utilities, manufacturers, customers, academia/research)?

John Glassmire, USA

HITACHI
Inspire the Next

Capturing microgrid success with data

Comments today draw from Hitachi Energy's experience at the Arlington Microgrid



Comments extend the poster presented tomorrow during the C6 poster session

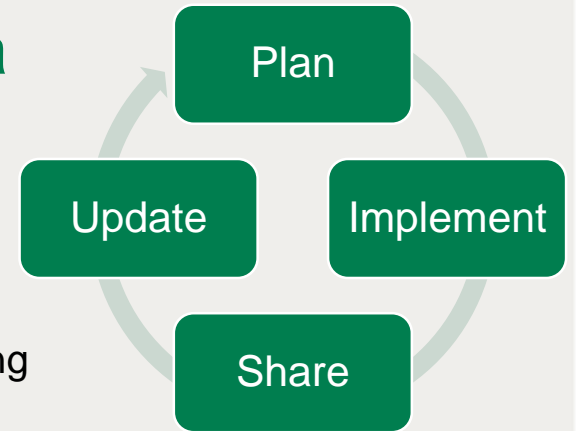
Group Discussion Meeting

Extending and replicating microgrid success with data

Data is a foundational element of digitalization

PLAN

- A plan for data requires an understanding of how the data will be used. For example:
 - oData may be used for standard development or refinement
 - oData may help demonstrate what is possible, e.g. V2G or seamless microgrid islanding
- Standards are a key starting point for data.
 - oAdditional data needs are likely for specific applications; extend with project-specific data collection.
- Working with experienced microgrid and digital partners can strengthen planning
 - oTechnology evolves quickly, and experienced vendors and partners can draw on lessons from previous deployments.



IMPLEMENT

- Data visibility and access can benefit not only data sharing, but also performance and operations at a particular microgrid project
 - oData-driven approaches yield overlapping benefits that maximize value for current project and inform future efforts.
- Data that you plan to share should be part of an organization's overall strategy
- Electric utilities may have requirements that impact digital approaches, particularly related to cloud and cybersecurity.

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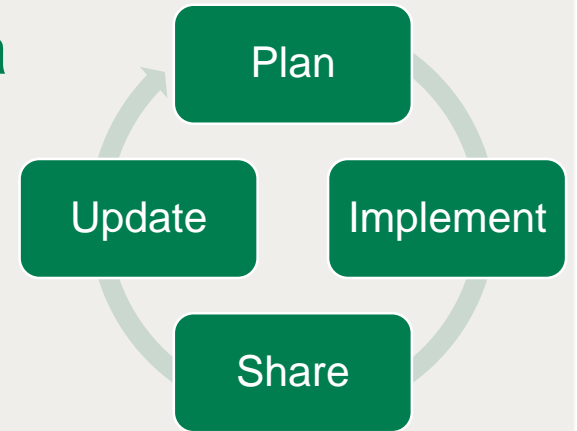
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SHARE

- Important to think through security and privacy, which will impact what you share.
- Present at technical conferences like CIGRE and contribute to working groups
- Participate and support standards organizations like IEEE, ISO

UPDATE

- Microgrid value keeps evolving with technology.
 - oFor example, earlier microgrids frequently had to go dark to transition to island. Seamless islanding is now possible and demonstrated in the Arlington Microgrid.
 - oElectric vehicles are poised to radically shift the microgrid value proposition and needs, due to large, co-located, controllable loads.
- For frequent project specific-data requirements not addressed by standards, feed back into standards.



Data is part of digitalization and requires a thoughtful, iterative approach, from planning through to updating knowledge for future projects