PROJECT IDEAS

TE Challenge Kickoff Workshop
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• *fractal* is a self-similar recursive pattern that allows for a microgrid-inside-microgrid solution

• *FractalGrid*
  - (usually) community-scale, but allows for indefinite scalability with well-bounded complexity of $O(n)$
  - makes use of standards and commercial-off-the-shelf (COTS) equipment, when available
  - units can operate autonomously and collaboratively
CleanSpark’s Transactive Energy Goals

• Use a well-defined transactive energy standard to share power within a system of microgrids
  – Distributed client
  – Advance scheduled transactions or near real time
  – Secure communications
  – Use open source, commercially compatible libraries

• Determine cost distribution among microgrids in a system
Potential Projects or Contributions

• Open source software implementation of TEMIX-style transactive energy framework
• Open ADR 2.0c profile definition/reference implementation
• Provide a live reference demonstration/implementation using an existing FractalGrid or other system of microgrids
Team Members Needed

- Simulation – test scalability of solution
- Utility or Balancing Authority – test interoperability at a large scale
- Load control device manufacturers – test market participation at both a device level and microgrid level
Thank You