Resiliency:
Improving the Cost of Long Duration Energy Storage

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Long-duration storage is critical to achieve net-zero energy emissions and provides cost savings

- Key Problem: How does the system move energy from times when it is generated to times when it is consumed?
  - Net-zero grids rely on renewable energy
  - Generation is not dependable, and output can be correlated with extreme weather
- Long duration storage can move energy intra-day, intra-week and seasonally
  - Long storage horizons provide robust assurance against reliability concerns, particularly during periods of prolonged strain on grid operations
  - Cost savings from reduced required buildout of renewable resources
  - Long duration storage resources may also provide: transmission relief, local area support, micro-grid support, flexibility and other critical grid functions that today may be supported by conventional generation
- Setting specific targets to develop long-duration storage early reduces overall costs to decarbonize and will help drive lower LDES costs

E3 (CA): https://efiling.energy.ca.gov/GetDocument.aspx?tn=250157

Form Energy (NY): https://formenergy.com/wp-content/uploads/2023/08/Form-Modeling-Multi-Day-Energy-Storage-in-NY-whitepaper-8.8.23.pdf

Cost savings and increased value can be achieved through development of LDES resources