U.S. DEPARTMENT OF ENERGY | Office of ELECTRICITY

NOI Overview : Aligning Manufacturability & Pre-production Design (AMPD) for Storage Technologies

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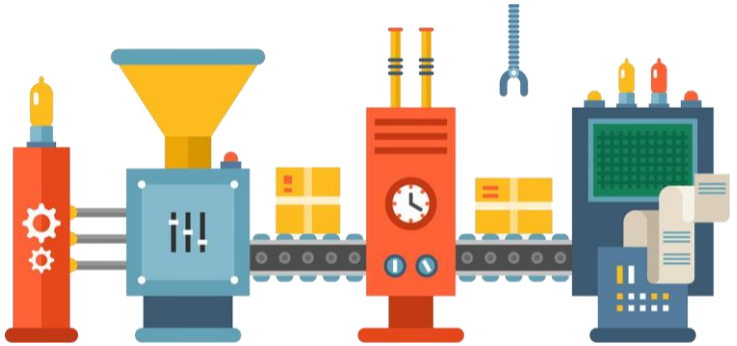
What will AMPD address?

- **Design challenges** that energy storage technology developers face when making design decisions that **impact manufacturability and production**
- **Pre-production design**: ≤ **MRL 7**; on a path to achieve **TRL 7**
- Establish **viable designs** with the manufacturability of the technology in mind

Why?



- Energy storage systems, components, and subcomponents would **benefit significantly** from **early-stage design** consideration
- Align pre-production storage system design to set the stage for **manufacturing scale up**
- Increase the manufacturability of materials, subcomponents, components, and the overall technology system can help **expand the portfolio of technology options**

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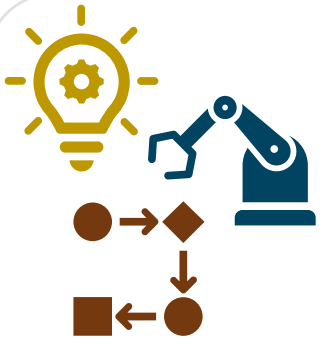
How will AMPD address these challenges?

$8 Million	≤ 4 projects	Fall 2024 (*planned*)

- Projects that propose pre-production design solutions that help improve manufacturability
- Energy storage technologies that discharge energy in the form of electricity that supports stationary, non-mobility applications (including, but not limited to, grid-scale or grid-connectable applications)
- Solutions for specific, clearly identified manufacturability challenges, including, but not limited to, the selection, modification, or development of the size, shape, or composition of a material, subcomponent, component, or system

Objectives → Outcomes



- Identify pre-production design challenges associated with energy storage technology manufacturability
- Discover potential R&D innovation solutions to address these challenges earlier in the design process

- Enhanced manufacturability metrics and/or indicators (technical or non-technical)
- Improved production of cost-effective, safe, and reliable short-, medium-, and long-duration storage technologies

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