



# Joint Approach to Develop a DOE Strategy for Energy Storage for Renewables Integration with the Grid

## **Pete Devlin**

Hydrogen and Fuel Cell Technologies  
On detail to Wind Program

## **Dan Ton**

Grid/Building Integration Team Lead  
Solar Energy Technologies

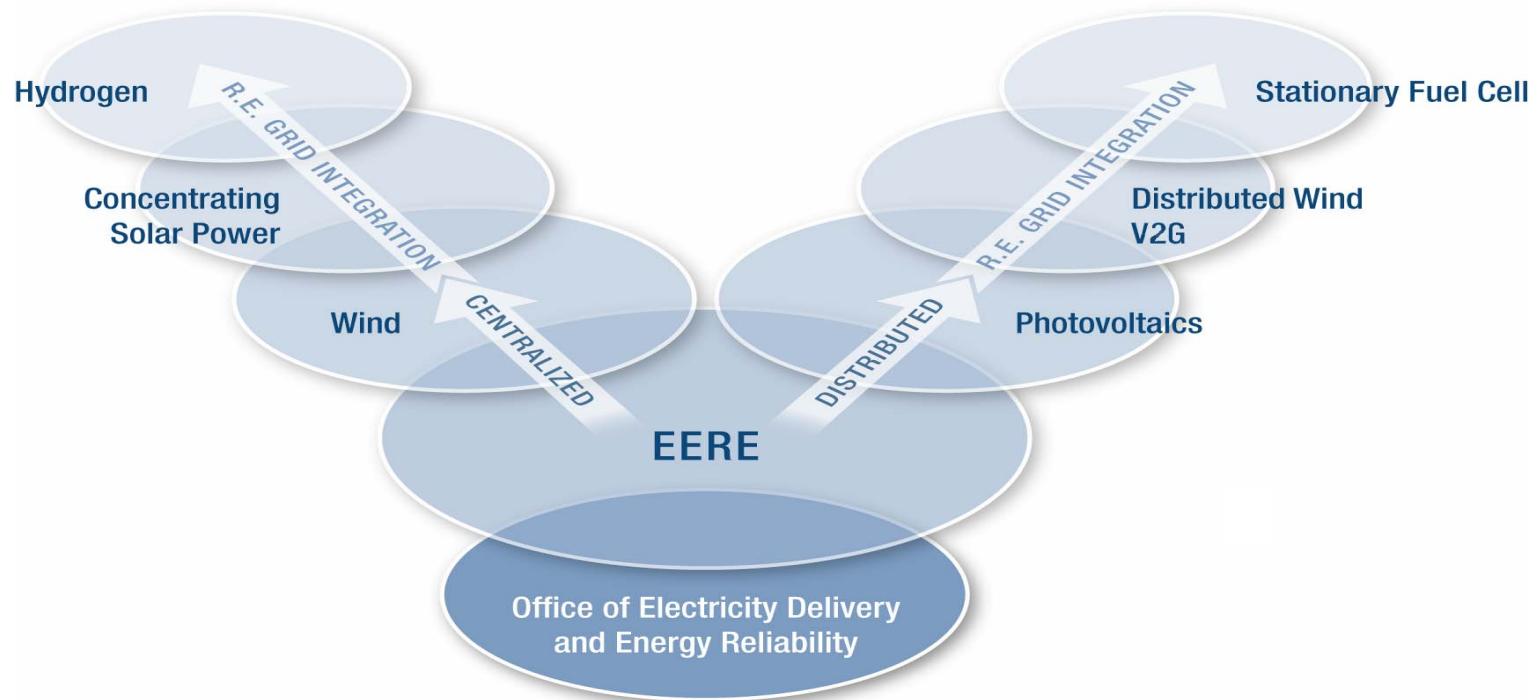
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# Preamble

- RD&D activities crosscutting EERE & OE
  - Further crosscutting within EERE programs (solar/wind/vehicle/H2)
- Energy storage for renewables integration – Viable strategy to address high-penetration issues, being pursued by (or of interest to) all programs
- Coordination & collaboration across DOE needed for
  - RSI
  - Energy storage for renewables integration
- Joint approach to develop a DOE storage strategy document – ready for presentation to transition team by January 2009

# Approach to Developing a DOE Storage Strategy, aka Critical Renewable Energy Storage Technology (CREST)



- **Transmission-grid integration for wind and CSP**
- **Distributed-grid integration for PV, wind, V2G, and others interconnected at the distribution level (<15kV)**

# Concept Roles and Responsibilities



- **Core Management Team**
  - Responsible for content and production of DOE CREST Strategy document
  - Guiding WG topic areas and activities
- **WG Leads & Co-Leads**
  - Responsible for defining main topic area(s) and assigning Federal lead for each sub-WG
  - Coordinating with the other WG Lead and Co-Lead
  - Coordinating all sub-WG activities
  - Synthesizing and compiling sub-WG topical reports into stand-alone report
  - Working in support of Core Management Team for final production of strategy document
- **Sub-WG Federal Leads**
  - Responsible for assembling subject-matter-experts as members representing national lab, industry, research communities, and/or regulatory entities (4- to 6-member team expected)
  - Responsible for producing topical report with consensus from all sub-WG team members
  - Working in support of WG Leads & Co-Leads to synthesize all topical reports into a transmission or distribution grid integration report
- **Federal and non-Federal Participants**
  - Each participant to serve in no more than 2 functional blocks in the structural diagram to avoid over-loading or over-influencing

# Proposed Content of CREST Strategy Document



## Table of Content

- Vision
- Goals
- Situation Analysis & Needs
- Benefits
- Challenges and Opportunities
- Strategic Objectives & Metrics
  - Technical, economic, and regulatory
- Actionable Recommendations