

High Penetration of Energy Storage Panel
DOE Electricity Advisory Committee Meeting

John E. Shelk, President & CEO
Electric Power Supply Association

September 29, 2015

EPSA – Who We Are

- EPSA members are the nation's leading competitive wholesale suppliers
 - Generators and power marketers (many with competitive retail, too)
 - Over 210,000 megawatts of capacity using all fuels and technologies
 - Largest natural gas and nuclear, among largest renewables and coal
 - Over 95 percent of assets in organized wholesale markets (RTOs/ISOs)
- Total competitive power sector is 40 percent of installed U.S. capacity
- Reliable, competitively-priced electricity from environmentally responsible facilities - baseload, mid-merit and peaking
- Energy storage was a focus of 2015 annual meeting – outside experts made presentations; several EPSA members are doing storage, all are interested
- Competition is all about fostering innovation and storage is no different

Energy Storage in Broader Context

- Electricity resource mix is changing and will continue to change rapidly
 - Technology – coming down the cost curve with many new options
 - Public policy – from federal Clean Power Plan to state RPS standards
 - Relative economics of fuels and technologies – shale gas revolution
- Competition is increasing – RTOs/ISOs are expanding at wholesale and new technologies, including solar, are and may give consumers more say at retail
- Rise of intermittent resources – greater stress on the system – capacity more important than ever (EPRI report, July 2015) as are ancillary services products
- What is not changing – reliability imperative and essential reliability services (NERC)

High Level EPSA Points on Storage Policy

- Storage policy must fit within broader competitive landscape – should be market driven and competitive, not based on pre-ordained storage penetration levels for utilities to install
- Full discussion of range of legal and practical issues – what is storage, who regulates, how?
- Storage is not something to be simply bolted on to the existing power delivery system (generation, transmission and distribution) – need to fully understand broad implications of various scenarios (e.g., wholesale energy, capacity and ancillary services price formation)
- Storage options will vary but generally this should be about power supply and management to meet market needs, not as infrastructure deployment for the sake of more infrastructure
- Demand response precedent shows excessive mandates invite backlashes; avoid mandates, but if goals or programs are set use competitive procurement (CA) rather than rate-base for utilities (ill-fated Oncor/Brattle proposal in Texas)
- Department of Energy role as to research and policy – DOE should not be a marketing arm for a specific technology or set of technologies, *but DOE and FERC should examine the full impacts*
- Even with high growth rates, storage will be very small overall at least in the near term and the system needs to be reliable at all times – *this will be an evolution not a revolution*



Electric Power Supply Association
Advocating the power of competition



John E. Shelk
President & CEO
Electric Power Supply Association
1401 New York Avenue, NW
Suite 1230
Washington, DC 20005
Telephone: 202 – 628-8200
Fax: 202-628-8260
E-mail: jshelk@epsa.org
Website: www.epsa.org

