# Session 6 Wolk

### Roadmap Development

## High Megawatt Converters for Commercial Scale Applications

Ron Wolk High Megawatt Converter Workshop January 24, 2007

#### **Potential Markets**

- DOE Applications
  - 250-800 MW SECA-Based IGFC FutureGen Power Plants (with CO2 capture)
  - Freedom Car
- HVDC Power Transmission
- DOD Applications
  - Pulsed power
  - Vehicle motive power
  - Ship power generation and distribution
  - Ship propulsion

#### Roadmap Development Issues

- Are there new materials, devices, and topologies that would accelerate the achievement of the cost and performance requirements for power conversion systems for these markets?
- How should a Roadmap process to achieve this objective be organized?
- Should it work down from topologies (market pull) or up from materials (technology push)
- Should a continuous integration and evaluation process be used to identify the most promising targets of opportunity?

#### What's Next?

- Formation of a committee to participate in developing the Roadmap
- Volunteers to staff the committee and its subcommittees
- Should subcommittees be organized by market thrust, product power capacity, time frame of development, other bases?
- Timeline for development of the Roadmap
- Would the formation of an Interagency Task Force on this subject be of value?