

# Grid Modernization Initiative Working Group

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# DOE Sequence

- Quadrennial Energy Review (QER)
- Quadrennial Technology Review (QTR)
- Grid Modernization Initiative (GMI)
  - Multi-Year Program Plan (MYPP)
  - Grid Modernization Laboratory Call (GMLC)
    - Foundational Research Projects (6)
    - Crosscut Research Projects (13)
    - Regional Partnerships (10)
    - Program Specific Projects
    - \$220M for 88 Projects

# Foundational Projects

- 1. Metrics**
- 2. Architecture**
- 3. Interoperability**
- 4. Testing/Library**
- 5. Valuation**
- 6. Sensing/Measurement**

# Crosscut Projects

1. Interconnection and Interoperability standards
2. DER Standards and Tests
3. Sensor Development
4. Distributed Data Analytics
5. Control Theory for Distributed Resources
6. EMS/DMS/BMS Integration
7. Simulations/models integration
8. Extreme Event Modeling
9. Computational Science for planning/operations
10. Cyber/Other Threat Detection
11. Support for Regulators and Small Utilities
12. Multiscale Production Costing for New Technologies
13. Tech Assistance for PUCs

# Regional Partnerships

1. Southeast Consortium
2. UPS Worldport Microgrid
3. California DER Siting Tool
4. Smart Idaho Falls Network
5. Vermont Enabling DER
6. New Orleans Resiliency Design
7. Alaska Microgrid
8. New York State REV Initiative
9. Hawaii DER Frequency Support
10. Midwest Interconnect Seams

# Working Group Plans

- Report to the EAC March 2017
- Stress Importance of the Issues
- Stress Complexity of the Issues
- Coordination/Management of Existing Projects
- New Projects to cover Gaps and Changing Realities
- The Policy/Technology Connection