



**MEDSIS Kick-Off Workshop**  
**GSA Comments**  
**FC 1130**

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## GSA Background

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### **Relevant GSA Responsibilities**

- Purchase energy products on behalf of various Federal agencies, international agencies, and quasi-governmental entities (e.g., AOC, Smithsonian Institution, World Bank Group, National Gallery of Art)
- Represent Federal Executive agencies before DC Public Service Commission
- Coordinate Federal regulatory activities nationwide with Departments of Defense and Energy



## Diverse Customer Base

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### **Federal Customer Footprint – DC Metro Area**

- Manage and/or lease 100 million sq. ft. Federal workspace – 43 million square feet owned.
- GSA annual electricity purchases on behalf of Federal customers: 1.56 million megawatt hours – 19% of the City's electric usage; total Federal electricity usage exceeds 26% of the City's total
- GSA annual gas purchases: 4.35 million decatherms – 14% of City's natural gas usage; total Federal gas usage exceeds 17% of the City's total



## Federal Goals

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### **Federal Agency 2025 Targets**

- Purchase 30% of electricity from renewable sources
- Reduce building energy intensity by 2.5% per year
- Reduce water consumption by 2% per year
- Purchase 25% of thermal and electric requirements as Clean Energy (includes cogeneration, Capital solar challenge)
- Meet Greenhouse Gas Goals (agency-specific)



## Distributed Generation Assets

### **GSA Heating Operation and Transmission Division (HOTD)**

- HOTD plant – 13<sup>th</sup> and C streets, SW
- Generates/sells steam and chilled water – about 80 Federal, quasi-Federal, and select private customers (est. 50 million square feet of DC space)
- 10 MW Cogeneration plant supplies most of the facility 30-35,000 MWH annual electric requirement.
- HOTD annual electricity exports – approximately 35,000 MWH
- Future Plans – GSA is currently analyzing ways to maximize value of HOTD system; includes assessment of potential legal and regulatory barriers.

## Federal Energy Assets in DC

### **The Architect of the Capitol**

- District heating and cooling system serving 17.5 million square feet of space
- Refrigeration plant being revitalized
- Combined heat and power (CHP) project is being developed (7.5 MW)
- New CHP generated power will be primarily used onsite with minimal exports.

<http://www.aoc.gov/capitol-buildings/capitol-power-plant>

<http://www.aoc.gov/cogeneration>



## Demand Response Efforts

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- GSA has participated in PJM demand response programs for the past 4 years in DC area
- In DC, 17 GSA and other Federal Buildings participating with 9 MWs of load enrolled for PJM Year 2015-16
- GSA is constantly looking for opportunities to expand DR and peak shaving participation





## Suggested Steps Going Forward

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- Identify/resolve potential technical, legal, and regulatory barriers to microgrids and virtual net metering
- Ensure real-time access to customer load and billing data
- Develop and implement small-scale pilots to address coordinated integration of customer-based resources (DG, demand response, smart buildings)





## GSA Goals – FC1130

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- Maximize value of customer-based resources via integrated distribution network.
- Utilize existing infrastructure resources effectively (AMI, billing systems)
- Eliminate regulatory barriers to DG deployment and coordinated network utilization
- Adopt best-practices developed in other regulatory initiatives (NY Reforming the Energy Vision)
- Address potential trade-offs for all stakeholders (e.g., integrated customer-based resources vs utility-based capital additions)
- Act Now

