



**MEDSIS Workshop III
Regulatory Framework**

GSA
FC 1130



GSA

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GSA Background

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

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



Current Regulatory Environment

- GSA anticipates that F.C. 1130 will provide a framework that will facilitate new DG technologies to come on board, provide a framework for microgrid development to enhance the current distribution system in PEPCO DC, and enable existing DG technologies such as Cogeneration, to continue to operate in a cost effective way.
- The goals of FC 1130 MEDSIS are aligned with the goals set by President Obama's **Executive Order 13693**, signed in March 19 2015, which encourages the federal government to continue to invest in DG projects including solar, Cogeneration, and fuel cells.
- In Sec. 19 (c) of EO13693 “**alternative energy**” is defined as energy generated from technologies and approaches that advance renewable heat sources including biomass, solar thermal, geothermal, and combine heat and power. In Sec.19 (e) “**Clean energy**” is defined as renewable electric energy and alternative energy.



Distributed Generation

GSA Cogeneration Portfolio

- The Federal executive agencies currently own and operate a number of facilities with on-site generation -- including on-site plants which utilize cogeneration, solar and wind turbine technologies.
- Current estimated Federal cogeneration portfolio in the DC Metro Area:

Facility	Capacity
HOTD	10 MW
AOC	7.5 MW
White Oak	54 MW
NIH	21 MW
NIST	8 MW



GSA Central Heating Plant (HOTD)

- HOTD is unique facility that provides opportunities to accomplish some of the F.C. 1130 objectives.
- Constructed in 1933 during the Franklin D. Roosevelt administration; located on C St, SW
- Provides Heating and Cooling services to: Federal Government, DC Government, Quasi-governmental.



HOTD Services Offered			
	Steam	Chilled Water	Cogeneration
Year	1934	1957 Expanded in '77, '03, '05	2003
Use	Used for heating in buildings	Used for cooling and dehumidification	Simultaneously generates electricity and thermal energy
Customers Served	Services 71 buildings	Services 10 buildings	Used for energy needs of HOTD Excess power exported to Pepco grid

Community Renewable Energy Facilities (CREF)

- Currently, there are initiatives in place by the DC PSC and the DC Council that could help grow DG technologies in Washington DC. Statutes and rules such as Community Renewable Energy Facilities (CREF) can serve as a framework to identify other opportunities for DG technologies.
- The CREF net metering program is a great initiative and should be expanded to include other types and sizes of DG systems, such as cogeneration in order to move energy more efficiently.
- Due to restrictive program requirements, the CREF has limited participation and not all DG technologies can take advantage of this forward looking program.
- The CREF statute can be analyzed via FC 1130 to see to what extent the program has provided results, and identify any deficiencies.



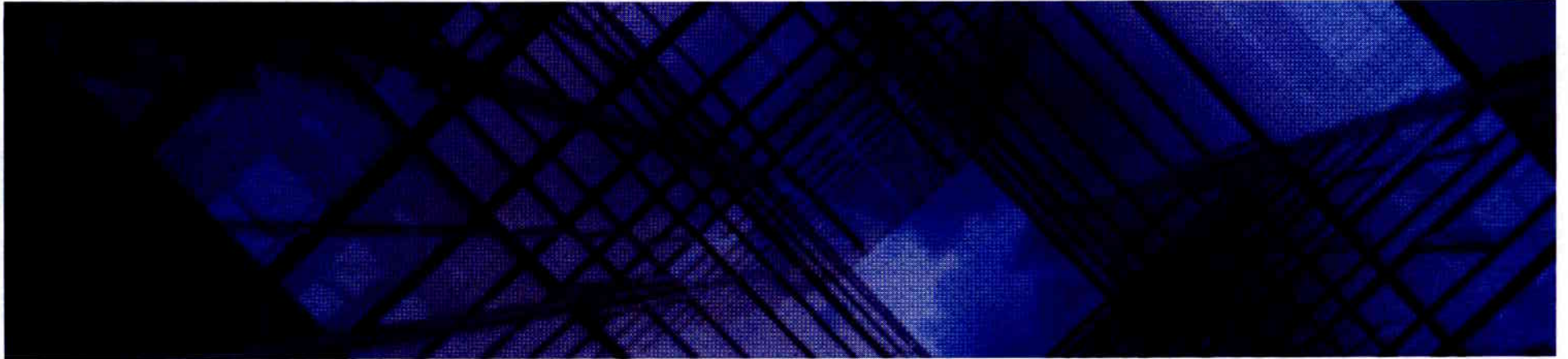
Community Renewable Energy Facilities (CREF) cont.

- GSA believes that the Commission should consider supporting the expansion of the CREF program beyond Tier 1 renewable resources to include cogeneration and at least double the 5 MW limit.
- Larger DG projects that efficiently utilize conventional fuels like natural gas could also take advantage of net metering. This will help enhance reliability and could be an asset to increase resiliency in the existing distribution network.

GSA Conclusions

- The Federal Executive agencies (GSA) have a large footprint in the mid-Atlantic region. Based on GSA's experience in different jurisdictions, we understand the importance of having the right conditions in place to encourage the development of DG and other innovative technologies.
- As stated before, the Commission should examine the potential for virtual net metering of existing DG resources that are capable of exporting power.
- GSA appreciates the Commission taking the initiative in F.C. 1130 to explore options for advancing cutting-edge technologies such as DG, CHP and ultimately microgrids that offer resilience, reliability, and energy efficiency in a cost-effective manner.





Questions?

GSA