

District Department of the Environment Air Issues, Climate Change, and Enforcement in the District of Columbia

MD-DC Utilities Association
2013 Environmental Conference



Air Issues

GHG Tailoring Rule

- Requires facilities to incorporate GHG requirements into their Title V permit.
- Six regulated GHGs: Carbon dioxide (CO₂), Methane (CH₄), Nitrous oxide (N₂O), Hydrofluorocarbons (HFCs), Perfluorocarbons (PFCs), Sulfur hexafluoride (SF₆). Carbon dioxide equivalent (CO₂e) is the preferred metric for determining GHG emissions rates for any combination of these six GHGs.
- Currently, new facilities with GHG emissions of at least 100,000 tons per year (tpy) CO₂e and existing facilities with at least 100,000 tpy CO₂e making changes that would increase GHG emissions by at least 75,000 tpy CO₂e are required to obtain PSD permits. Facilities that must obtain a PSD permit anyway, to cover other regulated pollutants, must also address GHG emissions increases of 75,000 tpy CO₂e or more. New and existing sources with GHG emissions above 100,000 tpy CO₂e must also obtain Title V operating permits.
- Could require some facilities that were not previously major sources to become major based on their GHG emissions alone, but realistically this will not affect utilities in the District.



Air Issues

GHG NSPS for Power Plants

- Applies to new sources. Unlike the first proposed rule, rulemaking sets different performance standards for natural gas-fired plants and coal-fired plants. Partial carbon capture and storage (CCS) will still be required for coal-fired power plants.
- Large, combined-cycle, natural gas turbines will be required to meet a standard of 1000 lb CO₂ per megawatt hour (Mwh). Small, combined cycle natural gas turbines will be required to meet a standard of 1100 lb CO₂/Mwh. Coal fired turbines will be required to meet a standard of 1100 lb CO₂/Mwh with an option of meeting a lower standard (between 1000-1050 lb CO₂/Mwh) over a 7 year period.



Air Issues

New Source Review

- Applies to any new construction or major modifications.
- Requires offsets and lowest achievable emission rate (LAER) for emission increases.
- Important changes in the new rules pertain to the significance threshold and the addition of the PAL.

Air Toxics (Hazardous Air Pollutants)

- Demand Response.

PSC cases with recent developments

- FC 813 – Pepco rate case in which the company files tariff changes related to the low-income discount program called the Residential Aid Discount (RAD). With respect to RAD customers, the Commission recently established for all Utility Discount Programs (UDPs), including RAD, a new program called the Consumer Education Plan (CEP). The CEP is in lieu of the Joint Utility Discount Day (JUDD) which was held annually to sign up low-income District residents for the UDPs. The CEP will educate low-income customers about the four UDPs available in the District. DDOE worked with the UDP Education Working Group to submit the proposed FY 2014 budget and CEP.
- FC 945 – Implementation of the restructuring of the electric industry in the District and the implementation of retail choice; implementation of the District's renewable portfolio standard [RPS], and monitoring of fuel mix disclosures by all electricity suppliers. The DC Council in the Distributed Generation Amendment Act of 2011 enacted a more aggressive renewable energy portfolio standard and increased the requirements for generation from renewable sources. Recently, the Commission expressed its concern about whether the higher RPS requirements can be met to avoid ratepayers having to pay substantial non-compliance fees.
- FC 988 – D.C. Universal Service Trust Fund (USTF) and Telecommunications Relay Service (TRS) issues. This rate case administers the District's Lifeline service, which provides basic telephone service to low-income residents at a subsidized rate. DDOE worked with other parties to update the program application form to conform to FCC Order 12-11. This order aims to reduce fraud and abuse in the low-income telephone discount program.

PSC cases with recent developments

- FC 1056 – Pepco's implementation of Advanced Metering Infrastructure (AMI, aka SmartGrid) including the deployment of smart meters and the development and implementation of a customer education program. One issue that was recently decided was the Office of People's Counsel's request for an order allowing customers to opt-out of smart meter installation. The Commission denied this request on the grounds that the requested relief is beyond the authority of the Commission.
- FC 1093 – Washington Gas Light Company's application to increase existing rates. DDOE intervened and advocated for shielding low-income Residential Essential Service (RES) gas customers from the proposed rate increase. The Commission did not agree with DDOE's position, and ruled that the approval of additional ratepayer funds to the RES Program under its current formulation is neither reasonable nor appropriate. The Commission stated that DDOE should look to the Energy Assistance Trust Fund (EATF) to make up any shortfall in RES Program funds needed to keep RES rates at 2012-2013 levels.
- FC 1096 – Regulatory treatment of electric vehicles (EV) charging stations and related services in the District. In this case, the Commission will decide whether, and to what extent, an EV rate should be subsidized as well as whether, and how, the rate should be structured so as to avoid the unrestrained charging of electric vehicles during peak usage times, especially on extremely hot days when demand is already high.

PSC cases with recent developments

- FC 1103 – Pepco filed an application to increase existing distribution service rates for electric service in the District by \$52.1 million, representing an increase of approximately 11.8% in Pepco's distribution revenues. DDOE opposes Pepco's proposal to collect about \$2 million in additional revenue from households whose incomes fall below 60% of the median levels in the District.
- DDOE also urged the Commission to take steps to protect low-income customers who switch from Pepco to "alternative" energy suppliers. Residential Aid Discount (RAD) program customers who use Pepco as their electricity supplier receive discounts on the generation portion of their electricity bills, in addition to discounts on the distribution portions. When RAD customers switch to alternative suppliers, the discounts on generation charges on their bills disappear. Consequently, many RAD customers who switch to alternative energy suppliers, often as a result of aggressive marketing practices, may see higher electricity bills after switching.
- FC 1105 – Investigation into the business and solicitation practices of Starion Energy in the District. On July 12, 2013, the Commission held a public hearing to gather information from consumers regarding the business and sales practices of retail energy suppliers. Twenty-two District consumers testified during the hearing, and all but one complained about allegedly unlawful, misleading, and deceptive sales practices of Starion. In response to the public hearing, on July 30, 2013, the Commission directed Starion to cease and desist from all violation of the D.C. Code and the Commission's rules regarding consumer protection standards applicable to energy suppliers.



PSC cases with recent developments

- FC 1107 – Investigation into electric service competition and consumer protection requirements. This case involves a review of the Commission's existing rules and procedures to determine whether any changes are necessary in light of the changes in the electricity competition marketplace. In particular, the review will focus on the Commission's existing requirements regarding licensing, billing, security deposits, disconnections and reconnections of service, resolution of formal and informal complaints, enrollment and renewal procedures, termination of contracts, cramming and slamming. The review will balance two important goals: the development of a healthy competitive market and the enforcement of effective consumer protections.



Customer energy use data vs. privacy rights

- Access to customer specific energy use data vs. privacy rights/expectations of the customers. There is a greater potential for energy savings if the SEU is granted access to the individual level of energy usage data. However, many customers have an expectation of privacy regarding their personal lives and behaviors. Trying to find the appropriate balance between these two policy objectives.
- Opt in or opt out? In the District, by default, customers are not participants of any energy saving programs, and must provide consent before they can be signed up for the program(s). Opower is a company that aims to change customer behavior by analyzing customer data and suggesting changes [e.g. in bill inserts] to the customer on his/her energy use. At present, Opower cannot implement its programs in the District because they are effective only if customers are participants by default [the cost of obtaining consent from each customer is extremely high].



Energy and Water Benchmarking

- Buildings over 50,000 gross square feet have to annually benchmark their energy and water performance and report the results to DDOE for public disclosure.
- Data access is often an obstacle to successful benchmarking of whole buildings--Utility partnerships are critical!
- DDOE and Pepco partnering in DoE Data Access Accelerator project.
- Pepco now providing building owners/managers with whole-building aggregated data.
- Aiming to provide direct upload of data on an ongoing monthly basis to ENERGY STAR Portfolio Manager for easier benchmarking by end of 2013.

Renewable Energy Initiatives

- DDOE's Renewable Energy Incentive Program (REIP) was authorized by the Clean and Affordable Energy Act of 2008 (CAEA), and developed to catalyze the market for renewable energy technologies in the District. The program provides cash incentives to District citizens who buy and install solar technology systems in the District. There has been high demand for the incentives offered through this program, which successfully supported over 4.2 megawatts of solar electric power and over 8,200 square feet of solar thermal capacity. Taken collectively, these systems will save District residents and residents over \$712,000 in energy costs per year. The program also provides climate benefits. By reducing demand from the local utility, system owners will offset over 3,800 tons of carbon emissions, including 2,000 tons of nitrous and sulfur oxides annually.
- In 2005, the District of Columbia Council enacted a Renewable Portfolio Standard (RPS) that applies to all retail electricity sales in the District. The RPS was first amended by the CAEA, and then in 2011 by the Distributed Generation Amendment Act, which increases the solar carve out from .4% to 2.50% by 2023.
- District energy suppliers must meet the RPS by obtaining renewable energy credits (RECs) that equal the percentage requirement for electricity sold, or by paying specified compliance fees. DC's RPS involves a two-tiered system. "Tier 1" renewable resources include solar (electric or thermal), wind, biomass, landfill gas, wastewater-treatment gas, geothermal, ocean (mechanical and thermal) and fuel cells fueled by "Tier 1" resources. "Tier 2" renewable resources include hydropower (other than pumped-storage generation) and municipal solid waste. Failure to meet the required RPS results in Alternative Compliance Fees being paid by suppliers, which are deposited into the Renewable Energy Development Fund (REDF). This fund is managed by DDOE, and required by law to be used to support new solar projects.



Renewable Energy Initiatives

- Certain renewable resources have in the past received preferential treatment through the use of compliance multipliers. Before January 1, 2007, electricity suppliers received 120% credit toward meeting the RPS for energy generated by wind or solar. Between January 1, 2007 and December 31, 2009, electricity suppliers received 110% credit for energy generated by wind or solar. Before January 1, 2010, electricity suppliers received 110% credit for energy generated by landfill methane or wastewater-treatment methane. Suppliers that fail to comply with the requirements must pay \$0.05 per kilowatt-hour (kWh) of shortfall from required Tier 1 resources, \$0.01 for each kWh of shortfall from Tier 2 resources. Solar energy sources have a unique set of shortfall payment requirements, from 2011 through 2016 at \$.50 per kWh, \$0.35 in 2017, \$0.30 in 2018, \$0.20 in 2019 and 2020, \$0.15 in 2021 and 2022, and \$0.05 in 2023 and thereafter.
- With respect to climate impacts, DC's draft Climate Action Plan estimates that if 20% of electric capacity is being met by renewables in 2020, CO₂ emissions will be reduced by 1.2 million metric tons.

Sustainable Energy Utility (SEU)

- The DC Sustainable Energy Utility (DC SEU) designs and implements energy efficiency and renewable energy programs in the District to reduce per capita energy consumption, increase renewable energy generating capacity, reduce the growth of peak electricity demand, improve the energy efficiency of low-income housing, reduce the growth of energy demand of the largest energy users, and increase the number of green-collar jobs in the District.
-
- The DC SEU is committed to community engagement, economic development, job creation, and environmental preservation. The DC SEU was authorized by the Clean and Affordable Energy Act of 2008, which also established the Sustainable Energy Trust Fund (SETF). The SETF is an assessment on the sales of electric and natural gas utility companies that funds the DC SEU.
- In FY 2012, the total electricity saved by the DC SEU was 24,504 MWh, which is enough electricity to power more than 2,000 homes for one year in the U.S. The reduction in the growth of peak demand was 3,732 kW. The DC SEU also realized 6,254 Mcf in natural gas savings and realized 153 kW of Renewable Energy Generating Capacity. The DC SEU served over 18,795 households, of which 11,395 were low-income. The DC SEU spent \$4.7 million in energy efficiency improvements in low-income communities, created 41 Full time Equivalent green jobs, and worked with 43 Certified Business Enterprises in the District.

