



Utility Regulation in the District of Columbia

Presentation to

**NIGERIAN ELECTRICITY REGULATORY
COMMISSION DELEGATION**

**Presented By
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**DISTRICT OF COLUMBIA PUBLIC SERVICE COMMISSION
WASHINGTON DC**

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Introduction

The presentation will address the following topics :

1. General background, Structure and Mission of the Commission
2. Statutory Authority for Rulemaking.
3. Regulatory Reporting Requirements and Analysis of Data – Quality of Service (QSS), Trends, Compliance.
4. Enforcement Actions, Examples
5. Lessons Learned.
6. Challenges.



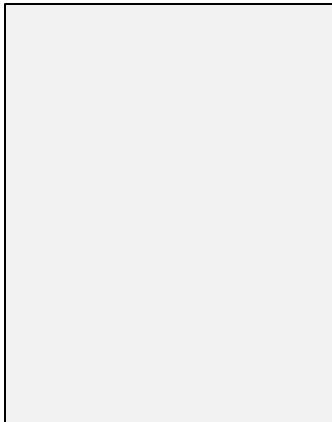
General background, Structure and Mission of the Commission

- ❑ The Commission was created by Congress in 1913 to regulate natural gas, electric, local telephone common carriers.
- ❑ The Commission is an independent home rule charter agency.
- ❑ Two Commissioners and the Chairman are appointed by the Mayor with the advice and consent of the D.C. Council (Legislature).
- ❑ Commissioners have staggered four-year terms.





Commissioners



**Vacant
Commissioner**



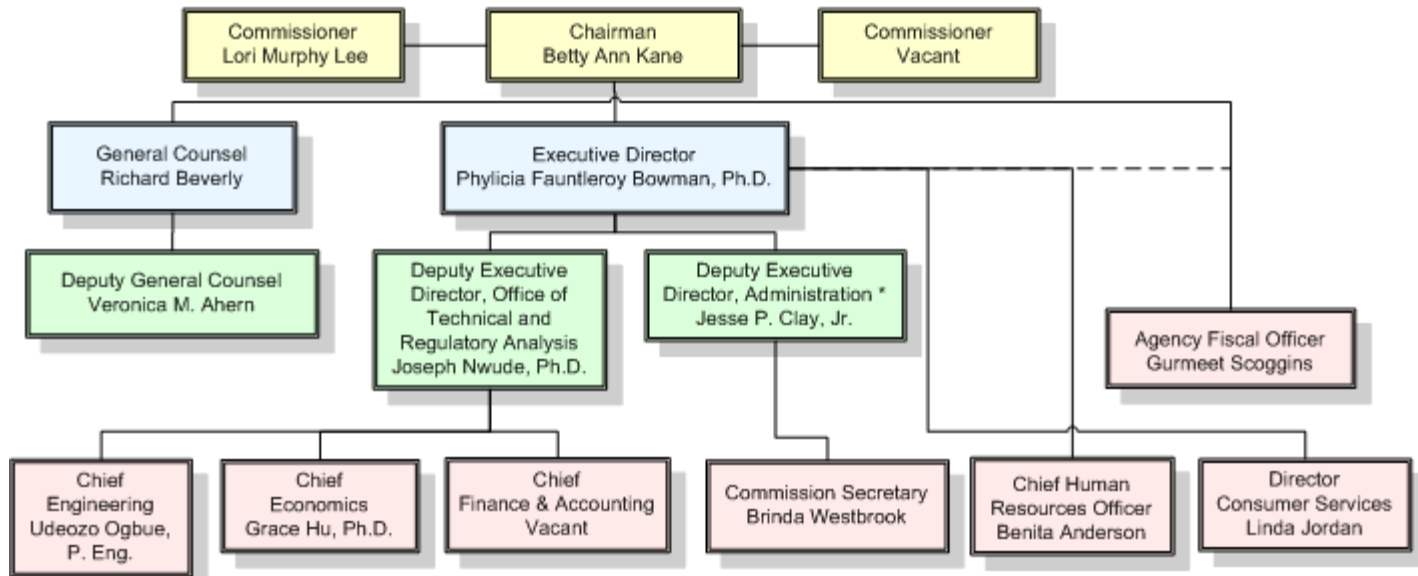
**Betty Ann Kane
Chairman**



**Lori Murphy Lee
Commissioner**



Organizational Structure



*Staff includes the Chief Information Technology Officer



Mission Statement

- **The mission of the District of Columbia Public Service Commission is to serve the public interest by ensuring that financially healthy electric, natural gas and telecommunications companies provide safe, reliable and quality utility services at reasonable rates for District of Columbia residential, business and government customers.**
- **We do this by:**
 - **Motivating customers– and results–oriented employees;**
 - **Protecting consumers to ensure public safety, reliability, and quality services;**
 - **Regulating monopoly services to ensure their rates are just and reasonable;**
 - **Fostering fair and open competition among service providers;**
 - **Conserving natural resources and preserving environmental quality;**
 - **Resolving disputes among consumers and service providers; and**
 - **Educating consumers and informing the public.**



Our Job at the Commission

Natural Gas



Pay Telephones



Customer Service



Electricity



Telecommunications





Commission Staff

Staff of 73 attorneys, engineers, economists, consumer specialists, and administrative support personnel





The Commission is Like a Court

- ❑ **The Commissioners are the judges.**
- ❑ **All staff involved in formal cases are advisors to the Commissioners.**
 - **Commissioners' staff, the Offices of the General Counsel (OGC), Executive Director, and Technical and Regulatory Analysis (OTRA) are all advisors to the Commissioners.**
 - **In some cases, the Office of Consumer Services (OCS) staff also serve as advisors.**
- ❑ **The Administrative staff is similar to the Clerk of the Court.**
 - **The Office of the Commission Secretary and the Administrative Offices (Executive Director, Deputy Executive Director for Administration, Human Resources, and Information Technology).**
- ❑ **OCS provides mediation services to consumers and businesses re complaints re utility service providers and pay telephone service providers and OGC staff serve as hearing officers when formal hearings are requested.**
- ❑ **OCS manages a pay telephone program.**
- ❑ **OCS is responsible for the Commission's education and outreach program**
- ❑ **OTRA manages the natural gas pipeline safety program.**



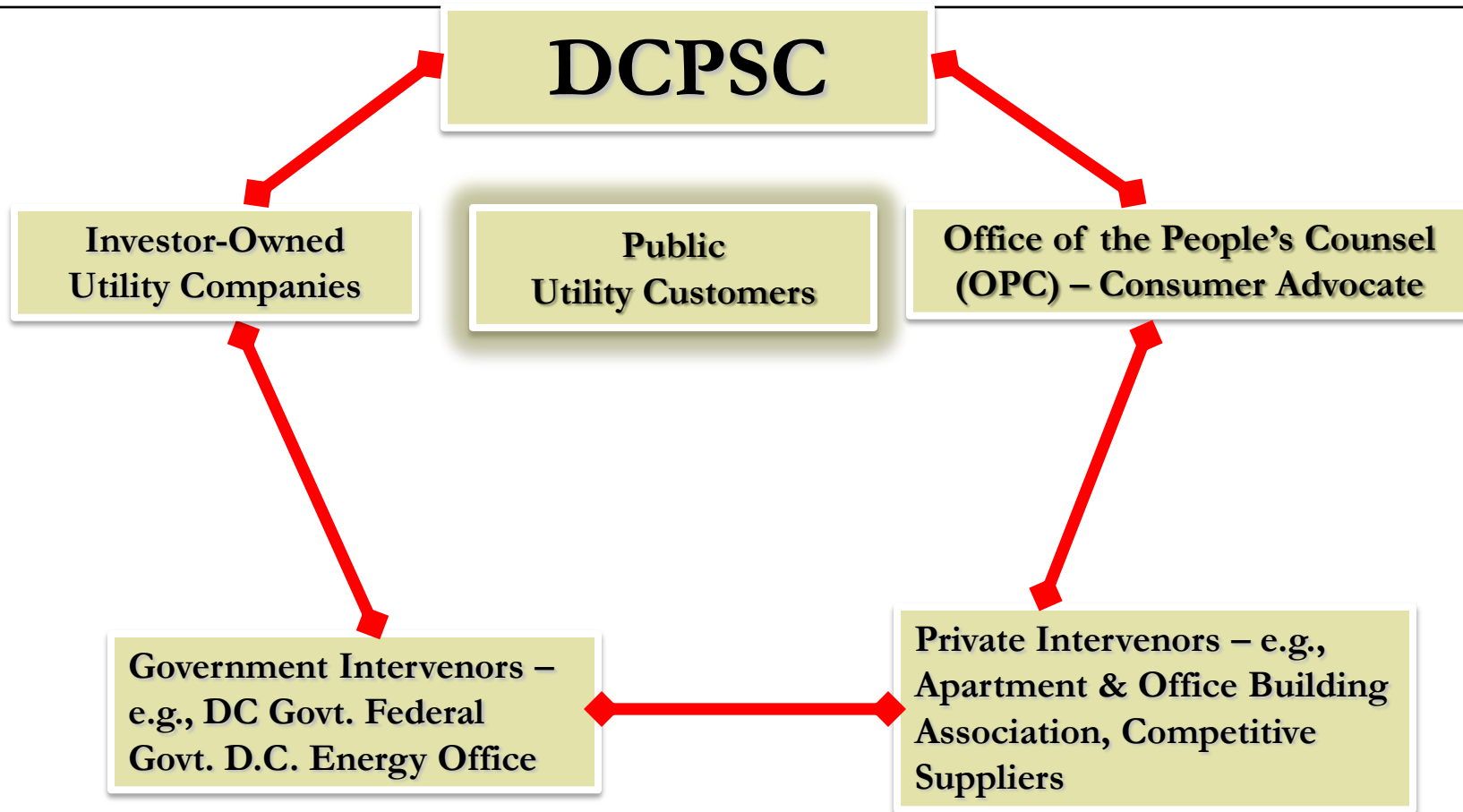
The Commission Functions as a Quasi-Judicial Agency

- Issues orders
- Makes rules
- Conducts utility company audits and investigations
- Issues Licenses





Commission's Role and Interaction





Statutory Authority for Rulemaking

Generally, the Commission has broad powers to promulgate Rules and Regulations for implementing the law enacted by the Legislature. The law may be general or prescriptive, and in either case, would make provisions for the Commission to issue Rules and Regulations to complement and delineate the intentions of the law. In the District of Columbia the law is codified in the District of Columbia Code (D.C. Code). Statutory authority for conducting investigations and hearings is contained in D.C. Code Section 343-901 *et. seq.* (Law), and provides as follows:



Statutory Authority for Rulemaking *ctd.*

- COMMISSION HAS POWER TO ADOPT RULES AND REGULATIONS THAT GOVERN THE MODE AND MANNER OF ALL INVESTIGATIONS AND HEARINGS OF PUBLIC UTILITIES AND PARTIES THAT APPEAR BEFORE IT.
- COMMISSION CAN INVESTIGATE ANY CHARGES OF UNJUST RATES OR UTILITY SERVICES WITH OR WITHOUT A HEARING BUT COMMISSION CANNOT ISSUE ANY ORDER AFFECTING SUCH RATES WITHOUT A FORMAL HEARING*.

*(A Formal Hearing is defined as a case where there are facts that are in dispute and are contested and require that parties have the right to cross-examine each other.)



Statutory Authority for Rulemaking *ctd.*

- ANY UTILITY RATE APPLICATION OR APPLICATION FOR CHANGE IN SERVICE REQUIRES THE COMMISSION TO CONDUCT A PUBLIC HEARING* ON THE APPLICATION.

*(A Public Hearing is a hearing convened to obtain information from the public regarding matters that impact the general public i.e., rate making affects the general public because it sets the rates that everyone must pay for utility services)



Rulemaking Process and Stakeholders' Participation

The Steps Are:

- Step 1. Petition for Rulemaking
- Step 2. Notice of Proposed Rulemaking (sometimes preceded by NOI)
- Step 3. Further Notice of Proposed Rulemaking (If Necessary)
- Step 4. Report and Order
- Step 5. Petition for Reconsideration
- Step 6. Memorandum Opinion and Order

Rulemaking process and Stakeholders Participation (*ctd*).

Rate Case Process for Setting Distribution Rates

- ❑ Most rate cases take 9-10 months to litigate
- ❑ The utility company files an application for a rate increase along with supporting documentation.
- ❑ The Commission issues an order, designating issues in the case.
- ❑ The utility company files Testimony in accordance with the designated issues. Other parties file data requests to which the utility company responds.
- ❑ Parties file Testimony and all parties file another round of discovery.
- ❑ All parties file Rebuttal Testimony and there is a third round of discovery.
- ❑ The Commission conducts a formal evidentiary hearing wherein the attorneys for each party cross-examine the witnesses and the Commissioners ask questions of the witnesses.
- ❑ The Commission holds 3 community hearings in 3 different wards sometimes 8 one in each of 8 wards of the District; one on a Saturday; one in the afternoon, and one during the evening..
- ❑ Within 90 days of the close of the record, the Commission issues a decisional order, after which parties have 30 days to file an application for reconsideration. The utility is directed to file revised rate schedules, after which the new rates go into effect.
- ❑ After the Commission issues its order on the applications for reconsideration, the parties can appeal all or part of the decision to the D.C. Court of Appeals



Steps in a Distribution Rate Case

- 1. Determine the company's Revenue Requirement (RR) using accounting cost of service principles.**
- 2. Allocate RR across customer classes.**
- 3. Design rates for each customer class using marginal cost principles:**
 - a. Residential**
 - b. Discount rate for low-income consumers**
 - c. Small Commercial**
 - d. Large Commercial**
 - e. Streetlights (Electricity)**



Number of Electric Companies Regulated by the Commission

- ❑ **Pepco, which is the sole electric utility company.**
 - **Pepco is an investor-owned electric distribution utility. The company divested (sold) its generation plants in 2000.**
 - **Pepco's generation service is called Standard Offer Service (SOS).**
- ❑ **18 Alternative Electric Generation Suppliers (AES) as of December 31, 2010**
 - **6 AES serve residential customers. (Currently there are 6 AES serving residential customers.)**
 - **18 AES serve commercial customers.**



Nature of Commission's Electric Regulation

- ❑ Electric rates are unbundled into distribution, transmission, and generation.
- ❑ Taxes account for about 8.5% of a residential bill.
- ❑ The Commission sets electric distribution rates in a rate case.
 - Electric distribution rates account for 16.6% of a residential bill.
- ❑ The Commission approves transmission rates based on decisions rendered at the Federal Energy Regulatory Commission (FERC).
 - Transmission rates account for about 3.4% of a residential bill.
- ❑ Electric generation rates are market-based and account for 71.5% of residential bill.
 - All electricity customers can choose their electric generation supplier.
 - The Commission approves Pepco's SOS electric generation rates through oversight of a competitive bidding process conducted by Pepco.
 - The Commission does not set the electric generation rates of Alternative Electric Generation Suppliers (AES).

Regulatory Reporting Requirements and Analysis of Data

Monitoring Oversight

- ❑ Following the completion of a rate case or a formal proceeding the Commission issues an Order containing its decision. Decisions normally contain:
 - ❑ The rates the commission has the authority to set.
 - ❑ Reporting requirements including time lines and report contents.
 - ❑ Compliance filing which complies with the decision.
 - ❑ Studies, investigations, etc. as the Commission determines.
- ❑ Staff responsibility is to review these filings and advise the Commission on the extent the filings are in compliance with the order.

Regulatory Reporting Requirements and Analysis of Data

Electricity Quality of Service Standards (“EQSS”)

- ❑ The EQSS establish standards and requirements for an adequate level of quality and reliability in electricity services in DC.
- ❑ EQSS cover the following areas of service quality:

A. Reporting requirements for

- Major Service Outages
- Non-major service outages
- Incidents
- Customer Service
- System Reliability
- Billing Error

Regulatory Reporting Requirements and Analysis of Data (*ctd*).

EQSS – Reporting Requirements

- ❑ **Major Service Outages** – 10,000 customers or more and lasting more than 24 hours (customer base is approx. 235,000)
 - Notify PSC and OPC within 1 hour by phone and e-mail
 - File a written report within 3 weeks
- ❑ **Non-Major Service Outages** - customer service outages caused by the failure of devices lasting over eight (8) hours, regardless of how many customers are affected; or customer service outages affecting over 100 but less than 10,000 customers, regardless of duration.
 - Notify PSC and OPC within 1 hour by phone and e-mail
 - File a written report within 5 days
 - Provide detailed report on all non-major outages, manholes events, loss of life and/or injury.

Regulatory Reporting Requirements and Analysis of Data (*ctd*).

EQSS – Reporting Requirements (*ctd*).

- ❑ **Incidents** – Manhole (smoking/fire/explosions); Loss of Life and/or Injury
 - Notify PSC and OPC within 30 minutes
 - File a written report within 5 days
- ❑ **Customer Service** – Walk in office, respond timely to phone calls and service requests from customers
 - Answer 70% of calls within 30 second. Call abandonment rate must be below 10%
 - Complete new residential service request within 10 business days (service provisioning)
- ❑ **System Reliability** – SAIFI and SAIDI of systems excluding major service outages
- ❑ **Billing Errors** – Notify PSC of billing error within one day of discovery, follow up report in 14 days and final report in 60 days with specified information.

Regulatory Reporting Requirements and Analysis of Data (*ctd*).

EQSS – Measures Reported and Monitored

B. Reliability Standard

- System Average Interruption Frequency Index (SAIFI), System Average Interruption Duration Index (SAIDI), and Customer Average Interruption Duration Index (CAIDI)
- The benchmark levels for SAIFI, SAIDI, and CAIDI shall be calculated with a five-year moving average of OMS data
- The calculations shall exclude OMS data for major event days (MED) consistent with the IEEE 1366, Guide for Electric Power Distribution Reliability Indices standard
- The utility shall calculate the SAIFI, SAIDI, and CAIDI for each year excluding MED
- The benchmark shall be based on the mean of a rolling five year average plus two (2) standard deviations
- The SAIFI, SAIDI and CAIDI benchmarks shall be reset annually using a rolling five (5) year average.
- The SAIFI, SAIDI and CAIDI benchmarks for recent years are shown in the next table
- If the utility fails to comply it shall be required to develop a corrective action plan.

Regulatory Reporting Requirements and Analysis of Data (*ctd*).

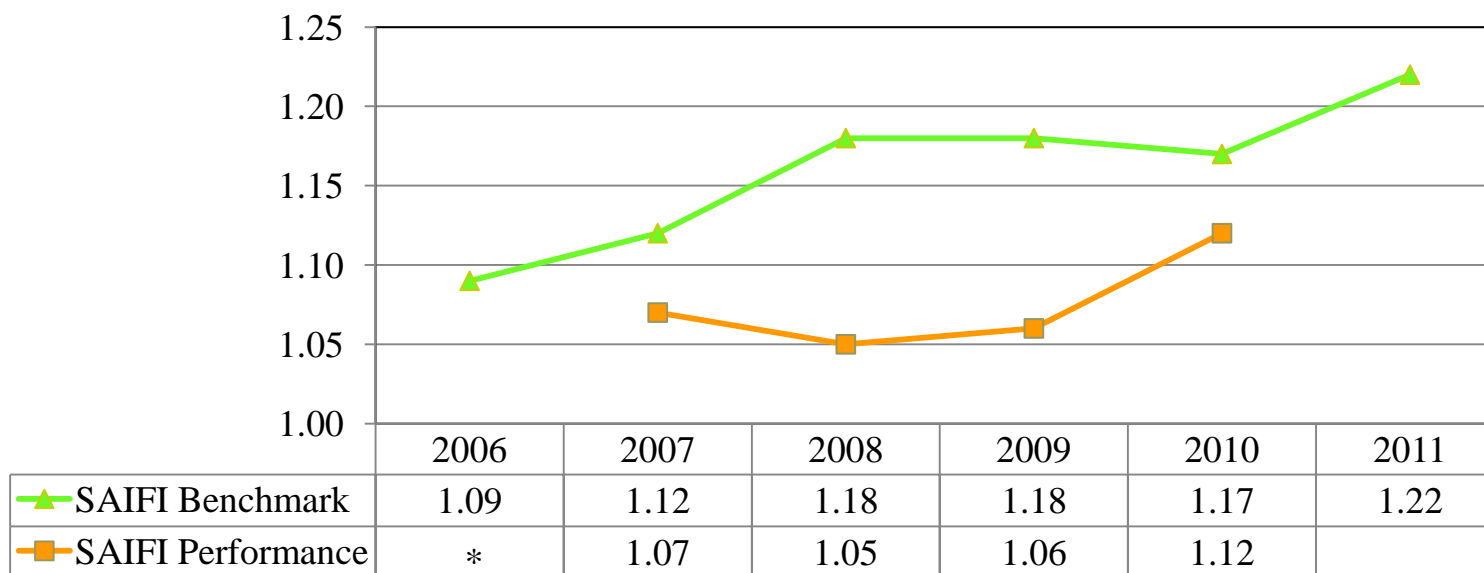
EQSS – Measures Reported and Monitored (*ctd*).

Existing Reliability Indices Benchmarks as reported in Annual Consolidated Reports						
BENCHMARKS (2006 -2011)				ACTUAL PERFORMANCE (2007 – 2010)		
Year	SAIFI	SAIDI	CAIDI	SAIFI	SAIDI	CAIDI
2006	1.09	3.52	3.72	*	*	*
2007	1.12	5.48	5.46	1.07	3.83	3.57
2008	1.18	5.55	5.33	1.05	4.85	4.85
2009	1.18	4.85	4.85	1.06	2.35	2.23
2010	1.17	4.22	4.60	1.12	2.68	2.41
2011	1.22	4.24	4.64	-	-	-

Regulatory Reporting Requirements and Analysis of Data (*ctd*).

EQSS – Measures Reported and Monitored (*ctd*).

Reliability Indices (SAIFI) - Benchmark and Performance

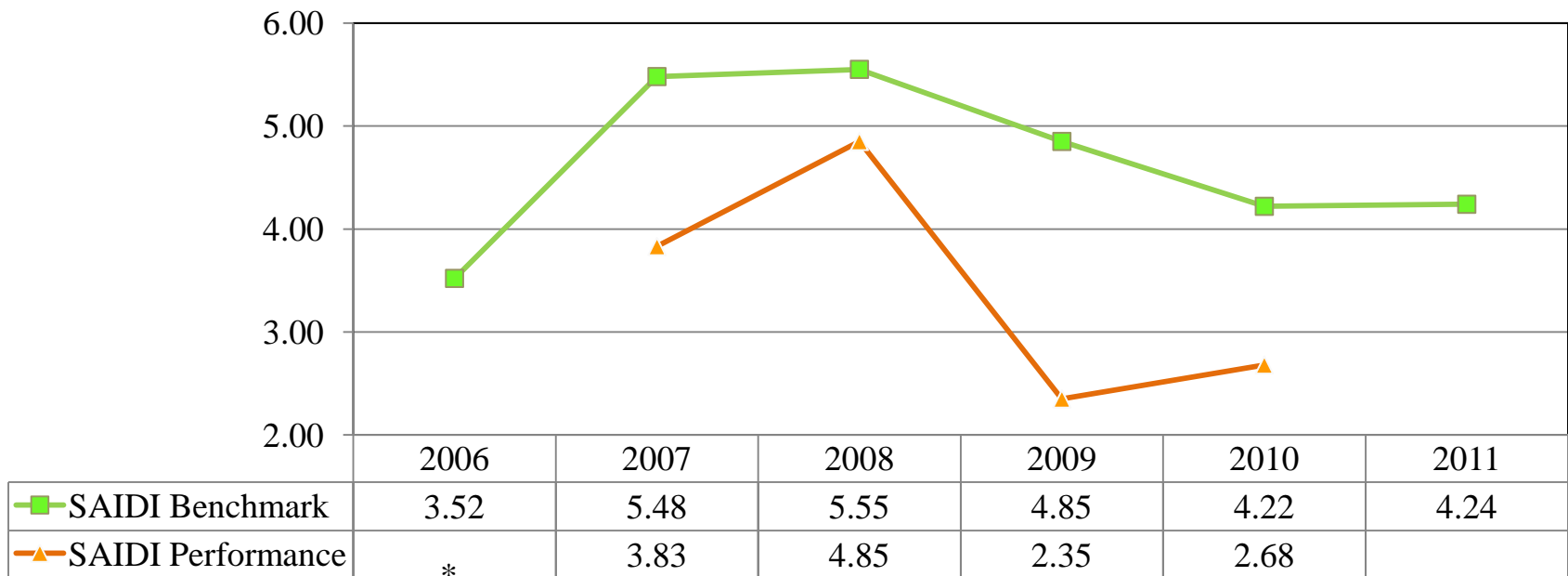


* Standards were first set in 2006, no performance measure for that year

Regulatory Reporting Requirements and Analysis of Data (*ctd*).

EQSS – Measures Reported and Monitored (*ctd*).

Reliability Indices (SAIDI) - Benchmark and Performance



Regulatory Reporting Requirements and Analysis of Data (*ctd*).

EQSS –Evaluation, Analysis and Results

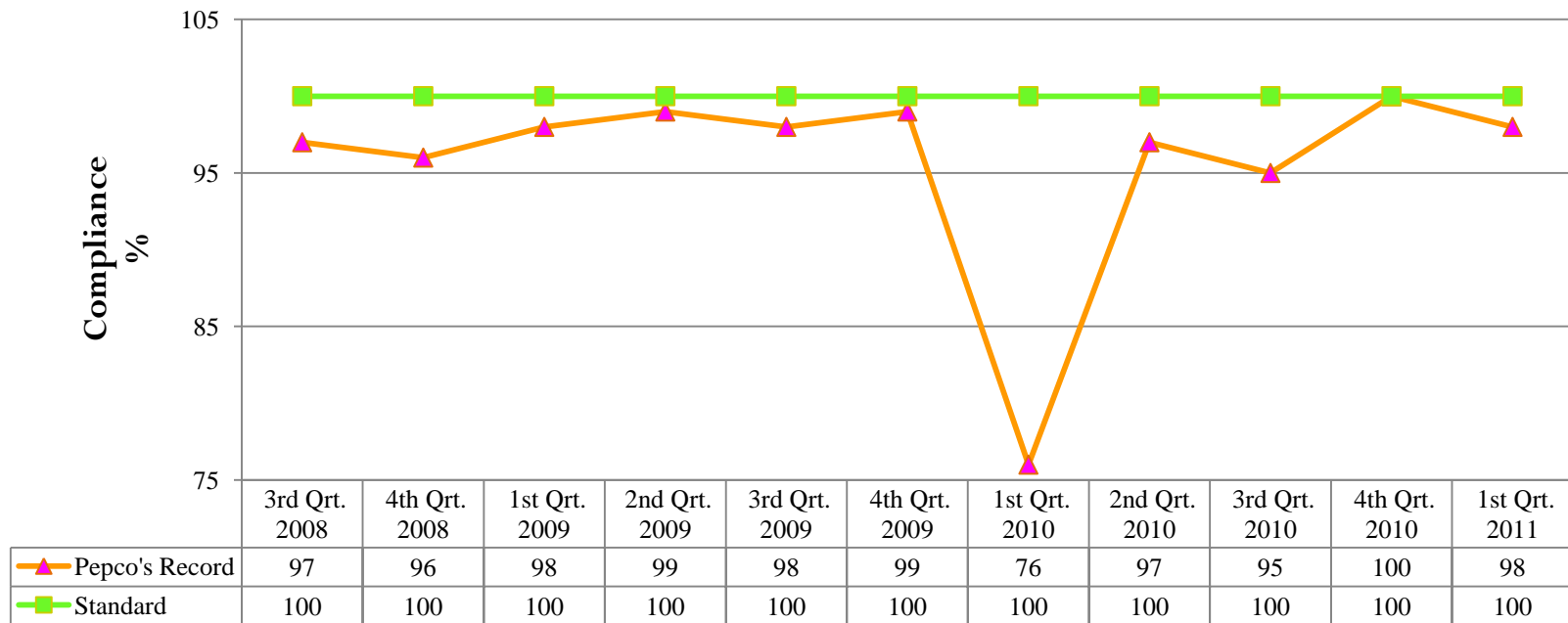
Results

- ❑ The reported data are analyzed and evaluated for trends and compliance with measures
- ❑ The results inform decisions on how EQSS measures may be improved, how utility performance can be enhanced and improved and where penalties may be appropriate given utility performance.
- ❑ Some of the results are presented in subsequent slides.

Regulatory Reporting Requirements and Analysis of Data (*ctd*).

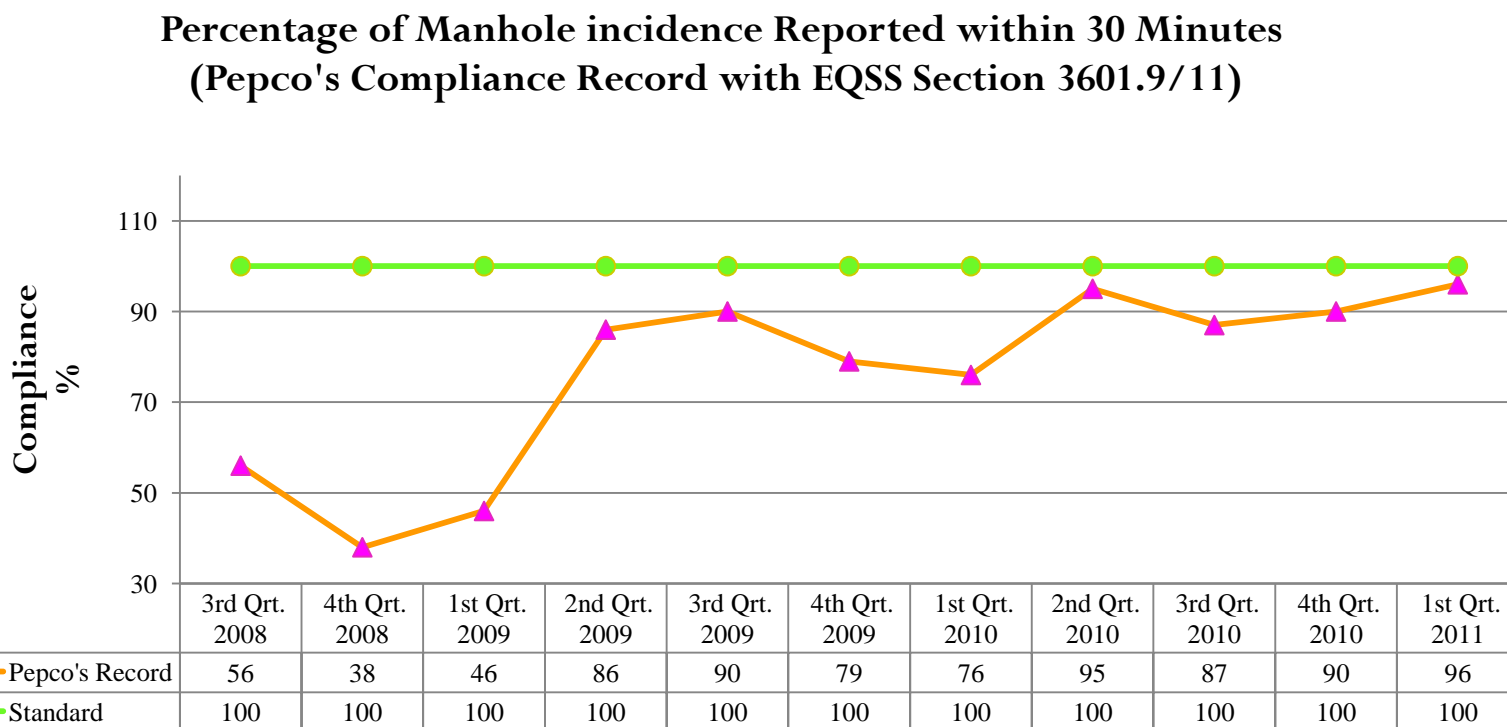
EQSS –Results Example (Reliability)

Complete Service Restoration non-major service outage within 24 Hrs.
(Pepco's Compliance Record with 3603.7 Percentage)



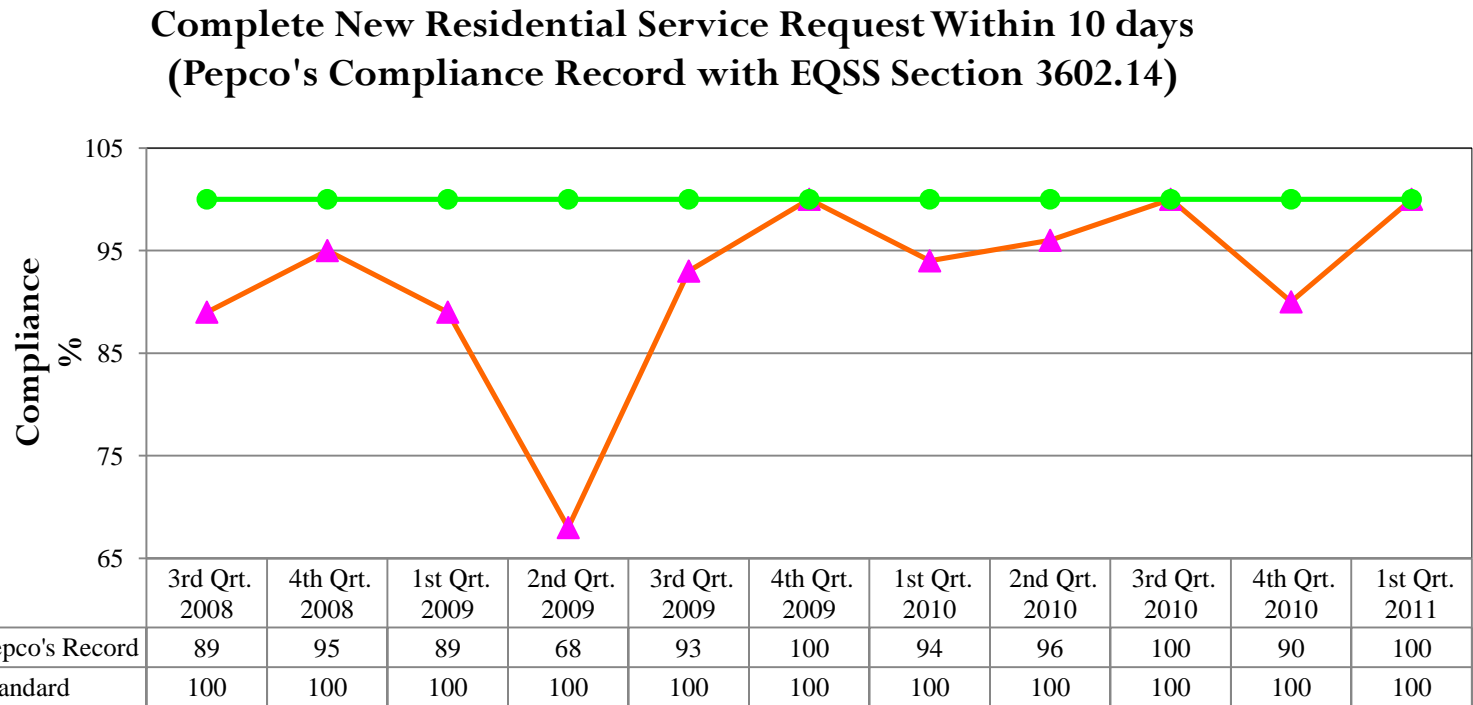
Regulatory Reporting Requirements and Analysis of Data (*ctd*).

EQSS – Results - Manhole Incidence (Timely Reporting)



Regulatory Reporting Requirements and Analysis of Data (*ctd*).

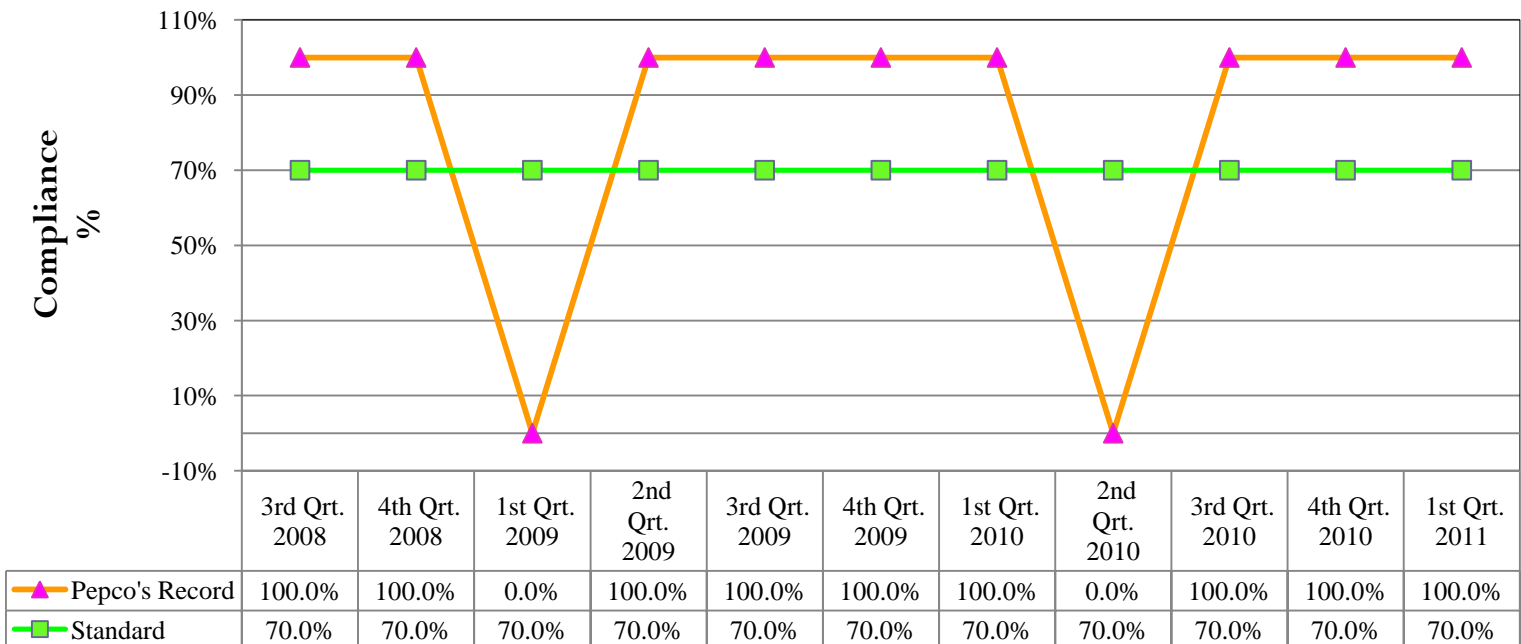
EQSS – Results - Customer Service Standard



Regulatory Reporting Requirements and Analysis of Data (*ctd*).

EQSS – Results - Customer Service Standard (*ctd*).

Answer 70% of all calls within 30 seconds.
(Pepco's Compliance Record with EQSS Section 3602.2)



Lessons Learned

EQSS -- Outcomes

- ❑ Identification of improvements to strengthen the EQSS including public input.
- ❑ Identification of success and failures of the utilities in meeting standards. (use graphs showing compliance with measures)
- ❑ Improvements on specific measures – e.g. Reliability
- ❑ Improving Pepco's service reliability and major outage restoration efforts are continuing to be top priorities for the PSC.
- ❑ Review past and proposed spending on reliability in an upcoming Pepco rate case.
- ❑ Require Pepco to prepare a mandatory management audit.
- ❑ Develop new requirements for major outage restoration based on public input.
- ❑ Continue to monitor the effectiveness of Pepco's reliability improvement plan which includes increasing vegetation management, improving worst-performing feeders, meeting increased demand, installing advanced distribution automation, and identifying undergrounding projects.
- ❑ Include penalties and rewards for performance

Lessons Learned (*ctd*).

EQSS – Lessons Learned - Steps to Improve Reliability Issues

- ❑ On July 7, 2011, in Order No. 16427, the PSC modified its Electricity Quality of Service Standards (EQSS). The new rules establish aggressive SAIDI and SAIFI reliability performance standards for Pepco, based on District of Columbia only data and designed to enforce continuous improvement in electric service reliability through 2020.
- ❑ Selective Undergrounding involves moving selected portions of overhead distribution feeders to underground conduits.
- ❑ Selective Undergrounding is under consideration in the District of Columbia for purposes of enhancing reliability only, not for aesthetic reasons.
- ❑ Commission Order No. 16763 issued on April 27, 2012, the Commission rejected the Company's methodology for identifying feeder portions for undergrounding.

Lessons Learned (*ctd*).

EQSS – Lessons learned – Reliability Issues

- ❑ The Commission reasoned that the initial screening of feeders failed to exclude underground feeders and was not specific to relevant outage causes (tree and other overhead exposure events.)
- ❑ Tree trimming remains contentious. The Company would like to implement a four-year trim cycle throughout the District of Columbia but faces resistance from residents and other agencies.
- ❑ The Company uses feeder-level outage data to prioritize tree trimming program.

Lessons Learned (*ctd*).

New Standards set as a result of Reporting, Monitoring and Analysis of Data.

New Reliability Indices Benchmarks Which Became Effective February 24, 2012 (Excludes OMS data for Major Service Outages)		
	BENCHMARKS	
Year	SAIFI	SAIDI
2013	1.13	2.68
2014	1.09	2.43
2015	1.05	2.21
2016	1.02	2.00
2017	0.98	1.81
2018	0.95	1.65
2019	0.92	1.49
2020	0.89	1.35

Lessons Learned (*ctd*).

EQSS – Lessons learned – New Reliability Standards (*ctd*).

- The calculations of the indices shall exclude District of Columbia OMS data for either Major Service Outages or for Major Event Days (MEDs). No later than January 1, 2013, the utility shall notify the Commission which method of excluding OMS data it will use and shall not change its selection without prior authority from the Commission. Major Event Days shall be determined in a manner consistent with the I.E.E.E. Standard 1366-2003 *Guide for Electric Power Distribution Reliability Indices*, provided that only District of Columbia outage data is used in the selection of MEDs.

Lessons Learned (*ctd*).

New Reliability Standards (Enforcement).

- ❑ If the utility fails to comply with subsection 3603.10, it may be subject to forfeiture in accordance with D.C. Official Code § 34-706 and 34-1508 (2010 Repl.). The utility shall also be required to develop a corrective action plan, which it shall file for the Commission's information within thirty (30) days of filing the Consolidated Report.
- ❑ The corrective action plan shall clearly describe the cause(s) of the utility's failure to comply with subsection 3603.10, describe the corrective measures) to be taken to ensure that the standard is met or exceeded in the future, and provide a target for completion of the corrective measure(s).
- ❑ The utility shall report on the progress of the corrective action plan in the following year's Consolidated Report submitted to the Commission.
- ❑ The utility shall also, per the orders of the Commission, continue current requirements of reporting annual reliability indices of SAIFI, SAIDI and CAIDI (with and without Major Service Outages and Major Event Days) in the annual Consolidated Report of the following year.
- ❑ No earlier than June 30, 2015, the utility may request the Commission to reevaluate the reliability performance standards established in subsection 3603.11 for the years 2016 through 2020 and thereafter.



CHALLENGES

Current Electric Issues

- ☐ **Reliability of Pepco's Distribution System**
- ☐ **Implementing Electric Reliability Standards**
- ☐ **Improving /Rebuilding Least Performing Feeders**
- ☐ **Imposing and Collecting Fines**
- ☐ **Develop and Implement Major Outage Restoration Standards**



Utility Regulation in the District of Columbia

END OF PRESENTATION