

City of Independence

MEMORANDUM

DATE: October 31st, 2014

City Council Office

TO: Honorable Mayor and Members of the City Council

FROM: Zachary C. Walker, Management Analyst *Zachary Walker*



SUBJECT: Summary of IPL Oversight Reports

Please find attached a summary of the various external entities that provide oversight and regulatory services of the Independence Power and Light Department. I have prepared this summary with assistance from IPL staff after receiving some inquiries regarding the level and nature of oversight at IPL. As this summary indicates, IPL operates in a heavily regulated and frequently audited environment, covering all facets from financial and accounting standards, service reliability, physical and cyber security, liability issues, environmental compliance, adequacy of infrastructure, and competitive wholesale pricing.

Please let me know if you have any additional questions or need any further information related to this topic.

Oversight of IPL's Operations by Outside Entities

1. City's Comprehensive Annual Financial Report ("CAFR")

The City has an annual audit of their financial statements. This audit is completed by an outside auditing firm. The audit is conducted in accordance with the auditing standards generally accepted in the United States of America (GAAS); "Government Auditing Standards" issued by the Comptroller General of the United States; the provisions of the Single Audit Act, OMB Circular A-133, and OMB's Compliance Supplement. The audit is planned and performed to obtain reasonable assurance about whether the financial statements are free from material misstatement. The audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant estimates made by management, as well as evaluating the overall presentation of the financial statements.

In addition, the City also produces a Continuing Disclosure Statement as a supplement to the City's CAFR. This document provides detailed discussion and financial information on the Power & Light Department and is provided to the bondholders of the City's debt.

2. North American Electric Reliability Corporation ("NERC")

NERC is a not-for-profit international regulatory authority whose mission is to ensure the reliability of the bulk power system in North America. NERC develops and enforces Reliability Standards; annually assesses seasonal and long-term reliability; monitors the bulk power system through system awareness; and educates, trains, and certifies industry personnel. NERC's area of responsibility spans the continental United States, Canada, and the northern portion of Baja California, Mexico. NERC is the electric reliability organization for North America, subject to oversight by the Federal Energy Regulatory Commission ("FERC") and governmental authorities in Canada. NERC's jurisdiction includes users, owners, and operators of the bulk power system, which serves more than 334 million people.

NERC has enforceable standards that cover two distinct areas: Reliability and Critical Infrastructure Protection ("CIP"). NERC does on-site audits for these two areas every 3 years.

Reliability Audit: The last Reliability audit at IPL was in June 2013. This audit covers our operations at Power & Light that impact the reliability of our system (power plants, transmission lines, substations, operations control center, backup control center, etc.) This is a very intense audit process with over 1,400 pages of documents provided to the audit team months in advance of the on-site portion of the audit. The auditors are then on-site for one week to go over our processes/procedures.

CIP Audit: The last CIP audit was just recently conducted in August 2014. Like the Reliability Audit, this is a very intense process that basically covers the "physical and cyber security" arena. The CIP audit was done over a three week period (first week on-site, second week off-site and the third week back on-site). In addition, over 12,000

pages of documents were provided to the audit team months in advance of the on-site portion of the audit.

Self-Certifications, Periodic Surveys and Spot Checks – In addition to the audits, IPL also has to self-certify compliance with a subset of NERC Reliability and CIP Standards on a quarterly basis. An internal review is completed to determine compliance with requirements before self-certifying. NERC will send out periodic surveys and questionnaires to assess the reliability of electric entities throughout the year. In addition to the self-certifications and surveys, NERC will conduct spot checks on NERC Standards, audits of a subset of requirements, on a periodic basis.

3. Insurance Company Inspections

Each year, our insurance company does an on-site inspection of our facilities (mainly our power plants). This review addresses liability issues with plant operations looking at operating and maintenance procedures of our plants (mechanical and electrical preventive and predictive activities, safety training), operating data (# starts, hours of operation, abnormal events), facilities and equipment including fire prevention and protection systems (periodic inspections and testing of permanent sprinkler systems, CO2 systems at the combustion turbines), and status of past insurance inspection recommendations for industry best practices.

The insurance inspectors also perform power plant boiler and pressure vessel inspections to make sure we are meeting state requirements.

Each year, they may provide recommendations on improvements and industry best practices that are reviewed for applicability, evaluated for benefit, and generally implemented as necessary to address concerns of the recommendations.

4. Environmental Protection Agency ("EPA")

Born in the wake of elevated concern about environmental pollution, EPA was established on December 2, 1970 to consolidate in one agency a variety of federal research, monitoring, standard-setting and enforcement activities to ensure environmental protection. Since its inception, EPA's mission was to protect human health and the environment.

The EPA has its national headquarters in Washington, D.C. which directs the regional offices for each of the agency's ten regions, and 27 laboratories. The agency conducts environmental assessment, research, and education. It has the responsibility of maintaining and enforcing national standards under a variety of environmental laws, in consultation with state, tribal, and local governments. It delegates some permitting, monitoring, and enforcement responsibility to U.S. states. EPA enforcement powers include fines, sanctions, and other measures. The agency also works with industries and all levels of government in a wide variety of voluntary pollution prevention programs and energy conservation efforts.

EPA Region 7 headquartered in Lenexa, Kansas is the Midwest regional office run by Administrator Karl Brooks and covers the states of Iowa, Kansas, Missouri and Nebraska. EPA Region 7 stated priorities are:

- Protecting and improving water quality across America's greatest watershed, the Missouri-Mississippi Basin;
- Remedying a legacy of polluted soil by cleaning up neighborhoods in places as diverse as downtown Omaha and rural Missouri's Lead Belt; and,
- Enforcing a new generation of air quality laws that encourage industrial and transport innovation by protecting public health.

The first and third priorities impact the operations of the IPL. Consequently, EPA Region 7 reviews and has final approval authority over all of IPL's Water and Air Permits even though these permits are issued by the Missouri Department of Natural Resources. During new permit requests and permit renewal cycles, IPL must communicate and negotiate with EPA officials as well as State permitting authorities.

As mandated by EPA, IPL must continuously monitor the stack emissions of our power plants while they are operating. This monitoring data must be collected, stored on dedicated servers, validated and submitted electronically to EPA every quarter. In addition, copies of all required annual stack air sampling conducted by third party must be sent to EPA for review.

Finally, EPA conducts unannounced inspections at our power plants during which they review all our environmental records and power generating operations. In the last five years, EPA has conducted three of these inspections. These inspections did not result in any environmental violations; however IPL was required to perform additional testing of our coal ash lagoons as the result of one of the unannounced inspections. This testing was performed in 2012 and the results were accepted by EPA.

5. Missouri Department of Natural Resources ("MoDNR")

The Missouri Department of Natural Resources was created under the Omnibus State Reorganization Act of 1974. MoDNR's mission is to protect, preserve and enhance Missouri's natural, cultural and energy resources. Headquartered in Jefferson City, Missouri, MoDNR is currently lead by Director Sara Parker Pauley and is divided into 5 Regions (Kansas City, Macon, St. Louis, Popular Bluff and Springfield). The Kansas City Regional Office of MoDNR is located in Lees Summit, Missouri.

MoDNR is divided into the Division of Environmental Quality, the Division of Geology and Land Survey, the Division of State Parks, the Environmental and Energy Resources Authority, and the Field Services Division. The Division of Environmental Quality is the primary regulatory body that impacts IPL's operations. The MoDNR DEQ is divided into 8 programs (Air Pollution Control, Hazardous Waste, Water Protection, Water Pollution Control, Solid Waste, Environmental Services, Public Drinking Water, and Land Reclamation).

EPA has delegated primary authority to regulate and enforce environmental regulations in Missouri to MoDNR. Consequently, IPL corresponds frequently with MoDNR's Lees Summit office and the Jefferson City Headquarters on environmental issues involving water, wastewater, air, solid waste, underground fuel storage tanks. MoDNR issues, after EPA review, all IPL air, water, hazardous waste, wastewater operating permits. All IPL construction projects

which disturb more than 1 acre must be reviewed and approved by MoDNR. Approximately 40 different environmental reports must be generated every year and submitted to MoDNR's air, water, wastewater and hazardous waste programs. Additional special reports must be submitted during upset conditions, malfunctions or spills.

MoDNR conducts unannounced inspections at each of our generating facilities every year. The focus of these inspections is IPL's compliance with air pollution control regulations but these inspections have also included fuel storage and hazardous waste compliance. IPL has an excellent record of compliance with all environmental regulations having no recorded violations.

6. Southwest Power Pool ("SPP")

Southwest Power Pool ("SPP") is one of nine Independent System Operators/Regional Transmission Organizations (ISOs/RTOs) and one of eight NERC Regional Entities. SPP is mandated by the Federal Energy Regulatory Commission to ensure reliable supplies of power, adequate transmission infrastructure, and competitive wholesale prices of electricity. SPP's oversight region covers part or all of Missouri, Nebraska, Kansas, Oklahoma, Arkansas and Texas.

The ISOs/RTOs are the "air traffic controllers" of the electric power grid. ISOs/RTOs do not own the power grid. They independently operate the grid minute-by-minute to ensure that power gets to customers and to eliminate power shortages. SPP provides the following primary services to utilities including IPL:

- **Compliance:** The SPP Regional Entity enforces compliance with federal and regional reliability standards for utilities of the region's bulk power grid. Non-compliance can result in significant fines.
- **Market Operations:** In the SPP Integrated Market, SPP coordinates next-day generation across the region to maximize cost-effectiveness, provide participants with greater access to reserve energy, improve regional balancing of electricity supply and demand, and facilitate the integration of renewable resources. In addition, participants buy and sell wholesale electricity in real-time. Participants can use the Integrated Market to get the least expensive available energy from other utilities. As a Market Participant, IPL has to comply with the many rules and protocols of the Integrated Marketplace. Non-compliance can lead to significant cost impacts on IPL and its retail customers.
- **Regional Scheduling:** SPP ensures that the amount of power sent is coordinated and matched with power received.
- **Reliability Coordination:** SPP monitors power flow throughout our footprint and coordinates regional response in emergency situations or blackouts.
- **Tariff Administration:** SPP provides "one stop shopping" for use of the region's transmission lines and independently administers an Open Access Transmission Tariff with consistent rates and terms.
- **Transmission expansion planning:** SPP's planning processes seek to identify system limitations, develop transmission upgrade plans, and track project progress to ensure timely completion of system reinforcements.

7. Triennial Report

Prior bond ordinances required IPL to have an independent consulting engineer perform a triennial report on the condition and operation of IPL. The review includes reporting on IPL's operations and financials, performing field inspections of major facilities, interviews with IPL management, and then providing the findings and recommendations in a report. The last triennial report was completed in 2005. Current bond ordinances do not require these reviews.