

# **IMPACTS OF RECENT USEPA RULEMAKING ON BPU**

**State of Kansas**

**Senate Utilities Committee**

**January 17, 2012**

**Patrick J. Cassidy**

**Director, Environmental Services**

**Kansas City Board of Public Utilities**



# Background

## Kansas City Board of Public Utilities (BPU)

### Electric and Water Utility:

Publicly owned administrative agency of the Unified Government (UG) of Wyandotte County/Kansas City, Kansas

### Customer information:

150,000 residents

67,000 electric meters

55,000 water meters

### Revenue Sources:

85% electric

15% water

### BPU Service Area Demographics:

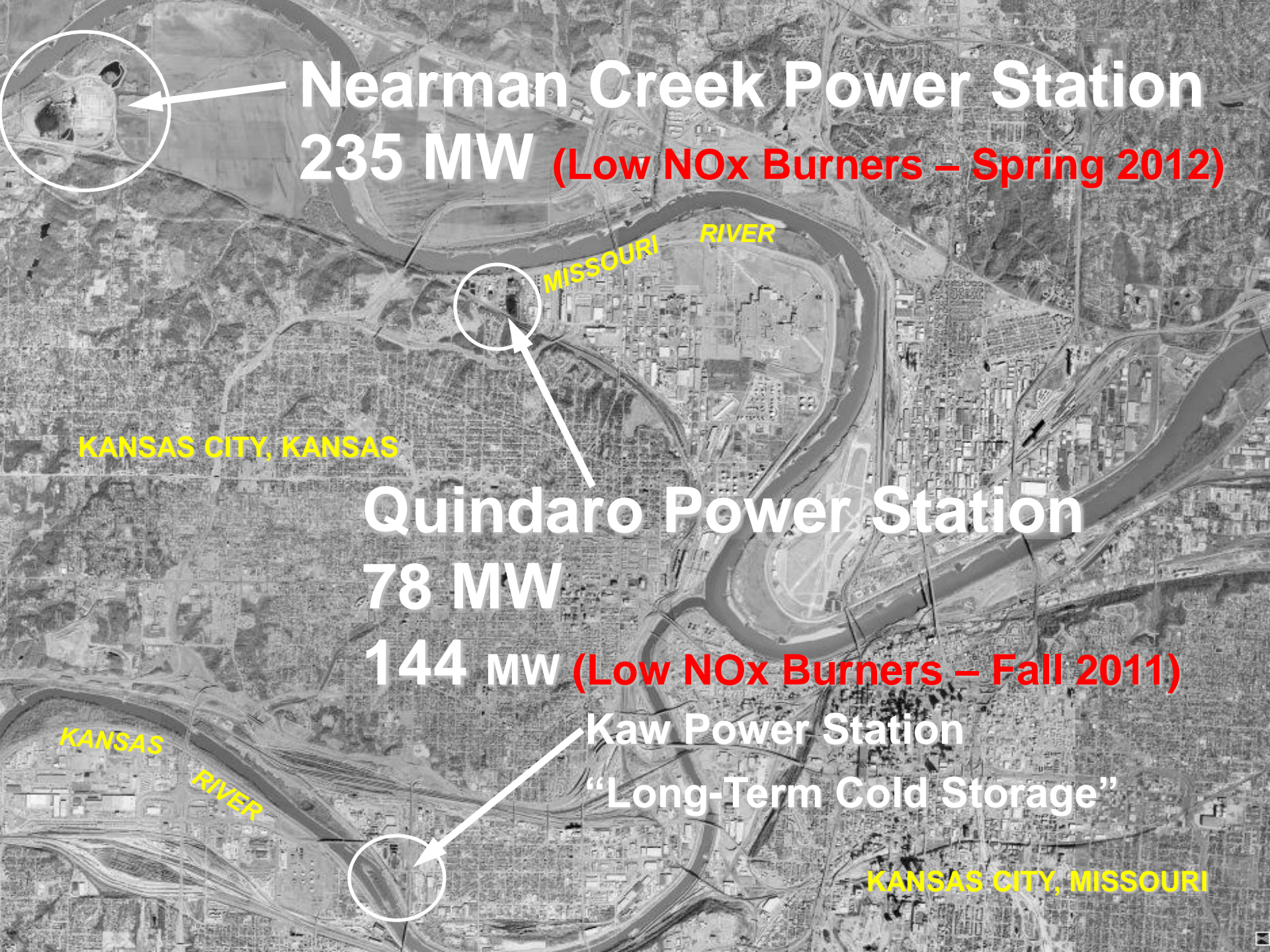
16.5% live below the poverty line

11.2% unemployment rate

14,000 annual “payment arrangements”

6,000 monthly accounts eligible for disconnection





# Nearman Creek Power Station

235 MW (Low NOx Burners – Spring 2012)

KANSAS CITY, KANSAS

# Quindaro Power Station

78 MW

144 MW (Low NOx Burners – Fall 2011)

# Kaw Power Station

“Long-Term Cold Storage”

KANSAS CITY, MISSOURI

# Current Environmental Issues:

- Cooling Water Intake Structures
- Coal Combustion Residuals (CCR)
- Wastewater Discharge Standards
- National Ambient Air Quality Standards (Ozone)
- Green House Gas Requirements
- Utility Maximum Achievable Control Technologies (MACT) – Mercury and Gasses



# **Current Environmental Issues:**

## **Cross State Air Pollution Rule (CSAPR)...**

**Published Final Rule August 8, 2011**

**Effective October 7, 2011**

(Approx 41 Motion to Stay filed with DC District Court)

“Stay” issued by DC District Court December 30, 2011

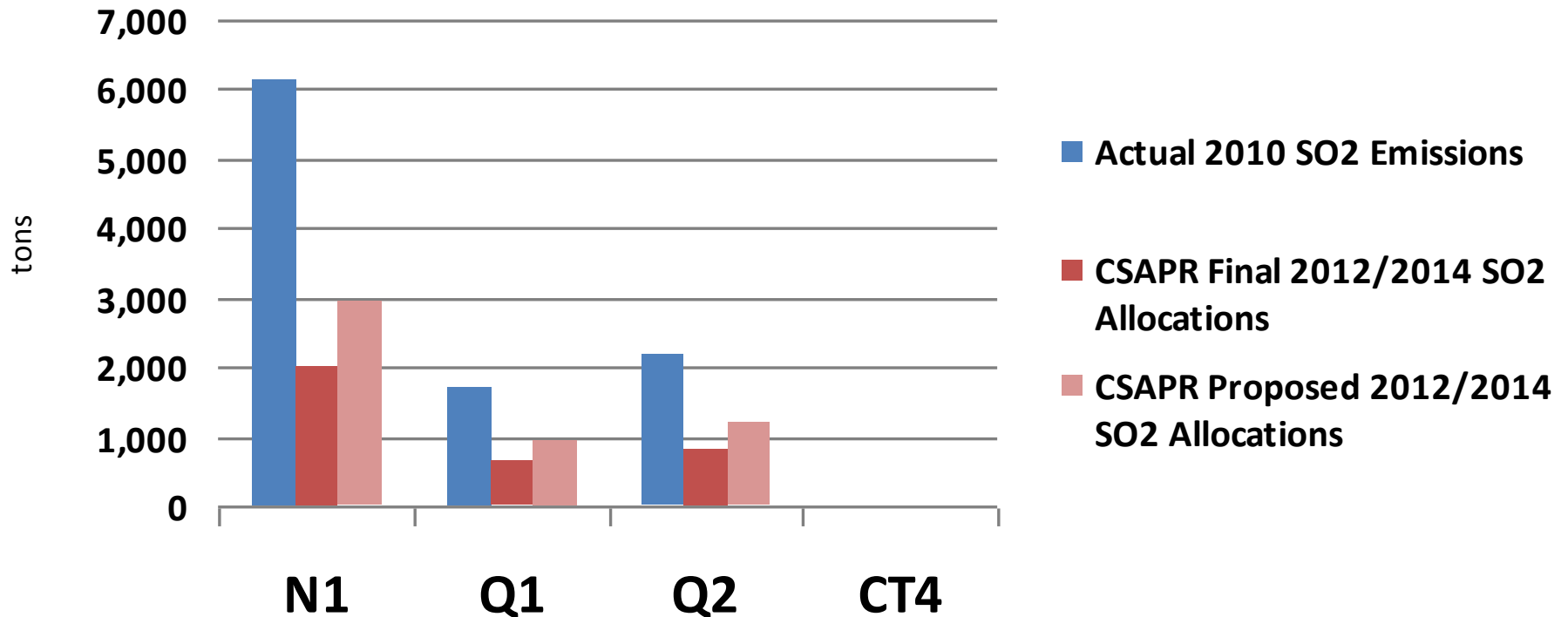
**Compliance “Begins” January 1, 2012**

Briefs due to DC District Court April 2012



# One Example of CSAPR Allowance Shortfalls...

BPU 2010 SO2 Emissions vs. CSAPR Allocations



# Potential NEAR TERM Compliance Solutions:

## AIR EMISSION CONTROL EQUIPMENT

SO<sub>2</sub> & NO<sub>x</sub> controls...

Capital: \$9,182,1000

O&M: \$13,960,000

## CONVERSION TO NATURAL GAS

Availability & capacity of gas pipelines

Price volatility

## PURCHASE POWER FROM THE GRID

Availability of external power

Transmission issues

## PURCHASE ALLOWANCES

Financial Constraints as a Public Utility



# Potential LONG TERM Compliance Solutions:

## FINAL AIR EMISSION CONTROL EQUIPMENT

Scrubbers

Coordination with other emission regulations

## OTHER ENVIRONMENTAL SOLUTIONS

Wastewater discharges

Ash handling and disposal

## UNIT CLOSURE (Q-1?)

Local grid constraints

## PERMITTING AND CONSTRUCTION

Meteorological tower!

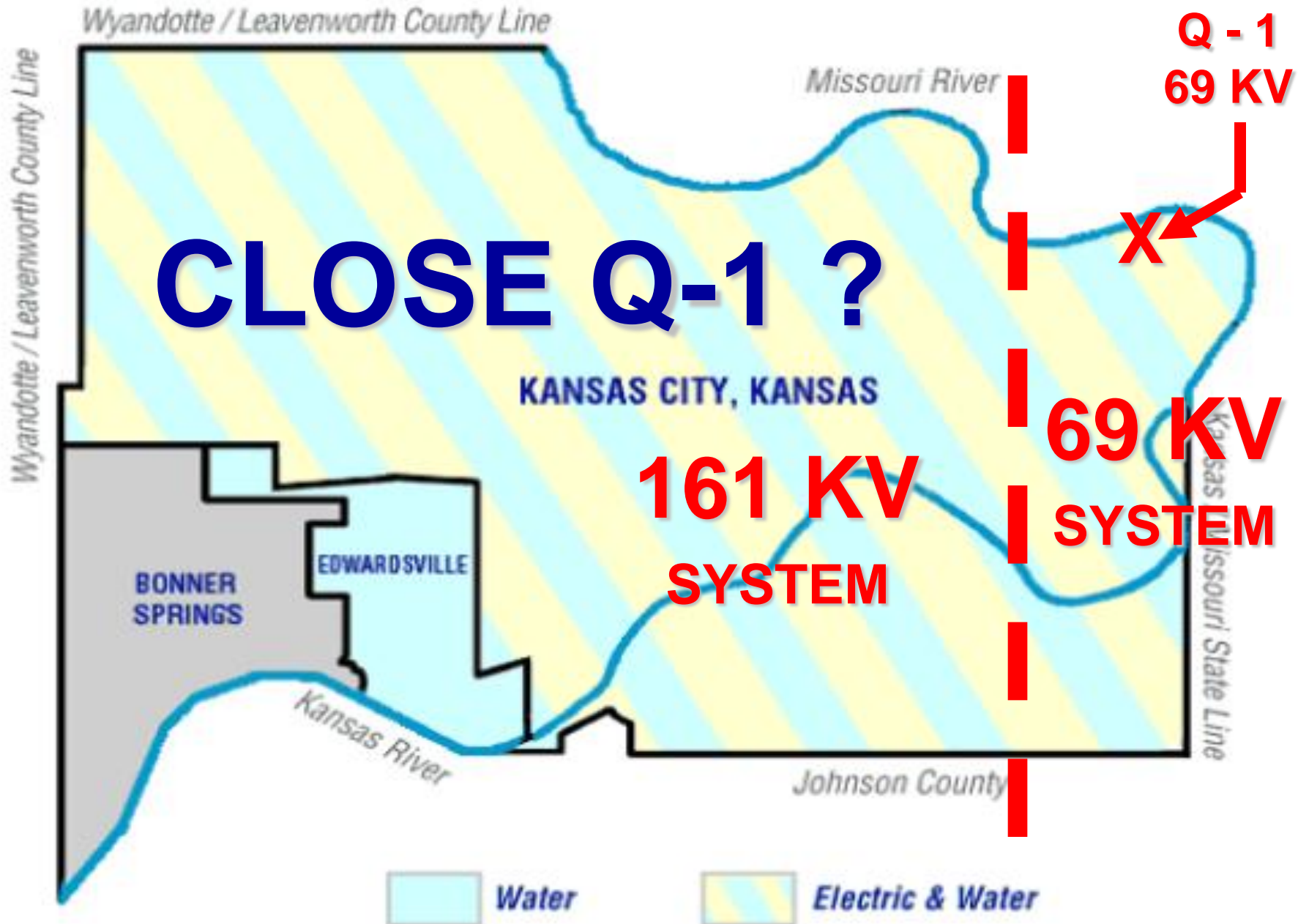
CT-5?

Combined Cycle?





# BPU Electric & Water Service Area Map



**CLOSE Q-1 ?**

**KANSAS CITY, KANSAS**

**161 KV  
SYSTEM**

**69 KV  
SYSTEM**

**Q - 1  
69 KV**

**X**

Wyandotte / Leavenworth County Line

Missouri River

Kansas / Missouri State Line

Johnson County

Wyandotte / Leavenworth County Line

**BONNER  
SPRINGS**

**EDWARDSVILLE**

Kansas River

# POWER PRODUCTION LOSS DUE TO EPA RULES:

Will Retire: 12,630 MW

At Risk: 11,358 MW

At Risk (Mo): 851 MW

At Risk (Ks): Unknown

*-- Source: Oil & Energy/MSNBC.Com, December 21, 2011*



# Estimated Compliance

Costs to BPU: \$480,000,000

Rate Increases to Come...

Residential Customers

Industrial Customers

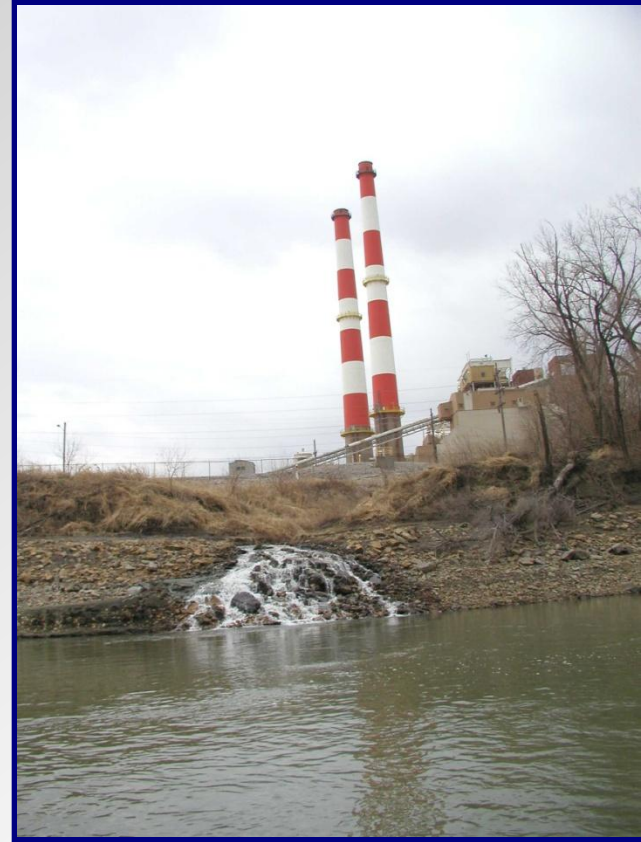


# ***THANKS!***

## ***Kansas City Board of Public Utilities***



**Nearman Creek Power Station**



**Quindaro Power Station**

