

# **Environmental compliance cost recovery by electric utilities in Kentucky: the environmental surcharge mechanism**

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**May 2016**

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**Kentucky Public Service Commission**

## Two applicable statutory mechanisms:

- Principal mechanism: Environmental surcharge  
KRS 278.183
- Also: certificate of public convenience and necessity (CPCN) KRS 278.020 (1)

Operation of both mechanisms is determined by statute, regulation and legal precedent

**Rate recovery of the cost of environmental controls for coal-fired power plants owned by electric utilities in Kentucky is governed by the Environmental Surcharge Mechanism (ESM)**

# The environmental surcharge:

- Adopted by Kentucky General Assembly in 1992 – effective January 1, 1993
- Principally a response to federal Clean Air Act Amendments of 1990, which set limits on sulfur dioxide and nitrogen oxide emissions from coal-fired power plants
- Process is similar to rate case – allows intervenors, discovery, hearings, etc.

# The environmental surcharge:

## Section 1

... a utility shall be entitled to the current recovery of its costs of complying with the Federal Clean Air Act as amended and those federal, state, or local environmental requirements which apply to coal combustion wastes and by-products from facilities utilized for production of energy from coal in accordance with the utility's compliance plan...

# The environmental surcharge:

## Section 1 (cont.)

... These costs shall include a reasonable return on construction and other capital expenditures and reasonable operating expenses for any plant, equipment, property, facility, or other action to be used to comply with applicable environmental requirements set forth in this section.

# The environmental surcharge:

## Section 1 (cont.)

Operating expenses include all costs of operating and maintaining environmental facilities, income taxes, property taxes, other applicable taxes, and depreciation expenses as these expenses relate to compliance with the environmental requirements set forth in this section.

# The environmental surcharge:

## Sections 2-5

- Set the process by which utilities apply for an environmental surcharge and the PSC's consideration thereof
- Process is similar to ratemaking in its consideration of reasonable costs and rates of return
- Surcharge appears as separate line item in the bill, either as an additional increment or as a credit
- At two-year intervals, PSC may, as appropriate, roll environmental surcharges into base rates

**Environmental surcharge cases may include an Environmental Compliance Plan (ECP) and one or more applications for permission to construct related facilities**

# The environmental surcharge:

## Key points:

- **Presumption of compliance with environmental mandates**
- **Presumption of recovery of costs of complying with environmental mandates**
- **Utility entitled to rate of return on environmental investments**
- **Reasonability standard applies to compliance plan and rate surcharge**
- **If compliance plan include construction of facilities, utilities may file for CPCN as part of compliance plan**

**Prior to construction of any major facility, including an electric generating facility, a utility must apply for a certificate of public convenience and necessity (CPCN)**

## The review process:

➤ Principal review process: Certificate of public convenience and necessity (CPCN)  
KRS 278.020 (1)

➤ Burden of proof lies with the applicant

Application of the CPCN process is determined by statute, regulation and legal precedent

# The CPCN process:

## Key points:

- Statute (KRS 278.020) is general – parameters of PSC decision have evolved over time through legal precedents
- Applicant must show a need for proposed facility – in ESM cases, this means showing the facility will result in compliance with environmental requirements
- Utility must show it has considered reasonable options, such as:
  - various types of new facilities
  - purchase of generating capacity or off-system power
  - demand-reduction measures

# The CPCN process:

## Key points:

- Wasteful duplication is not allowed – a utility may not overbuild or incur unnecessary costs
- “Least cost” principle flows from absence of wasteful duplication
  - Least cost not just construction or acquisition cost
  - Long-term costs also considered
  - PSC seeks least-cost reasonable option
- Grant of a CPCN leads to a presumption of future cost recovery

**Case 2016-00027**  
**LOUISVILLE GAS &**  
**ELECTRIC CO.**

# Case 2016-00027 – LG&E

- Total costs: \$316 million (\$309 million recovered through surcharge)
- Expenditures are at Mill Creek plant in southwest Jefferson County and Trimble County plant near Bedford
- \$311 million to comply with Coal Combustion Residuals (CCR) rule
- \$5 million to comply with Mercury & Air Toxics (MATS) rule

# Case 2016-00027 – LG&E

## CCR compliance

- Pond closures and new process water systems – Mill Creek - \$193.7 million
- Pond closures and new process water systems – Trimble - \$110.4 million (52% of total cost)

# Case 2016-00027 – LG&E

## MATS compliance

- Supplemental mercury controls – Mill Creek Units 1-4 - \$4.4 million
- Supplemental mercury controls – Trimble Unit 1 - \$600,000

# Case 2016-00027 – LG&E

## Rate impacts

(estimated by LG&E based on average LG&E residential customer using 976 kiloWatt-hours per month)

- 2016: 73 cents (0.8 %)/month
- 2020 (peak): \$2.26 (2.49%)/month
- 2024: \$1.90 (2.09%)/month

**Case 2016-00026**  
**KENTUCKY**  
**UTILITIES CO.**

# Case 2016-00026– KU

- Total costs: \$678million (\$640 million recovered through surcharge)
- Expenditures are at Brown plant in Mercer County, Ghent plant in Carroll County and Trimble County plant; also at retired Green River plant in Muhlenberg County, Pineville plant in Bell County and Tyrone plant in Woodford County

# Case 2016-00026– KU

- \$545.4 million to comply with Coal Combustion Residuals (CCR) rule
- \$77.5 million for ash/waste pond closures at retired plants
- \$10.1 million to comply with Mercury and Air Toxics (MATS) rule
- \$7 million for scrubber upgrades

# Case 2016-00026 – KU

## CCR compliance

- Landfill expansion - Brown - \$5.3 million
- Pond closures and new process water systems – Ghent - \$339.9 million
- Pond closures and new process water systems – Brown - \$98.3 million
- Pond closures and new process water systems – Trimble - \$101.9 million (48% share)

# Case 2016-00026 – KU

## Pond closures

- Green River - \$56.4 million
- Tyrone - \$13.1 million
- Pineville - \$8 million

## Scrubber upgrade

- Ghent Unit 2 - \$7 million

## MATS compliance

- Supplemental mercury controls – Ghent Units 1-4  
- \$10.1 million

# Case 2016-00026 – KU

## Rate impacts

(estimated by KU based on average KU residential customer using 1,146 kiloWatt-hours per month)

- 2016: \$2.16 (2.06%)/month
- 2019 (peak): \$3.54 (3.37%)/month
- 2024: \$2.67 (2.55%)/month

# What's next

- Formal evidentiary hearing/joint with KU case

June 14 – 9 am EDT

PSC offices – 211 Sower Blvd., Frankfort

- Open to public
- Streamed live at [psc.ky.gov](http://psc.ky.gov)
- PSC decision in early August

# For **MORE INFORMATION**

**Send questions to:**

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