

METHANE TO MARKETS WORKSHOP



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PUBLIC SERVICE COMMISSION (PSC)

KRS 278.010 Defines Utility and Utility Service

Electric

Natural Gas

Water

Sewer

Telecommunication

KRS 278.030

(1) Every utility may demand, collect and receive fair, just and reasonable rates for the services rendered

....

(2) Every utility shall furnish adequate, efficient and reasonable service and may establish reasonable rules governing the conduct of its business and the conditions underwhich it shall be required to render service.

PSC REGULATES

1500 electric, natural gas, water, sewer and telecom companies:

5 vertically integrated investor owned electric utilities

2 electric G&T cooperatives & 19 electric distribution cooperatives

5 large and 30 small natural gas local distribution companies

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PSC REGULATES, continued

30 natural gas Farm Tap

150 water companies, Districts and Associations

77 sewer companies

1182 telecommunications; 20 ILEC (wires), 200 CLEC, 50 cellular

KENTUCKY ELECTRIC GENERATION 2008

	<u>MWh</u>	<u>FUEL PERCENTAGE</u>
COAL	91,620,588	93.6
PETROLEUM	2,874,440	2.9
NATURAL GAS	978,692	1.0
OTHER GAS	3,835	*
HYDROELECTRIC	1,917,470	2.0
OTHER RENEWABLE	459,619	0.5
OTHER	8,697	*

PSC DOES NOT REGULATE

- (a) Interstate transactions
 - (1) Merchant electric generators
 - (2) Wholesale prices
 - (3) Natural gas commodity prices
- (b) TVA multi-state federally regulated electric G&T company
- (c) 3 electric distribution cooperatives served by TVA

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PSC DOES NOT REGULATE, continued

- (d) Municipally owned utilities (except intra-state wholesale water sales)
- (e) Oil and gas exploration & transmission (exception Farm Tap)
- (f) Transportation companies – railroad, trucking, taxi cabs

SITING AUTHORITY – PSC

KRS 278.020 Certificate of convenience and necessity required for construction provision of utility service or of utility

KRS 278.216 Site compatibility certificate – Site assessment report – commission action on application

- (1) No utility shall begin the construction of a facility for the generation of electricity capable of generating in aggregate more than ten megawatts (10 MW) without having first obtained a site compatibility certificate.

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SITING AUTHORITY – PSC

- (2) An application Shall include the submission of a site assessment report (SAR) as prescribed in KRS 278.708(3) and (4)...A utility may submit and the commission may accept documentation of compliance with the National Environmental Policy Act (NEPA) rather than a site assessment report.
- (3) The commission may deny the application. The commission may require reasonable mitigation of impacts disclosed in the SAR including planting trees, changing outside lighting, erecting noise barriers, and suppressing fugitive dust, but the commission shall in no event order relocation of the facility.

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SITING AUTHORITY – PSC

- (4) The commission may also grant a deviation from any applicable setback requirement...

KENTUCKY STATE BOARD ON ELECTRIC GENERATION AND TRANSMISSION SITING

KRS 278.700 (2) “Merchant electric generating facility” means, ...an electric generating plant, together with associated facilities, that:

- (a) is capable of operating at a capacity of ten megawatts (10MW) or more

- (b) electricity sold in wholesale market

Since 2002, 6 certificates issued, 1 application filed, 1 pending – None built

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OTHER REGULATORY BODIES

County Local Planning and Zoning Commissions (if exists)

- (a) Landfill siting
- (b) Utility generation siting

EPA

- (a) Air Quality
- (b) Water Quality

PSC and Siting Board do not stray outside statutory jurisdiction

No formal coordination

Approval conditioned on obtaining all required permits

INCENTIVES AND BARRIERS AND CHALLENGES

39 landfills with sufficient potential for electric generation

- (a) 7 active sites – 21.68 million tons in place
- (b) 18 candidate sites – 55.686 million tons in place
- (c) 14 potential sites – 19 million tons in place

Landfill operator responsible for well maintenance, gas collection and delivery

- (a) Gas volume
- (b) Gas quality BTU content

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INCENTIVES AND BARRIERS AND CHALLENGES, continued

Horizon LFG 5 mile 12" pipeline to GE Appliance Park using gas directly in its industrial process

East Kentucky Power Cooperative generates 17 MW of electricity directly from 6 separate sites

- (a) Engines generate 800 kW each
- (b) Sells electricity to distribution cooperatives – tariff rate
- (c) Sells electricity on open market – market rate

INCENTIVES

No state or local incentives in Kentucky

Landfill Operator – revenue stream from gas to offset expenses

Cooperatives - EKPC

- (a) Green Power Pricing program (end user markets)
- (b) DOE Renewable Energy Production Incentives (REPIs)
- (c) Owns and or sells Renewable Energy Credits

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INCENTIVES, continued

Private Companies (Investor Owned Utilities and Other)

- (a) Direct use of LFG – offsets purchases
- (b) Own electric generation and sells surplus – offsets purchases
- (c) Owns renewable energy credits
- (d) DOE Renewable Energy Tax Credits

BARRIERS

- (a) No Renewable Portfolio Standard (federal or state)
- (b) Politics of coal production and use
- (c) Relatively low price of electricity
- (d) Small project size / scale
- (e) Merchant generator and investor owned utility interconnection
- (f) Business model (Cooperative vs. IOU?)

CHALLENGES

Policy Maker

- (a) Committed Strategic Planning
- (b) Education
- (c) PSC legal requirements
 - (1) Least cost rate paradigm
 - (2) Net metering 30 kW limit (size and own territory?)

Landfill Operator

- (a) Maintaining LFG wells and gathering system
- (b) Water treatment / disposal

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CHALLENGES, continued

EKPC

- (a) 27 landfill operators and third parties
- (b) Price paid for gas
- (c) Maintaining flow and quality of gas
- (d) Noise of machinery
- (e) On site labor