UTILITY RATEMAKING: The Kentucky PSC Process

September 2016

Kentucky Public Service Commission



RATEMAKING IS A LEGAL PROCESS

- State statutes
- Regulations derived from those statutes
- Legal principles derived from the application of the statutes and regulations

The PSC ratemaking process Governed by statute – KRS 278 • Rates must be "fair, just and reasonable" Investors are entitled to an opportunity to earn a return on equity (equity is the net value of the shareholder investment) For non-profit utilities, rates are adequate to meet lender requirements and maintain financial stability **Two-part process** Revenue requirement Rate design

Timetable

- 30-day notice of intent required
- Public notice required
- Clock starts when application complete
- Rates can't take effect for 30 days
- PSC typically imposes suspension period
- Suspension may be for either five or six months, depending on type of rate case
- Case must be completed within 10 months
- Rehearing requests within 23 days of final order

Intervenors

Kentucky Attorney General - statutory representative of ratepayers in general
Full intervenors – must show they represent unique interests and will contribute evidence that otherwise might not be brought before the PSC – testimony, discovery, crossexamination

Process

Intervention – may come before filing of application

Discovery – one or more rounds of data requests

to/from parties; from PSC staff

- Public meetings at PSC discretion
- Public comment
- Evidentiary hearing not required
- Post-hearing filings
- Final order

Settlements

- Must be unanimous all full intervenors agree
- Partial settlements (stipulations) are allowed
- Settlements typically are "black boxes" do not specify details of trade-offs in areas such as expenses and rates of return
- However, resulting rates must still meet "fair, just and reasonable" test

What is NOT in base rates:

- Low-income assistance program fee
- Ancillary fees
- Franchise fees
- Local taxes
- Purchased water costs
- Fuel cost adjustment (above or below base fuel cost)
- Commodity cost of natural gas
- Environmental compliance cost for electric utilities separate by state law

Demand-side management surcharge (energy efficiency programs

– gas & electric) – separate by state law

Two-part process
Revenue requirement is determined first
Rate design

- **Revenue requirement base rates**
- Bottom-line number for total revenue
- Calculated over a "test year" 12-month period
- Historic test year previous 12-month period that ends within three months of filing date – actual numbers
- Forecasted test year 12 months beginning at the end of six-month suspension period
- Suspension period is five months for historic, six months for forecasted

Revenue requirement – base rates

- Allowable expenses
 - routine construction replacing poles, new lines
 - equipment purchases
 - operations: maintenance, billings, customer service, etc.
 - personnel costs: salaries & benefits

 major construction – some costs recoverable in progress, but most are not until project is in service

- depreciation
- borrowing costs

Revenue requirement – base rates

- Calculating return on equity
 - Capital structure debt & common equity
 - Cost of debt long-term & short-term
 - Examine risk factors
 - Compare to similar utilities
- Return on equity has to balance the ability to attract capital at reasonable rates against impact on ratepayers

- **Revenue requirement base rates**
- Expenses not allowed –

 promotional advertising (for example: customer information education/information expense is recoverable through rates, sports sponsorships are not recoverable)

- executive bonuses
- charitable donations
- club memberships
- any expense deemed unreasonable

Revenue requirement – base rates

• Unusual or one-time costs or revenue are excluded from test year and accounted for separately as regulatory assets or liabilities, for example:

- Storms costs
- Asset sales

• Final revenue requirement = allowable expenses and the additional revenue needed for an opportunity to earn a fair rate of return on equity or, for non-profit utilities, to meet lender requirements and maintain financial stability

The bottom line –

what is fair, just & reasonable?

• Balancing act

- Fair to investors
- Sufficient to support safe and reliable service
- Not unduly burdensome on ratepayers
- Rates cannot be confiscatory
- PSC has discretion, but only within the legal limits

Rate design

The purpose is to allocates costs and revenue proportionately over various rate classes

- Residential
- Commercial
- Large industrial
- Miscellaneous fire service, hydrants, etc.

Each large rate class may be divided into several categories of service

The PSC ratemaking process Rate design –cost of service studies

As part of a rate application, utilities must submit a "cost of service" study that determines how much it costs to serve each rate class and also may examine fixed versus variable costs

Rate design – customer classes

Basic premise – customers receiving same type of service should pay the same rate

In general, larger customers have lower cost of service, due to economies of scale – it costs less to serve a 1-megaWatt load than 1,000 1-kiloWatt loads

Among the major customer classes, cost of service is highest for residential class

Rate design – fixed vs. variable costs

Fixed costs – independent of consumption

- Basis for monthly service charge
- Monthly service charges historically have not fully recovered fixed costs
- Variable costs based on consumption
- Variable charge (per kWh, per gallon, etc)
- Variable charge generally recovers a portion of fixed costs

Rate design

PSC uses cost of service study as a guideline, but rates are not set to strictly reflect costs

 Industrial customers may pay higher rates than cost of service study would indicate

 Residential rates, while higher than industrial, may not fully cover cost of service

 Fixed and variable costs are not allocated on a strictly proportional basis to fixed and variable charges

Rate design

 Some rebalancing of costs and rates typically occurs in every rate case PSC has adopted gradual approach to attaining fully balanced rates This gradual approach applies both across rate classes and with respect to fixed vs. variable costs

Rate design - issues

 Cross-subsidization across rate classes – how much is fair or acceptable?

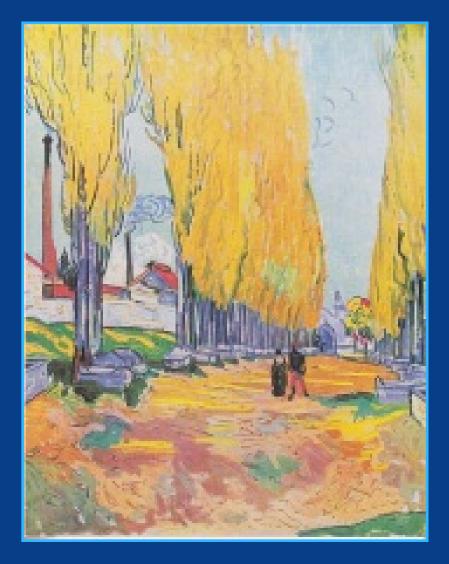
• Fixed vs. variable cost allocation

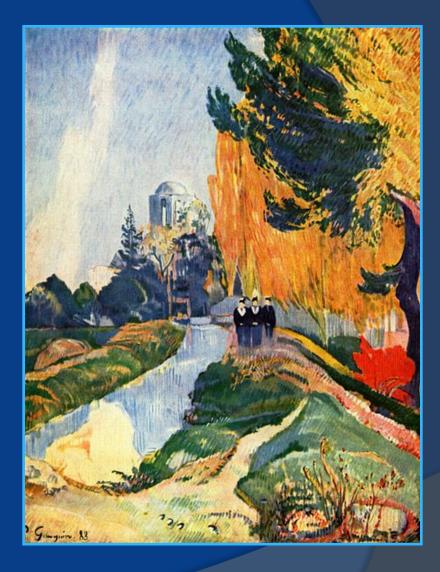
 Is a higher fixed rate component unduly burdensome on lower-income customers?

- Does a higher fixed rate component discourage efficient usage and is it unfair to customers who take steps to reduce consumption?

RATEMAKING IS ALSO AN ART A balancing act

- Low rates vs. adequate service
- Low rates vs. financial stability
- Low rates vs. shareholder return
 - Small vs. large customers





Van Gogh

Gauguin



Reality: les Alyscamps, Arles, France

Case 2016-00162 Columbia Gas of Kentucky

- Columbia Gas seeking to increase annual revenue by \$25.4 million (27.4%)
- Proposing to increase both customer and delivery charge
- Total revenue sought: \$118 million
- Most recent increase December 2013
 - Requested \$16.6 million annual increase
 - Settled for \$7.66 million annual increase (8%)
 - Average monthly residential bills increased about \$3.12
 - Fixed charge and delivery charge both increased

Reasons for requested increase

- Replacement of old and potentially unsafe gas mains
- Increased operating costs
- The proposed changes
- Monthly charge: \$17.25 (includes \$2.25 AMRP surcharge) increases to \$19.75 (AMRP reset to 0)
- Charge per 1,000 cubic feet: from \$2.3402 to \$3.9404 (includes two surcharges totaling \$0.0736 per mcf that remain unchanged)
- \$0.69/month demand-side management charge is unchanged

Rate impact – average use

- Columbia Gas estimate based on average monthly residential use of 5,500 cubic feet
- Monthly charge: \$17.25 (includes \$2.25 AMRP surcharge) > \$19.75 (AMRP reset to 0)
- Charge per 1,000 cubic feet: \$2.3402 ->>\$3.9404 \$12.87 ->>\$21.67
- Current gas cost : \$4.5034/mcf = \$24.77

Case 2016-00162 Rate impact – low use case Based on residential use of 1,000 cubic feet Monthly charge: \$17.25 (includes \$2.25 AMRP) surcharge) \longrightarrow \$19.75 (AMRP reset to 0) Charge per 1,000 cubic feet: \$2.3402 ->> \$3.9404 Total: \$19.59 -----> \$23.69 +\$4.10 (20.9%) Ourrent gas cost : \$4.5034/mcf = \$4.50 Total bill impact: \$24.78 -> \$28.88 +\$4.10 (16.1%)

Rate impact – high use case

Based on residential use of 10,000 cubic feet

- Charge per 1,000 cubic feet: \$2.3402 -> \$3.9404

\$23.40 ------ \$39.40

• Current gas cost : \$4.5034/mcf = \$45.03

Total bill impact: \$85.37 ->\$104.87 +\$18.50 (21.7%)

Rate impact – very high use case

Based on residential use of 20,000 cubic feet

- Charge per 1,000 cubic feet: \$2.3402 -> \$3.9404

\$46.80 ----- \$78.80

- Current gas cost : \$4.5034/mcf = \$90.07
- Total bill impact: \$154.81 ->> \$189.31 +\$34.50 (22.3%)

Case 2016-00162	Summary	npacts	
	Current	Proposed	Change
Low use			
Total without gas cost:	\$19.59	\$23.69	+\$4.10 (20.9%)
Total bill impact:	\$24.09	\$28.19	+\$4.10 (17%)
Average use			
Total without gas cost:	\$30.12	\$41.42	+\$11.30 (37.5%)
Total bill impact:	\$54.89	\$66.19	+\$11.30 (20.6% <mark>)</mark>
High use			
Total without gas cost:	\$40.65	\$59.15	+\$18.50 (45.5%)
Total bill impact:	\$85.68	\$104.18	+\$18.50 (21.6%)
Very high use			
Total without gas cost:	\$64.05	\$98.55	+\$34.50 (53.9%)
Total bill impact:	\$154.81	\$189.31	+34.50 (22.3%)

Intervenors:

- Kentucky Attorney General Office of Rate Intervention
- Lexington-Fayette Urban County Government
- Community Action Council for Lexington-Fayette, Bourbon, Harrison, and Nicholas Counties, Inc.
- Sentucky Industrial Utility Customers, Inc.

- What's next:
- Formal evidentiary hearing
 November 1 9 am EDT
 PSC offices 211 Sower Blvd., Frankfort
- Open to public
- Streamed live at psc.ky.gov
- Suspension period ends December 26
- SC must issue decision by March 27, 2017



Questions?

Contact information:

Andrew Melnykovych Communications Director Kentucky Public Service Commission 211 Sower Boulevard, Frankfort KY 40602 502-782-2564 Psc.info@ky.gov

Prior to construction or acquisition of any major facility, such as a power plant, a utility must apply for a certificate of public convenience and necessity (CPCN)

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 – this includes demand forecasts

Utility must show it has considered reasonable options, such as:

- construction of various types of new facilities
- long-term contracts to purchase water from a third party
- 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

The CPCN process:

Procedure:

- > No statutory time frame
- Intervention permitted
- Hearings/public comment meetings
 - Hearing webcasts at psc.ky.gov
- Public comments