

# Price Regulation and Ratemaking: Perspectives from Colorado

**Ron Davis**  
**Principal Economist**  
**Colorado Department of**  
**Regulatory Agencies**  
Public Utilities Commission  
1560 Broadway, Suite 250  
Denver, CO 80202  
P 303.894.2883 | F 303.869.0333  
Email: [ronald.davis@dora.state.co.us](mailto:ronald.davis@dora.state.co.us)



# Overview

---

- Electric Utility Rate Regulation in Colorado
- Ratemaking Principles
- The Rate Case



# Rate Regulation in Colorado

---

# Colorado Utility Regulation

---

- Administrative regulation of prices, entry, and other aspects of utility behavior used to deal with real or imagined problems of a monopoly utility
- Rate regulation
  - Balance between efficient pricing ( $P = MC$ ) and electric utility's viability (revenues  $<$  total cost)
  - “Break even prices” established by regulator in absence of government subsidies
- Entry regulation
  - Exclusive rights to serve (franchise)



# Rate Regulated Electric Utilities

---



## Public Service Company of Colorado

- 1.2 million customers
- Denver Metro Area including Boulder, Grand Junction, certain mountain areas
- 6,650 MW Peak
- 34,200 GWh Annual Sales
- Provides natural gas service



## Black Hills/Colorado Electric Utility Company

- 90,000 customers
- Pueblo, Canon City, Rocky Ford
- 380 MW Peak
- 2,000 GWh Annual Sales
- Provides natural gas service



# Authority and Obligation

---

- Authority from Article XXV of the Colorado Constitution and Title 40 of Colorado Revised Statutes
- Paramount consideration to the **public interest**, balancing:
  - Needs of customers for safe and reliable utility services at reasonable rates
  - Needs of utilities to earn a reasonable profit and to sustain reliable infrastructure
- Rate cases are **quasi-judicial**: litigated proceedings under formal administrative law process; conducted "on the record" where representation by an attorney is often necessary



# Public Interest Ratemaking

---

- The public interest considers the “just and reasonableness” of the rates
- The Commission takes into account:
  - Affordability of service
  - Access to service (rural areas)
  - Public finance needs through rate revenues
  - Price discrimination where one group of customers subsidizes another group



# Ratemaking Principles

---



# Colorado Rate Mechanisms

---

- **Base rates** recover:
  - Expenses such as operations, maintenance, administrative, general expenses, taxes, and depreciation
  - Returns on rate base (RoR)
  - Not fuel expenses and not purchased energy expenses
- **Adjustment clauses** recover:
  - Fuel (coal and natural gas)
  - Purchased energy (from IPPs through long-term Purchased Power Agreements or PPAs) and from others through short-term market purchases
  - Purchased capacity (from IPPs through long-term PPAs)
  - Energy efficiency
  - Renewables (incremental costs only)



# Rates Set Forth in Tariffs

- A tariff is the contract between the utility and the consumer
- Establishes prices
  - Charges are fixed and nonnegotiable until next rate case
  - Customers must be served at these prices
- Sets forth terms and conditions for service
  - Defines obligations on both sides of the meter
- Changes require regulatory approval

PUBLIC SERVICE COMPANY OF COLORADO		COLO. PUC No. 7 Electric	
P.O. Box 640 Denver, CO 80201-0640		Sixth Revised	Sheet No. 30
		Sub. Fifth Revised	Cancel Sheet No. 30
ELECTRIC RATES		RATE	
RESIDENTIAL GENERAL SERVICE			
SCHEDULE R			
<u>APPLICABILITY</u> Applicable to Residential service. Not applicable to standby or resale service.			
<u>MONTHLY RATE</u> Service and Facility Charge:.....		\$	6.25
Energy Charge: All kilowatt hours used, per kWh			
Summer Season .....		0.03467	R
Winter Season .....		0.03153	R
The summer season shall be the period June 1 through September 30 of each year and the winter season shall be the period October 1 through May 31.			
<u>MONTHLY MINIMUM</u> .....		\$	6.25
<u>ADJUSTMENTS</u> This rate schedule is subject to all applicable Electric Rate Adjustments as on file and in effect in this tariff.			
<u>PAYMENT AND LATE PAYMENT CHARGE</u> Bills for electric service are due and payable within fifteen (15) days from date of bill. Residential customers have the option of selecting a modified due date ("Custom Due Date") for paying their bill. The due date can be extended up to a maximum of fourteen (14) business days from the scheduled due date. Customers selecting a Custom Due Date will remain on the selected due date for a period not less than twelve (12) consecutive months. A maximum late payment charge of 1.0% per month shall be applied to all billed balances for Commission jurisdictional charges that are not paid by the billing date shown on the next bill unless the balance is \$50 or less. The Company will remove the assessment of a late payment charge for one billing period, but not more frequently than once in any twelve-month period, at customer's request. The late payment charge will not apply to a billed security deposit, or in instances where a Company billing error is involved, or where complications arise with financial institutions in processing payments that are no fault of the customer, or where a customer is current on an active payment arrangement.			
(Continued on Sheet No. 30A)			
ADVICE LETTER NUMBER	1476	ISSUE DATE	December 8, 2006
DECISION NUMBER	CD-6-1379	VICE PRESIDENT Policy Development	EFFECTIVE DATE January 1, 2007



# Bonbright Principles

---

- Rates should be:
  - Simple, understandable, and acceptable
  - Uncontroversial as to interpretation
  - Likely to yield the revenue requirement
  - Revenue stability for utility
  - Rate stability for customers
  - Fair across customer classes
  - Not unduly discriminatory
  - Economically efficient
- Difficult to optimize—mutually exclusive objectives
- The regulator balances the objectives



# Hope and Bluefield

---

- **Hope Decision:** Regulated prices must be set at levels that give the regulated utility a reasonable opportunity to recover the costs of investments
  - Returns on equity should be commensurate with the returns on investments for other firms with similar risks
  - Returns on investment should assure the financial integrity of the utility to maintain credit and to attract capital

(Federal Power Commission v. Hope Natural Gas Co., 320 US 591, 602(1944))

- **Bluefield Decision:** Rates that are too low are unjust, unreasonable and confiscatory, and their enforcement deprives a utility of Constitutional property rights

(Bluefield Water Works v. Public Service Commission, 262 U.S. 679, 690 (1923))



# Decision-Making Dynamics

---

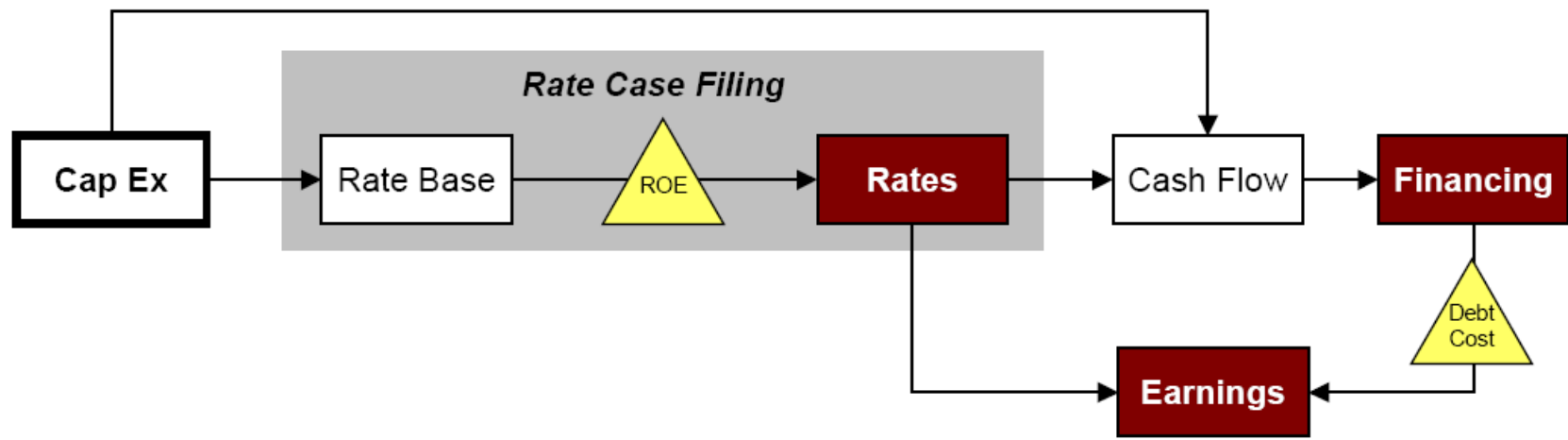
- No regulatory agency completely independent of political influences
- Public interest regulation conveys costs and benefits on groups as compared to alternatives
- Regulatory results often a function of:
  - Sophistication of utility's regulatory strategy
  - Stakeholder groups' ability to organize
  - Available resources to participate effectively in:
    - Governmental institutions' decision making (legislative, executive, judicial)
    - Regulatory proceedings
    - Settlement negotiations



# The Rate Case

---

# The General Rate Case



Source: CRA International



# Rate Cases in Two Phases

---

- A **Phase I** rate case is where a utility requests permission from the CPUC to increase rates to meet an overall earnings short fall
  - A “revenue requirements” proceeding
- Once an earnings short fall is identified, the determination of which customers will have their rates raised to cover the earnings short fall is the subject of **Phase II**
  - The “spread of the rates”
  - Rate design





# Rate Case Filing Process

- Utility files an "Advice Letter"
  - Letter includes copies of tariffs with new rates
  - Commission rules require form and context
  - Generally filed more than 30 days in advance of the date when the new rates go into effect
  - Written testimony often accompanies the advice letter (Direct Testimony)



P.O. Box 640  
Denver, Colorado 80201-0940

May 1, 2009

Advice No. 1335 - Electric

Public Utilities Commission  
of the State of Colorado  
1560 Broadway, Suite 250  
Denver, Colorado 80202

The accompanying tariff sheets issued by Public Service Company of Colorado are sent to you for filing in accordance with the requirements of the Public Utilities Law:

COLORADO P.U.C. NO. 7 - ELECTRIC

and the following sheets are attached:

Colorado P.U.C. Sheet No.	Title of Sheet	Colorado P.U.C. Sheet No.
Twelfth Revised	Table of Contents	Fifteenth Revised
Twelfth Revised	Table of Contents	3rd Sub. Eleventh Rev
Eighteenth Revised	Table of Contents	Seventeenth Revised
Ninth Revised	Reserved for Future Filing Index	Eighth Revised
Second Revised	Reserved for Future Filing Index	First Revised
Eleventh Revised	Reserved for Future Filing Index	Tenth Revised
Fourth Revised	Schedule of Charges for Sub. Third Revised	25
Second Revised	Schedule of Charges for Sub. First Revised	25A
Second Revised	Maintenance Charges for Sub. First Revised	26
Second Revised	Street Lighting Service	26A
Second Revised	Maintenance Charges for Sub. First Revised	26B
Second Revised	Street Lighting Service	26C
Second Revised	Maintenance Charges for Sub. First Revised	26D
Seventh Revised	Street Lighting Service	Sixth Revised
	Residential General Service	20



# Commission Options

---

- Approve the rates
- Allow the rates to take effect without explicit approval (*i.e.*, rates go into effect by operation of law)
- Suspend the rates (*i.e.*, not allow them to go into effect for several months) and set the matter for hearing
  - Initiates a rate proceeding
  - Often the response to a protest from someone opposed to the rate increase



# Rate Proceedings

---

- Interested parties respond to the Advice Letter and Direct Testimony (Answer Testimony)
- The utility responds to the Answer Testimony with written Rebuttal Testimony
- At a hearing, the written testimony is submitted into the official record
- Attorneys present witnesses and offer them for cross-examination
- Commissioners and their advisors ask the witnesses questions at the hearing
- Commission makes decision based upon record



# Example Procedural Schedule

## Docket No. AL09-299E

### Phase I

Advice Letter Filed	May 1, 2009
Direct Testimony	May 1, 2009
Answer Testimony	September 4, 2009
Cross Answer / Rebuttal	October 13, 2009

Hearings	October 26 -
(Revenue Requirements)	November 3, 2009
Hearings	November 12-
(Fuel Clause)	November 13, 2009

Commission Decision	On or Before
	December 24, 2009

New Rates Go Into Effect January 1, 2010

### Phase II

Advice Letter Filed	May 1, 2009
Direct Testimony	May 1, 2009
Answer Testimony	October 2, 2009
Cross Answer / Rebuttal	November 25, 2009

Surrebuttal Testimony	December 18, 2009
-----------------------	-------------------

Hearings	January 11 -
	January 21, 2009

Commission Decision	ASAP
---------------------	------

New Rates Go Into Effect	Spring 2010
--------------------------	-------------



# Information Gathering Powers

---

- Reporting requirements
  - Annual financial reports (SEC 10-Ks, FERC Form 1s)
  - Production reports (system supply)
  - Service quality reports (outages, complaints, metering)
  - Miscellaneous reports (RESA budget, street lighting)
- Audit and inspection
  - Books, records, assets
  - Verification and litigation
- Subpoenas
  - Enforceable by courts
- Voluntary
  - Just ask!



# Rate Proceeding Discovery

---

- Parties pose questions and request data from the utility through their attorneys
  - Information needed to respond to the utility's requested change in rates through Answer Testimony
- Utility obligated to respond to questions and data requests within a specified amount of time as long as the requests are relevant and reasonable
- Utility may object to requests
- Disputes concerning discovery settled by the Commissioners or by an Administrative Law Judge

