North Carolina Utilities Commission
Public Staff

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What Is The Public Staff?

- Established in 1977 by N.C. Gen. Stat. § 62-15
- Represents the using and consuming public in North Carolina Utilities Commission proceedings
  - Not the public at-large
  - Economic regulator and advocate
- Eighty-one staff members organized into nine divisions

Accounting	Consumer Services	Economic Research
Energy	Executive	IT
Legal	Transportation	Water/Sewer/ Telephone

Key Functions of Public Staff

- Audit regulated utilities in Commission investigations and proceedings and present testimony of findings and recommendations
- Investigate customer complaints
- Assist legislative staff, legislators and Governor’s office regarding proposed legislation and constituent services
- Work with other State agencies, counties, and municipalities on regulated utility matters
- Undertake studies, investigations, and stakeholder and working groups as requested by the Commission

Differences Between NCUC and Public Staff

- Independent agencies
  - Separate staffs, leadership and budgets
- NCUC does not direct or oversee the Public Staff's operations
- Public Staff appears as a party before the NCUC
  - Public Staff subject to ex parte rules and cannot independently communicate with NCUC on pending matters
  - Public Staff does not participate in NCUC decision-making
- Staff roles
  - NCUC staff is an advisory staff
  - Public Staff is an audit/advocacy staff

TRADITIONAL RATEMAKING

Rate Case Process – 270 Days

1) Utility files rate case application, exhibits, testimony and proposed rates
2) NCUC suspends rates and schedules customer and evidentiary hearings
3) Public Staff engages in discovery, audits/investigates, files testimony
4) Intervenors engage in discovery and file testimony
5) Settlement discussions may occur between parties
6) Customer and evidentiary hearings
7) Parties file proposed orders
8) NCUC reviews all evidence and issues order
9) Utility puts new rates into effect

Ratemaking Overview

- Based on the cost of service in the test period
    - Test year – Financial data from a historical 12-month period
        - Serves as a proxy for the anticipated level of costs for the period of time the rates will be in effect
- Rates are prospective, but are established based on what the utility has already spent
    - Utilities typically do not recover expenses and capital costs in advance
- N.C. Gen. Stat. § 62-2(3a) requires "…energy planning and fixing of rates in a manner to result in the least cost mix of generation and demand side reduction measures which is achievable…"
- Rates must be just and reasonable

General Ratemaking Formula

- **Revenue Requirement** = (**Rate Base** x **Rate of Return**) + **Expenses**
- **Rate Base** – value of the property (net of depreciation) on which a utility may earn a rate of return.
    - Must be "**used and useful**" - Power plants, transmission and distribution lines, etc. actually used in providing service to customers
- **Rate of Return** – % return that utility may earn on invested capital, including debt and equity investments.
- **Expenses** – can recover reasonable and prudent expenses based on an historical test year.

Rate Base

- **Revenue Requirement** = (**Rate Base** x **Rate of Return**) + **Expenses**

- Rate base is the reasonable and prudent cost of property on which a public utility is authorized to earn its rate of return

- Rate base calculation:

  Original cost of the utility assets (prudent capital investment that is used and useful – includes capital additions since original construction, e.g. emissions controls)

  (minus)

  Accumulated depreciation expense

Typical Utility Assets in Rate Base

- Generation facilities
- Transmission lines
- Distribution lines
- Transformers and substations
- Meters
- Computer and software systems
- Vehicles
- Equipment
- Buildings
- Pipelines

Rate of Return

- **Revenue Requirement** = (**Rate Base** x **Rate of Return**) + **Expenses**

- Percentage return that the utility is allowed to earn on its invested capital
- Designed to compensate investors for the use of their capital and associated risk
- Rate of return composed of three components:
  - Cost of debt
  - Cost of equity, i.e. ROE
  - Capital structure (debt and equity ratios)
- Rate of return is not a guaranteed return → it is the return the utility is authorized to earn

Expenses

- **Revenue Requirement** = (**Rate Base** x **Rate of Return**) + **Expenses**

- Utilities are authorized to recover reasonable and prudent expenses
  - Maintenance expense
  - Operating expense
    - Depreciation
    - Salaries
    - Transportation
    - Customer service
    - General taxes
    - Administrative
    - Uncollectibles
    - Testing
    - Legal
    - Rate case expenses

Cost Allocation

- Attribute (allocate) costs to different customer classes based on the cost incurred to serve those classes
  - Residential, commercial and industrial classes
    - Capital requirements vary by customer class
      - Residential customers require significant distribution facilities
  - Economies of scale
    - Municipalities and industrial customers are cheaper to serve on a per kWh basis
  - Time differentiation
    - Contribution to peak vs. non-peak demand
  - Retail vs. wholesale
    - Municipalities and electric cooperatives
  - System costs across multiple state jurisdictions
    - North Carolina/South Carolina allocate costs approximately 65:35

Cost Allocation Methodologies

- Summer coincident peak
  - Customer’s share of the system load at the system’s summer peak
- Winter/summer coincident peak and average demand
- Non-coincident peak and average demand
- Twelve months peak average
  - One peak each month, or
  - Average of twelve highest peaks during year

- DEC and DEP allocates based on load demand at <u>summer coincident peak</u>

- Choice of methodology is somewhat subjective

RIDERS

"Riders" may be used to set rates outside of rate cases

- **Increasing use of riders =**
  - Less regulatory lag and investor risk for utilities
  - More work for regulatory staff
  - Evolution away from traditional ratemaking approach
  - "Single issue ratemaking"
  - Some riders reflect technology and policy change (DSM/EE and REPS)
  - Fuel, CPRE, JAAR

PERFORMANCE BASED RATEMAKING (PBR) IN H951

What is PBR?

"Performance-based regulation" is defined in H951 as "an **alternative rate-making approach** that includes decoupling, one or more performance incentive mechanisms, and a multiyear rate plan, including an earnings sharing mechanism, or such other alternative regulatory mechanisms as may be proposed by an electric public utility."

Decoupling

Decoupling = "a rate-making mechanism intended to break the link between an electric public utility's revenue and the level of consumption of electricity on a per customer basis by its residential customers."

- In a rate case, assumptions are established regarding numbers of customers ("billing determinants") and sales needed to meet the revenue requirement
- If a utility sells more electricity than assumed, it makes more $ (all else being equal)
- Purpose of decoupling is to make the utility indifferent to whether sales are higher or lower than what was assumed in the last rate case

Performance Incentive Mechanism (PIM)

- PIM = “a rate-making mechanism that links electric public utility revenue or earnings to [utility] performance in targeted areas consistent with policy goals…and includes specific performance metrics and targets against which electric public utility performance is measured.”
  - In a general rate case, service quality is examined to determine whether it is “adequate”
  - A potential PIM would establish a targeted measure of service quality and rewards/penalties for meeting/not meeting the target

Multiyear Rate Plan (MYRP)

- MYRP = "a rate-making mechanism under which the Commission sets base rates for a multiyear period that includes authorized periodic changes in base rates without the need for the [utility] to file a [rate case]."
  - In a general rate case, rates are set to meet a revenue requirement, all based on a historical test year; utility manages its capital expenditures and expenses between rate cases
  - In a MYRP, a utility provides both historical cost information and cost projections for multiple years, and a Commission approves (e.g. annual) adjustments
  - In H951, MYRP limited to 36 months

Earnings Sharing Mechanism

- Earnings Sharing Mechanism = "an annual rate-making mechanism that shares surplus earnings between the [utility] and customers over a period of time covered by a MYRP."
  - In a general rate case, the Commission sets an ROE
  - Utility has the opportunity to earn the ROE – may earn above or below
  - Underearning drives rate case filings
  - In a MYRP with a earnings sharing mechanism, the utility's earnings are examined each rate year of the MYRP; if the utility earns above a certain level over the approved ROE, earnings are shared with customers; if the utility earns below a certain level, the utility can file a rate case (or, in some states, rates are adjusted to help compensate the utility for the loss)

How will the rate case process change?

1) Utility files a PBR application with a general rate case application, with exhibits, testimony, and proposed rates
2) PBR application must include a decoupling mechanism, one or more PIMS, and a MYRP, including an earnings sharing mechanism, and proposed revenue requirements and base rates for each of years the MYRP is in effect
3) Case will run on a “dual” track, i.e. Public Staff (and intervenors) will engage in discovery on both the rate case and the PBR application and file testimony and exhibits on both; utility files rebuttal; evidentiary hearing; parties file proposed orders and briefs
4) Commission will enter an order on both the PBR application and the general rate case
5) If Commission rejects the PBR application, utility will have the opportunity to refile – base rates in effect in the meantime
6) If PBR application approved, MYRP goes into effect with annual reviews

THANK YOU