



# THE UNBUNDLING OF DISTRIBUTION RATES

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#### **BACKGROUND**

For approximately its first 100 years of existence the Maine PUC regulated vertically integrated electric utilities who billed their customers for one bundled product.

Revenue requirements, rates, billing were all based on the assumption that electricity was a natural monopoly and was one product.





# The Beginnings Of Unbundling In The U.S.

- The Public Utilities Regulatory Policy Act (PURPA)-Required utilities to buy output from Qualifying Facilities(QFs)
- FERC Order 888- Required utilities to provide open access to their transmission system to other entities
- Declining costs of new generation





#### **Unbundling In Maine**

- In 1997 the Maine Legislature Passed the Electric Industry Restructuring Act
- As a result, effective 3/1/2000 retail generation service deregulated
- Maine PUC initiated revenue requirement/rate/rate design cases for each of the three investor owned utilities in 1997 (the Mega Cases)





#### The Mega Cases

- Initiated in Fall of 1997
- Major Components of the Mega Cases were:
  - Setting a T&D Revenue Requirement
  - Setting a Stranded Cost Revenue Requirement
  - Deciding how rates for each of these components should be set to recover the revenue requirement (Rate Design)
- Cases were done in several phases and were completed shortly before the start of Restructuring (3/1/2000)





#### Divestiture of Generation As Part Of Restructuring

- Maine utilities were generally required to divest their generation assets as part of restructuring
- Exceptions were:
  - Qualifying Facilities (QF) Contracts
  - Nuclear Assets
  - Generation required as part of utility's T&D function





#### **Benefits of Divestiture**

- Removed opportunities for self-dealing and favoritism
- Provided the Commission with an objective valuation for assets
- Assets (especially hydro) provided much more than estimated
- Amounts from sale above book value (Available Value) used to reduce stranded costs





#### **Issues From The Divestiture**

- Allocation Of Gain From Sale of Affiliate's Property Sold As Part of the Divestiture
- What carrying costs should be applied to the Available Value before rates were reset
- How should Available Value be allocated between customers





#### **Creation of Stranded Cost Rates**

- As a result of Unbundling new rate component was created – Stranded Costs
- Stranded Costs are the sum of :
  - Difference between sale price and book value of divested assets
  - Difference between value of sale of QF contract entitlements and contract price
  - Nuclear obligations
  - Regulatory Assets related to generation assets





#### **Stranded Cost Issues Going Forward**

- As process has gone forward stranded costs have become fully reconciled
- Reasons for full reconciliation:
  - > Historic
  - Generally not subject to management control
  - Not sensitive to changes in volume





# **Stranded Cost Issues Going Forward**

- Since stranded costs were fully reconciled and since stranded cost assets would expire during over a reasonably short period of time the Commission has set a separate ROE for Stranded Cost Rate Base
- The Commission has determined that the stranded cost ROE should be based on medium-term U.S treasury notes and a risk premium
- In Emera Maine's recent stranded cost rate proceeding the settled ROE was 5.9%.





# **Unbundling of O&M Costs**

- Test year costs were first assigned based on direct assignment basis
- The direct assignment process was not controversial
- The big issue in this area was how Administrative and General (A&G) costs should be handled
- The Company identified a few items that would be eliminated as result of restructuring and then allocated the remaining expenses between T&D and its new Retail CEP based on a Global Allocator





# **Unbundling O&M (cont'd)**

- Staff recommended allocating the test year A&G to the business units (including Generation) based on each unit's share of Direct O&M
- Commission recognized that economies of scope would be lost initially and thus declined to accept Staff Approach in full but found that Company underestimated reductions
- Commission essentially did an estimated reduction and recognized that it would be in a better position after the Company had operated as a T&D





# Setting the Cost of Capital for the New T&D Utility

- Another difficult issue in the Mega Cases was setting the Return on Equity (ROE) for the new T&D Utilities since T&D utilities were essentially non-existent
- Issue was complicated by the fact that CMP and other utilities were going to a holding company structure
- Commission used three different peer groups to set the ROE: vertically integrated electric utilities, gas distribution companies and water utilities





#### **Cost of Capital (cont'd)**

In its CMP Mega Case decision, the Commission noted:

"Our analysis of the cost of capital, especially with respect to the cost of common equity, sometimes implies a precision that is not really present. Nevertheless, we must set an exact cost rate for each of the components and for the overall cost of capital to the utility."





#### **ROE** Issues

- Finding a comparable proxy group for T&D only utilities has continued to be a challenge since much of the U.S. has not restructured and also industry trend toward holding company structure
- In recent distribution rate cases Staff used a proxy group which screened out holding companies with earnings from regulated entities of less than 90% including revenue from Gas Local Distribution Companies





# **ROE Issues (Continued)**

- The major ROE issue that has emerged since unbundling is the disparity in ROEs allowed by FERC and state commissions including the Maine PUC
- In recent distribution rate cases Commission as part of settlements approved ROEs on average of 9.5%
- FERC allowed ROE is 10.56% plus adder for RTO participation and
- The disparity in ROEs has resulted in a tremendous increase in investments in transmission





# **Unbundling Transmission from Distribution**

- Shortly before the onset of Restructuring the Commission recognized that FERC had asserted jurisdiction over retail transmission service when a state had unbundled generation
- Applying the FERC 7-Factor Test the Commission and the utilities engaged in a collaborative process to work out the split between transmission and generation





#### The FERC 7 Factor Test

- 1. Distribution normally close to retail customers
- 2. Distribution facilities normally radial in character
- 3. Power flows into distribution; rarely out
- 4. Power entering distribution is not transported to another market
- 5. Power in distribution system consumed in restricted geographical area
- 6. Meters located at the trans/dist interface
- 7. Distribution at lower voltage levels





#### **Applying the Test In Maine**

- Commission and parties agreed that the demarcation point between transmission and distribution in Maine should at the 34.5 kV level.
- Facilities at or above 34.5 kV transmission and below 34.5kV distribution





# **Going Forward Transmission/Distribution Plant**

- Transmission and Distribution Plant identified in separate FERC Accounts
- Transmission –FERC Accounts 350-359
- Distribution-FERC Accounts 360-374
- Those costs directly assigned in revenue requirements proceeding
- Major issue in Transmission Plant is the split between Pool Transmission Facility (PTF)/Local





#### The PTF/Local Transmission Split

- Pool Transmission Facility (PTF) costs are split among all the New England States based on load share
- Maine's load share is 8%
- PTF = lines operated at 69kV except for lines that:
  - Only serve local load
  - Generator leads
  - Lines which usually operate as open





#### **PTF/Local Split Issues**

- The disparity in cost treatment can result in higher cost PTF plant being cheaper to states than lower cost Local facilities
- Disparity provides incentive to utility and regulator to choose facilities that are higher cost to society as a whole
- Non-transmission Alternatives (NTAs) such as demand response and distributed generation do not receive socialized treatment and thus are disadvantaged when compared to PTF investments





# **Splitting Common Costs Between T and D**

- Expenses which can be identified as either
  Transmission or Distribution are directly assigned
- Those expenses as well as General Investments are allocated between Transmission and Distribution using one of three allocators:
  - Wage Allocator
  - Customer Allocator
  - Plant Allocator





#### **Allocators**

- Wage allocator based on proportion of directly assigned wages to total wages. Used to allocate:
  - Administrative and General (A&G) expenses such as salaries, office expenses
  - Investments such as corporate offices and intangible plant such as computer software.
- Although investments in transmission and cost of transmission service have grown significantly over recent years transmission wage expense has remained relatively flat





#### **Allocators Continued**

- Customer allocator is based on the proportion of transmission revenues to total revenues and is used to allocate:
  - Collections Expenses
  - Uncollectible Accounts Expense
  - Meter Reading
  - Customer Information Expense
- This allocator has changed greatly over recent years since transmission rates and revenues have being growing at a much faster pace than distribution rates and revenues





#### **Allocators Continued**

- Plant Allocator is based on proportion of gross plant in service to total plant in service (including A&G and intangible plant allocated using the Wage Allocator)
- Allocator primarily used to allocate general insurance expense and property tax expense.





	WAGE		PLANT		CUSTOMER	
	Т	D	Т	D	Т	D
2008	18.8%	81.2%	29.0%	71.0%	25.0%	75.0%
2009	22.2%	77.8%	32.0%	68.0%	32.8%	68.2%
2010	20.2%	79.8%	31.9%	68.1%	34.7%	65.3%
2011	19.1%	80.4%	34.0%	66.0%	34.6%	65.4%
2012	20.0%	80.0%	44.0%	56.0%	36.0%	64.0%
2013	21.1%	78.9%	49.2%	50.8%	38.0%	62.0%





#### **Emerging Issues In Allocation Factors**

- Maine Utilities planning major investments in Customer Billing Systems
- These investments are currently considered intangible plant rather than customer costs and thus allocated based on the wage allocator
- Should these costs be reclassified as customer costs and subject to the customer cost allocator
- Continue monitoring allocators to ensure that costs are not double recovered





#### **Allocator Factors Continued**

- CMP's parent allocates its support costs form the parent and service company to it operating companies based on a global allocator (revenue, wages and plant)
- At the CMP level these costs were being allocated between T&D based on the wage allocator
- Given the growth in the plant and wage allocators, costs were being disproportionately being assigned to distribution





#### **Allocator Factors Continued**

 CMP agreed to set up a separate Transmission business unit so cost from parent could be allocated directly to Transmission based on the global allocator and thus avoid such costs being "trapped" at the transmission level





# **Unbundling of Actual Rates/Rate Design**

- Commission did not attempt to redesign rates based on new T&D cost structure
- Commission utilized a top down methodology to unbundle the generation component
- The guiding principle of the Restructuring Rate Design was the "no losers" principle
- Under the "no losers" principle no ratepayer would be worse off as a result of restructuring





# **Unbundling of Actual Rates Continued**

- Under the Top Down Methodology revenues from bundled service were compared to the Commission's determined T&D revenue requirement
- The difference between these two amounts was allocated to the utilities' customer classes based on their share of generation costs based on standard offer prices
- In the case of CMP, the Asset Sale Gain Account was used to help achieve the "no losers" principle





# **Emerging Issues in Distribution Rate Design**

- Commission recently revisited the question of rate design for distribution delivery service in CMP's recent rate case
- Big questions in the case involved how much of distribution costs were fixed and should be recovered through fixed charges; how much were demand related; how are distribution costs impacted by season and by time of day.
- Most controversial issue in case was CMP's proposal for a standby rate (see Net Metering Discussion)





#### **Emerging Issues In Distribution Rate Design**

Commission reiterated that rate design requires Commission to balance the following often competing factors:

- Economic Efficiency
- Customer Understanding
- Fairness
- Customer Acceptance
- Rate Stability





#### **Emerging Issues In Rate Design Continued**

#### Commission approved a Stipulation which called for:

- a moderate increase in the customer charge for residential and small commercial customers
- CMP's withdrawal of standby rate proposal
- Increase in demand charges for months of July and August
- Commission Ordered optional demand charges for residential and small customers
- Further rate design changes to be explored based on CMP's new billing system which will allow more targeted demand rate structure

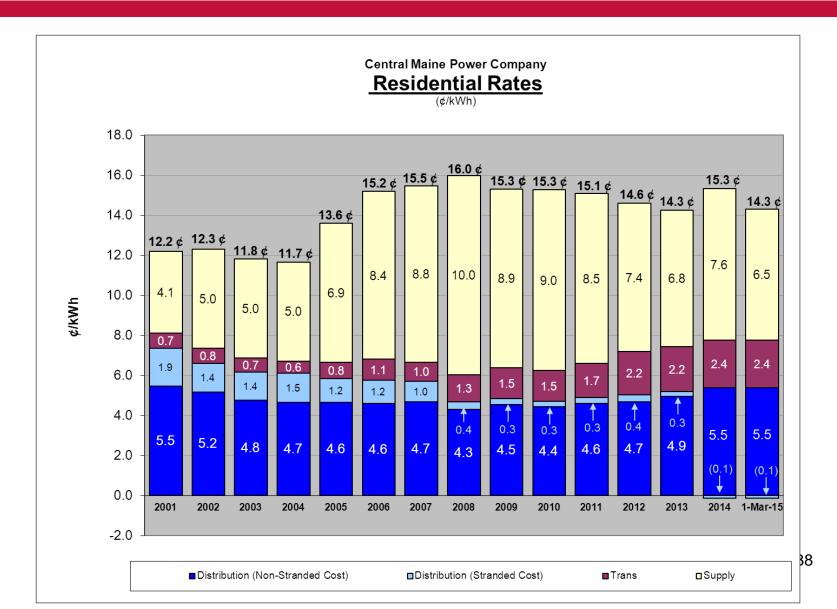




# WHAT HAS HAPPENED TO RATES IN THE UNBUNDLED WORLD?

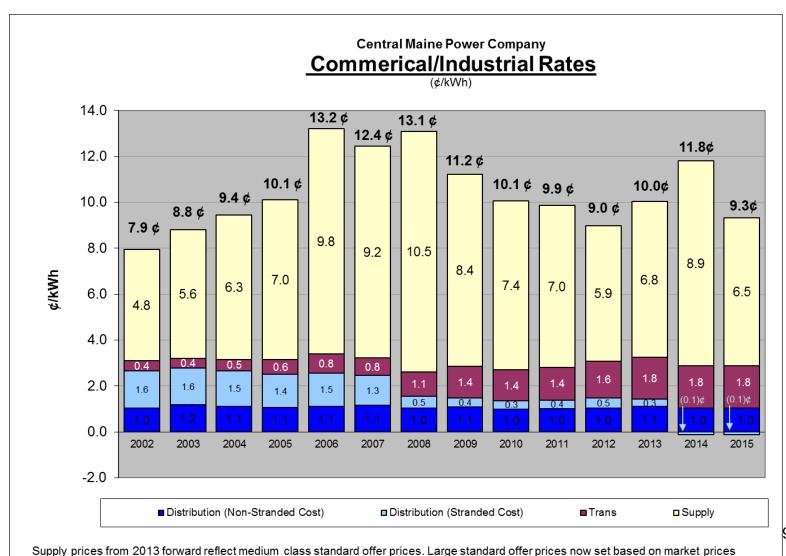






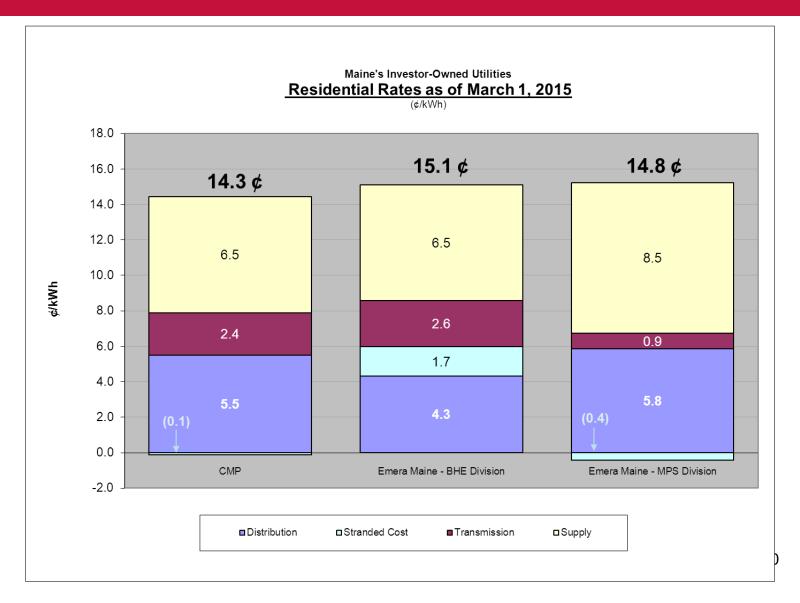
















Thank you. We would be happy to answer any additional questions you may have.

**Questions?**