



Non-Traditional Cost Recovery for New Generation

ERRA Pricing/Tariff Committee Meeting

June 11, 2013

Budapest, Hungary

Review of Investment Incentives

- Tax Credits
- Accelerated Depreciation
- Renewable Energy Mandates
- Expedited Regulatory and Siting Processes
- Early Prudency and Pre-Approval Determinations
- Grants and Loans
- Rebates
- Feed-in Tariffs
- **Incentive Rate Treatments**
 - Extra Profit on Investments
 - Earlier Recovery of Prudently Incurred Costs
 - **Special Rate Adjustments**
 - Recovery of Capital Investments during Construction Period
 - **Recovery of Financing (Carrying Charges) during Construction Period**

Special Rate Adjustments

- DTE Electric Company (Michigan)
 - Public Act 295 of 2008
 - Providers had to file a proposed renewable energy plan
 - Incremental cost of compliance with the renewable energy standards for a 20-year period (10% Target)
 - » 300 MW by end of 2013; 600 MW by end of 2015
 - Non-volumetric mechanism for recovery of the incremental costs of compliance
 - » Itemized on the bill
 - » Rate Impact not to exceed:
 - \$3.00 / month per residential meter
 - \$16.58 per month for commercial secondary meter
 - \$187.50 / month per commercial primary or industrial meter



Special Rate Adjustments

- Allowed **Incremental** Costs of Compliance over 20 Years (above what would have been spent from traditional energy sources)
 - Rate of return on equity (ROE and debt /equity ratio remain fixed)
 - Capital, operating, and maintenance costs
 - Financing costs
 - Transmission interconnection and substation costs
 - Ancillary service costs
 - Reductions for
 - Tax Credits
 - Revenue for Renewable Energy Credits
 - Revenue from Wholesale Sales
 - Revenue from the Special Rate Rider

Special Rate Adjustments

- DTE Electric Company

Initially Provided 20 Year Plan

- 1,295 MW of renewable energy
 - \$2 billion in new investment through 2029
 - 565 MW of wind capacity
 - 15 MW of solar capacity
 - 29 MW of capacity from retrofitting boilers at existing power plants
 - \$3.5 billion through 2029 to buy renewable energy
 - Purchase power from others (primarily wind energy)

Special Rate Adjustments

- DTE Electric Company
 - Renewable Energy Plan Surcharge

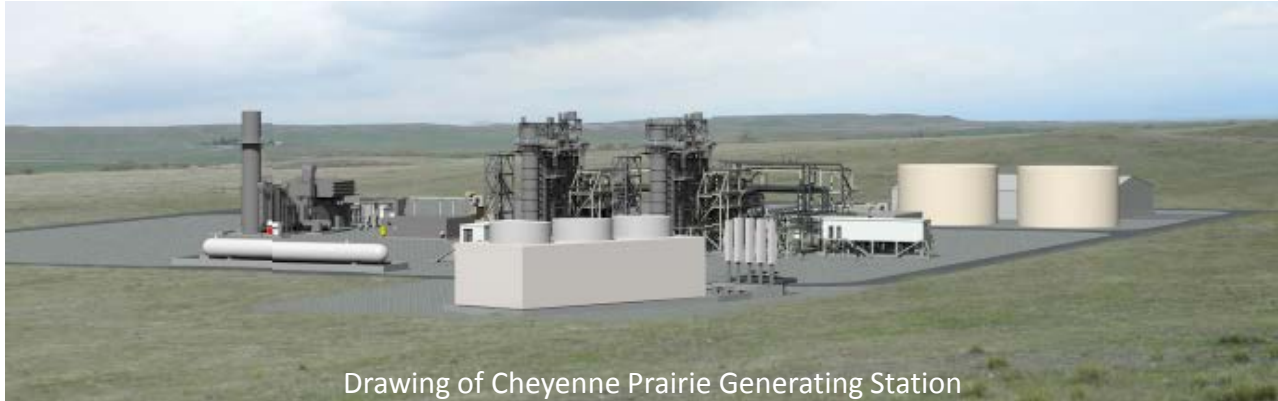
	Monthly Charge
Residential	\$3.00 per meter
Commercial Secondary and Government Rate Schedules	
0 - 400 kWh per month	\$4.00 per meter
401 – 850 kWh per month	\$8.00 per meter
851 – 1,650 kWh per month	\$12.00 per meter
Above 1,650 kWh per month	\$16.58 per meter
Primary and Industrial Rate Schedules	
0 – 11,500 kWh per month	\$16.58 per meter
11,501 – 41,500 kWh per month	\$140.00 per meter
Above 41,500 kWh per month	\$187.50 per meter

Special Rate Adjustments

- DTE Electric Company (Michigan)
 - Recent Estimates
 - Surcharge Revenue 2009 through 2029
 - \$2,012.5 million
 - Incremental Cost of Compliance 2009 through 2029
 - \$1,847.2 million
 - The surcharge can be extended, if necessary, to pay for incremental costs that exceed the surcharge recovery over the initial 20 year period

Recovery of Costs During Construction

- Cheyenne Light, Fuel & Power Company (Wyoming)



- Building a 132 MW natural gas-fired power plant with its affiliate Black Hills Power Company
 - 95 MW combined cycle combustion turbine
 - 37 MW simple cycle combustion turbine
 - Agreement to cap construction costs at \$222 million – if allowed to collect financing during construction
 - Construction began late 2012, expect in-service late 2014

Recovery of Costs During Construction

- Construction Financing Rate Rider
 - *Cheyenne Prairie Generating Station* Rate Rider Tariff
 - Allowed financing costs during construction
 - Reduce construction costs
 - Estimated \$12 million over the life of the plant
 - Estimated \$2.2 million on a net present value basis
 - Finance costs collected during construction period will not be capitalized, reducing the regulatory asset base upon which investors earn
 - Begin to phase-in rate increase in smaller steps

Recovery of Costs During Construction

- Benefit possible due to current spread of short-term and long-term interest rates
 - Special Rate Rider Return (Debt from Revolving Line of Credit)

	% of Total Capital	Cost Rate	Weighted Average
Debt	46%	2.00%	0.92%
Equity	54%	9.60%	5.18%
Total			6.10%

- Return with Long Term Debt

	% of Total Capital	Cost Rate	Weighted Average
Debt	46%	6.47%	2.98%
Equity	54%	9.60%	5.18%
Total			8.16%

Recovery of Costs During Construction

- Rate Rider Calculation Steps
 - Step 1: Determine Quarterly Revenue Requirement
 - Special Rate Rider Return (Short Term Debt & Equity) on the Cumulative Construction Costs to Date
 - Debt Rate is Updated Quarterly
 - Debt Rate = Forecasted LIBOR rate + 150 basis points
 - Income Tax Costs Associated with the Equity Portion of the Return
 - Franchise Fees Associated with Additional Revenues due to Rate Rider
 - 1% tax on revenues is collected to be paid to the City

Recovery of Costs During Construction

- Rate Rider Calculation Steps
 - Step 2: Assign Revenue Requirement to Customer Classes -- Based on Same Demand Allocator Used in the Prior Rate Case

Customer Class	Total Quarterly Financing Costs	Demand Allocator	Quarterly Revenue Requirement
Residential	\$372,444	27.67%	\$103,055
Commercial	\$372,444	5.88%	\$21,900
Secondary General	\$372,444	35.23%	\$131,212
Primary General	\$372,444	11.06%	\$41,192
Industrial	\$372,444	19.56%	\$72,850
Lighting	\$372,444	0.60%	\$2,235

Recovery of Costs During Construction

- Rate Rider Calculation Steps
 - Step 3: Determine the Rider Rate on a kWh Basis
 - Sum Quarterly Revenue Requirement plus over/under-recovery from prior period then Divide sum by the Forecasted kWh Billing for each Customer Class

Customer Class	Quarterly Revenue Requirement	Forecast kWh Billing	1 st Quarterly Rider Rate per kWh
Residential	\$103,055	35,620,903	\$0.00157
Commercial	\$21,900	11,931,970	\$0.00184
Secondary General	\$131,212	91,689,429	\$0.00143
Primary General	\$41,192	31,506,025	\$0.00131
Industrial	\$72,850	69,747,766	\$0.00104
Lighting	\$2,235	1,478,022	\$0.00151

Recovery of Costs During Construction

- Average Rate Impacts (Cumulative Impact)

	1st Quarter	2 nd Quarter	3 rd Quarter
<u>Residential</u> 624 kWh/Month	\$0.98 /month 1.3%	\$1.87 /month 2.4%	\$3.82 /month 4.6%
Rate Rider per kWh	\$0.00157	\$0.003	\$0.00615
<u>Commercial</u> 1,066 kWh/Month	\$1.96 / month 1.4%	\$3.74 / month 2.7%	\$ 5.99/ month 4.4%
Rate Rider per kWh	\$0.00184	\$0.00351	\$0.00615



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