

MINUTES

Electric Cost of Service and Rate Design Study

November 13, 2012 – 5:00pm

Municipal Center
400 South Eagle Street
Naperville, IL 60540

Roll Call of Department Staff

Mark Curran	Present
Olga Geynisman	Present
Bernie Saban	Present

Background:

- Current Electric Rates Implemented in 2007
- Power Supply contract with Goldman Sachs Expired
- New Power Supply contract with IMEA in 2011
- Major Capital Investment Projects
- Non-power supply operating expenses stable
- Customer load growth relatively flat
- Naperville Smart Grid Initiative

Need for the Study:

- Existing rates reflect old power supply structure (energy charge only)
- New rates reflect new IMEA power supply structure (energy + demand charge)
- New rate classes required to provide options for customers

Financial Forecast:

- Review and Summarize Historical Information
- Revenue Forecast
 - Customers
 - Sales
 - Revenues from Sales and Other Sources
- Expenditure Forecast
 - O&M Expense Including Purchased Power
 - Capital Requirements
 - Debt Service
- Develop Net Income and Cash Flow Analysis
- Reviewed Net Income & Cash Flow Analysis Results
 - Developed Financial Plan
 - Reviewed Financial Plan with City Staff
 - Determined Level of Revenue Adjustments Needed through forecast

Cost of Service Analysis:

- Purchased Power Costs
 - 2007 – 2011: All Energy Costs (kWh)
 - 2012 – 2016: Both Energy (kWh) and Demand (kW) Costs
- Transmission & Distribution Costs
 - No major changes
- Customer Cost
 - No major changes
- No revenue increases required for FY12 & FY13
- No significant cost reallocation between classes
- Power supply cost structure changes drive customer retail rate design changes for :
 - General Service
 - Primary
 - Transmission

Standard Electric Rates & Typical Bills:

- Customer charges all stay the same
- No change to standard Residential Service
- No change to standard General Service
- General Service Split into two classes
 - General Service (GS); less than 50 kW
 - General Service Demand (GSD); greater than 50 kW
- Larger customers will see lower energy charges and higher demand charges
- Demand – Highest hour of energy usage

Time of Use Electric Rates & Typical Bills:

- Considered Naperville system daily load shape
- Considered IMEA power supply cost structure
- Considered new metering capabilities
- For a typical customer, TOU Bill = Standard Bill
- Designate 9:00pm - 11:00pm as off-peak rather than on-peak hours for the Residential TOU rate class
- Increase critical peak and on-peak energy rates from \$.1615/kWh to \$.1775/kWh based on cost of service analysis
- Require customers to remain on TOU rates for a minimum of 12 months after switching from standard rates
- Allow customers a one-time option to switch back to standard rates at any time

Demand Response Initiative:

City Controlled Energy Reduction

- Residential customer chooses to sign-up and participate in program
- Customer notified 24 hours in advance of planned event by e-mail, text or through ePortal.
- City sends signal to adjust thermostat setting by 3-5 °F for
 - Up to 5 events per month
 - Up to 3 hours per event or a maximum of 15 hours per month
 - Reduces system peak demand and reduces Naperville power supply costs
- Savings passed along to customers in form of a bill credit each month
- Residential Customer Class Credit :
 - \$2.08/month fixed bill credit or \$24.96 per year
 - \$0.62/kWh variable credit (estimated \$11.62 per month with five events)
- Customers can receive additional variable credit if other power usage is reduced during event

Customer Controlled Energy Reduction

- Customer chooses to sign up and participate in program
- Customer notified 24 hours in advance of planned event by e-mail, text or through ePortal.
- Customer adjusts thermostat or reduces power usage in another manner at their discretion.
- Up to 5 events per month
- Up to 3 hours per events or a maximum of 15 hours per month
- Reduces system peak demand and reduces Naperville power supply costs
- Savings passed along to customers in form of a bill credit each month:
- Residential Customer Class Credit:
 - \$0.62/kWh variable credit
- Other Customer Class Credit:
 - \$0.89/kWh variable credit

Council Consensus

- Endorse proposed rate structure
- Prepare ordinance for proposed rate structure
 - Implement standard rates beginning January 1, 2013 (implementation date now proposed March 1, 2013)
 - Implement TOU rates and demand response programs beginning May 1, 2013
 - Implement 2% rate increases on May 1, 2013; May 1,2014; and May 1, 2015