LOVELAND UTILITIES COMMISSION

2019 Power Cost-of-Service Rate Study Direction

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Presentation Overview

- Background
- Monthly Base Charge
  - Should we recover all fixed costs in the Base Charge or stay with the existing methodology?
  - Pros and Cons of two methodologies
- Residential Self-Generating (Solar) Rate Design
  - Present 3 Scenarios (including current rate design)
  - Pros and Cons of 3 Scenarios

Background

- Feedback from City Council at July 24, 2018 Study Session
  - Presentation by Joe Bernosky on the Residential Solar rate structure
  - Questions from Councilors on why we don't recover all fixed costs in our Monthly Base Charge
  - Why do the Residential Solar customers pay a higher Monthly Base Charge than a regular Residential customer?
  - Why do we pay Residential Solar customers full retail rate (8.0 – 9.6 cents per kWh in 2018) for their excess generation when we can buy energy from PRPA for about 6 cents per kWh?
- Feedback from Residential Solar Customers
  - Criticism of the additional charge per kW of capacity of customer's solar unit
  - Staff committed to evaluating the rate structure again as part of this year's study
- Direction from Today Will Be Presented to City Council on May 14, 2019
  - Study Session featuring Mark Beauchamp, President of Utility Financial Solutions

Monthly Base Charge

- Current Methodology For Calculating Base Charge Called Minimum System Requirement
  - Fixed Costs associated with theoretical system that delivers 1 kW of capacity to each customer is what is included in the Base Charge
  - Based on smallest transformer size, conductor size, pole length
  - Yields a current Base Charge of $15.54/mo.
- Could Include All Fixed Costs In Monthly Base Charge
  - Would yield a current Base Charge of about $26/mo.

Pros and Cons Of Recovering All Fixed Costs in the Base Charge

- Pro
  - Greater revenue stability
- Cons
  - Adverse impact on customers with low usage
  - Could undermine efforts to conserve energy
  - Base Charge would be well above State average of $19

Pros and Cons Of Minimum System Requirement Methodology

- Pros
  - A better outcome for low usage customers
  - Does a better job of promoting conservation
  - An industry-standard methodology
- Cons
  - Less revenue stability
- Staff recommends staying with MSR methodology

Residential Solar Rate Design

- 2018 Residential Solar Rate
  - Monthly Base Charge: $14.80
  - Additional Monthly Charge for Capacity of Customer's Solar Unit: $2.47/kW
  - Rate for Energy Consumed: $0.07955 - $0.09624/kWh
  - Buyback Rate for Excess Energy Generated: $0.07955 - $0.09624/kWh
- 124 Residential Solar Customers At 2018 YE
- Rate at cost of service in 2018 and generated $57K net revenue

Two Alternative Rate Designs

- Option 2
  - Must generate $57K of net revenue
  - Eliminates additional monthly charge per kW of capacity of customer's solar unit
  - Buyback Rate for Excess Energy Generated: $0.0475/kWh on avg.
- Option 3
  - Must generate $57K of net revenue
  - Sets Buyback Rate at $0.062/kWh on avg. (same as rate buying from PRPA)
  - Additional monthly charge per kW capacity of solar unit: $0.96/kW

Comparison of Options - Based on 2018 Rates

	Option 1 (current)	Option 2	Option 3
Monthly Base Charge	$14.80	$14.80	$14.80
Additional Charge Per kW Capacity of Solar Unit	$2.47	N/A	$0.96
Rate Per kWh For Energy Consumed	$0.07955 - $0.09624	$0.07955 - $0.09624	$0.07955 – 0.09624
Rate Per kWh For Excess Energy Generated	$0.07955 - $0.09624	$0.0475 (avg.)	$0.062 (avg.)

Pros and Cons Of Option 1 (Current Rate Design)

- Pros
  - Greatest revenue stability of the three Options
  - Rewards high excess generators
- Cons
  - Highest Monthly Base Charge of the three Options
  - Buyback rate exceeds cost of purchasing power from PRPA

Pros and Cons Of Option 2 (No Solar Unit Capacity Charge)

- Pros
  - Lowest Monthly Base Charge of the three Options
  - Rewards high net usage customers

- Cons
  - Adverse impact on high excess generators
  - Least amount of revenue stability of the three Options

Pros and Cons Of Option 3 (Buyback Rate = PRPA Purchased Power Rate)

- Pros
  - Buyback rate aligned with PRPA rate
  - The middle ground of the three Options
- Cons
  - Less revenue certainty compared to Option 1
  - Residential Solar customers would still have a higher base charge than regular residential customers
- Staff recommends Option 3

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QUESTIONS?