The essentials:
- UNS Electric, Inc., is a small utility serving approximately 93,000 ratepayers in Santa Cruz and Mohave Counties in Arizona. The utility faces challenges in paying for fixed assets with a declining demand and a business model built on increasing energy consumption.
- As a remedy, UNS is applying for a rate change focused on increasing the cost of electricity for small volume electricity users, especially those that may benefit from net-metering policies for distributed (primarily solar) generation.
- Although the utility is small, the rate case is being closely watched, as it may be precedent setting for other utilities.

Policy
UNS Electric Inc., a utility company serving around 93,000 customers throughout the Santa Cruz and Mohave Counties, is seeking approval from the Arizona Corporation Commission (ACC) to change their rate design. If approved, UNS Electric’s rate design may be precedent setting, with mandatory demand charges for all distributed energy resource (DER) customers. The stated purpose of the charge is to require DER customers to pay more for using the grid by increasing their monthly bill.

Several events have occurred that prompted the utility to request this change. First, they recently invested in a $55M, 137MW natural gas combined cycle (NGCC) unit in Gila River. Second, they have experienced the shutdown or curtailment of operations by large customers (e.g., their largest customer “Mercantor Minerals” went bankrupt in 2014). Finally, they have experienced declining load growth in the residential and commercial sectors. Although there appear to be several stressors that have caused the utility to worry about their cash flow, the resultant rate change request focuses primarily on DER. It is therefore interesting to note that DER represents only 1 percent of their generation portfolio; an order of magnitude less than the levels of adoption seen by many other utilities around the nation. Their customer base is 88 percent residential, 11 percent commercial and 1 percent industrial/mining.

Like other investor owned utilities, UNS Electric has cost recovery strategies based on a volumetric rate design, meaning that their revenue increases with the total amount of kWh that their customers use. Although UNS’s proposed rate change has evolved significantly since its initial proposal, there are four primary changes being proposed: 1) an increase to the basic service fee, 2) the elimination of the 3rd tier volumetric pricing for large volume consumers, 3) a new three part rate design for DER customers (including demand charges and time of
use pricing), and 4) a change in the rate at which excess electricity from DER is compensated.

**Basic Service Fee:** UNS is proposing to increase the basic service fee from $10.00 to $15.00.

**Elimination of 3rd Tier Volumetric Pricing:** Historically, customers have paid more for using more electricity. Several rate case participants cite paying a higher rate for using more electricity as a driver of adoption of energy efficient practices. To combat decreasing demand, UNS is proposing removing the higher price rate for customers in the largest volume category, meaning that higher volume users would pay the same rate as existing middle volume consumers.

**Three-part rate design for DER users:** UNS proposes a 3-part rate design that includes a demand charge for DER customers in addition to the fixed charge and volumetric pricing. The demand charge would be based on the highest demand required by the customer. Additionally, new DER customers would be mandated to use time of use (TOU) pricing. With TOU pricing the cost of a kWh depends on the total usage in the service area. When demand is high the kWh costs more than when demand is low. Many comments have been entered into the rate case proceedings, which are concerned with whether customers have sufficient experience and expertise to manage TOU and demand charge pricing and dispute the equity of this increase relative to UNS’s suggested burden on the system.

**Compensation for excess generation:** This request would alter the way in which excess generation from DER is paid for. Under the current net-metering laws excess generation is banked against future months, thereby assuring the avoided retail rate. UNS proposes to pay for excess generation at a new rate, called the Renewable Credit Rate (RCR). Which, updated annually, would reflect the rate the utility is paying for other renewable energy power purchases. This rate would be substantially less than the avoided consumer cost, likely by more than a half.

The stated rationale behind these increases is the need to pay for the non-fuel related expenditures that have increased dramatically, especially after the partial acquisition of the new NGCC generator, while their revenue stream, (dependent upon volumetric electricity usage) has decreased. The investment in the Gila River generation facility was a strategic move aimed at reducing the utility’s susceptibility to market volatility.

UNS describes several categories of objectives in support of the proposed rate design:
1) Align rate structures with decreasing energy consumption based on consumption patterns and other demand decreases;
2) Reduce the levels of cross-subsidies between customers;
3) Give the company appropriate opportunity to recover its fixed costs.

Additionally, UNS proposed that DER creates several grid integration challenges that can have a negative impact on the grid: 1) intermittent generation; 2) inability to monitor; 3) excess generation. However, these claims are not supported with hard evidence in the filing and other rate case participants have presented evidence to the contrary, especially at the low penetration rates, which UNS currently sees.

**Potential impacts**

The UNS Electric Rate case (docket number E-04204A-15-0142) has been generating controversy and attracting the attention of many customers of large utility companies serving other parts of Arizona like Arizona Public Service (APS) and Tucson Electric Power (TEP), both of which have rate cases later this year. Users are concerned that, if approved for UNS Electric, the other utility companies will follow.

The most prominent potential impact is the impact on the payback period for distributed solar. If the currently proposed fees are imposed this will greatly increase the payback period for solar, and therefore slow if not halt altogether these investments. Rate case participants have submitted evidence that when the Salt River Project (an Arizona utility that is not regulated by the ACC) added fees to increase the cost of having grid tied solar that new applications for projects decreased by 95 percent.

Other impacts include a decreased ability to incentivize efficiency due to the proposed removal of the highest volumetric rate category, increased utility bills that will be harder for customers to pay, and an improved credit rating for the utility, which may help with other necessary future investments.

**Learn more**

1. “UNS Electric, Inc. E-Docket”

   Publisher
   Arizona Corporation Commission

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In the matter of the application of UNS Electric, Inc. for the establishment of just and reasonable rates and charges designed to realize a reasonable rate of return on the fair value of the properties of UNS Electric, Inc. devoted to its operations through the state of Arizona, and for related approvals.

2. “Arizona Study Claims Solar Leasing Companies Can Afford to Make Net Metering Changes”
   Author
   Julia Pyper
   Publisher
   Greentech Media
   URL

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