Meeting Date: January 8, 2018

Report No. SUA-18-03
Agenda Item No. 5a

Status: General Orders

Purpose: Distributed Generation Rate Design

Background Summary: On June 5, 2017, the Trustees approved the updated Net Metering Interconnection Agreement. The agreement is for customers who intend to install, own and operate an inverter-based electric generating facility using fuels derived from biomass, waste or a renewable energy source such as wind, solar or water to produce electricity having a maximum rated electrical output of 100 kW or less.

Although net metering is a simple approach to dealing with customer owned generation (also known as Distributed Generation (DG) or Distributed Energy Resources (DER)), it is not the most equitable approach. To date, there are so few customers who own generation, net metering has not adversely impacted those customers who do not own generation.

However, with the growth and interest in customer owned generation, if there is an increase in customer owned generation and a DG rate is not established, the current electric rate structure will not allow the SUA to recover the full cost of serving the DG customers. If the SUA does not recover the full cost of serving any customer group, the other customer groups subsidize or pick up the slack, which is not a desirable situation nor is it equitable.

In order to prevent subsidization across customer classes and to allow for future growth in DG, staff has been working with the consulting firm Avant Energy to develop a DG rate design, which will be presented with this report.

Budget Impact: There is no budget impact for the recommended action.

Prior Council Action or Part of an Approved Project: Yes

Related Items: SUA-17-13, Net Metering Interconnection Agreement Update

Alternatives:

1. Direct staff to continue with the Net Metering Agreement currently in place. As noted above, this approach would not allow the SUA to recover the full cost of service from the DG customer group, which results in non-DG customers subsidizing DG customers.
2. Direct staff to prepare a DG rate based on the “Avoided Cost for All Customers” approach. This approach minimizes cross-subsidization between customer classes and it has no economic impact on the SUA. The customer pays their standard retail rate for all power consumed and the SUA credits the customer for all power generated at the SUA’s avoided cost.

3. Direct staff to prepare a DG rate based on the “Increased Customer Charge for DG Residential Customers” and the “Avoided Cost for Business Customers” approach. Requires a large one-time increase to customer charge to recover the fixed costs associated with providing a service connection plus likely future increases as fixed costs increase. Also, includes a reduced energy charge (from standard retail rate) to recover the variable cost portion of providing service to the customer. The increased energy charge reduces cross-subsidization as compared to the net metering approach. Business customer DG rate would be as described in alternative #2.

4. Direct staff to prepare a DG rate based on the “Demand Charge for Residential Customers” and the “Avoided Cost for Business Customers”. Requires advanced metering infrastructure (AMI) to be in place and operational. Residential customers would be billed a demand charge based on their maximum usage during each billing period to recover fixed cost associated with providing a service connection. This approach also reduces cross-subsidization as compared to the net metering approach. Business customer DG rate would be as described in alternative #2.

**Recommendation:** It is recommended that the Trustees approve alternative #2.

With the exception of alternative #1, any DG rate design will have to be provided to GRDA for review to ensure that the rate design does not violate the terms of the purchase power contract prior to being presented to the Trustees for consideration/approval by resolution.

**Prepared by:** Loren Smith, Electric Utility Director

**Reviewed by:** Dan Blankenship, Deputy City Manager

**Submitted by:** Norman McNickle, City Manager

**Attachments:** DG Rate Design Report