



# AWARD ENERGY INNOVATIONS GRANT TO UCR TO RESEARCH OPTIMAL PLACEMENT OF SMART METERS IN THE AMOUNT OF \$100,000

Resource Operations and Strategic Analytics  
(ROSA)

Board of Public Utilities  
August 26, 2019

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## BACKGROUND

1. November 2000 - RPU established an Energy Innovations Grant Program
2. Offers funding to public or private post-secondary institutions within the city limits of Riverside
3. Supports research, development and demonstration projects that advance energy-related fields

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## BACKGROUND

4. All proposals must meet the following criteria:
  - a. Propose an original innovative solution to a significant energy issue;
  - b. Address a California energy market need;
  - c. Provide a clear potential benefit to California electric ratepayers; and
  - d. Must be completed within one year

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## DISCUSSION

1. Advertised on website and through assigned Account Manager
  - a. Ten proposals received - University of California, Riverside
2. Grant Review Committee focused on proposals that directly affected the Utility, its customers, operations, and energy systems
3. Selected "Optimal Placement of Smart Meters to Improve Efficiency and Reliability of Power Distribution Systems" proposal

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## PROJECT PROPOSAL

**GOAL:** Develop smart meter placement strategy that will determine optimal locations to deploy around 14,000 residential electric smart meters

1. Identify key use cases of smart meter data for RPU and summarize business values & technical requirements of smart meter applications
2. Identify and determine optimal placement of smart meters
3. Recommend location of smart meters that can maintain optimal characteristics for most of the applications

## BENEFITS TO RPU AND RATEPAYERS

1. Improve efficiency, reliability, and operations of power distribution system
2. Optimizes collection and analysis of meter data to improve customer satisfaction, efficiency and development of programs for RPU customers
3. Workforce development and training for RPU staff and preparing workforce

## RECOMMENDATIONS

That the Board of Public Utilities recommend that the City Council:

1. Approve the award of the Riverside Public Utilities Energy Innovations Grant to the University of California, Riverside, in the amount of \$100,000, to be paid in three (3) installments funded in Fiscal Year 2019-20, to fund research for the Optimal Placement of Smart Meters to Improve Efficiency and Reliability of Power Distribution Systems for an initial one-year term; and
2. Authorize the City Manager, or designee, to execute the agreement and extensions to the agreement, including making minor, non-substantive changes, to sign all documents and instruments necessary to complete the transaction, and execute amendments.