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Docket Number: 16-OIR-01

City of Riverside Public Utilities Comments on 04-18-16 IRP Workshop_SB 350_Docket No. 16-OIR-01

Additional submitted attachment is included below.

CITY OF RIVERSIDE

MEMORANDUM

Riverside Public Utilities: Power Resources

May 16, 2016

California Energy Commission
Dockets Office, MS-4
Docket No. 16-OIR-01
RPS Proceeding
1516 Ninth Street
Sacramento, CA 95814-5512

RE: Riverside Public Utilities Comments on Development of Guidelines for Integrated Resource Plans from Local Publicly Owned Electric Utilities under Senate Bill 350

Riverside Public Utilities appreciates the opportunity to provide further comments on the *Development of Guidelines for Integrated Resource Plans from Local Publicly Owned Electric Utilities under Senate Bill 350*, as discussed at the April 18, 2016 Lead Commissioner Workshop. Riverside Public Utilities (RPU) was established in 1895, under the provisions of the California Constitution and Article XII of the City Charter. RPU is supervised by the Public Utilities General Manager, and under the management and control of the City Manager, subject to the powers and duties vested in the Board of Public Utilities and the City Council. RPU provides high quality, reliable services to over 108,000 metered electric customers and 64,000 metered water customers throughout the City of Riverside, CA. The Utility is committed to increasing its use of renewable resources and promoting sustainable living practices that help reduce environmental impacts within the City of Riverside and the state of California.

We appreciate Chair Robert Weisenmiller's invitation to present our Integrated Resource Plan (IRP) at the April 18 Workshop, in addition to the opportunity to provide these follow-up comments. Our comments are divided into the following three sections:

1. A brief review of Riverside's IRP and associated planning process.
2. Riverside's recommendations for implementing SB 350 IRP guidelines
3. An index of SB 350 IRP requirements addressed in Riverside's 2014 IRP

We hope that the CEC finds these follow-up comments to be helpful and look forward to continued collaboration with the Energy Commission to ensure a successful outcome to this important process.

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1. RPU's Integrated Resource Plan

It is considered standard industry best practice for both public and investor owned utilities to periodically perform and compile Integrated Resource Plans. At its most fundamental level, an Integrated Resource Plan (IRP) is used to help guide RPU's long-term power procurement decisions to meet its customers' future peak load and system energy requirements, along with appropriate reserve margins. In an IRP, a utility examines both supply-side and demand-side resources in an effort to identify one or more least-cost, least-risk future resource procurement scenarios that can be used to meet the utilities expected future resource needs.

RPU began the planning process for its most recent IRP in mid-2013. Table 1 below summarizes the steps of our IRP process; note that the entire process took slightly less than two years to complete. Although the vast majority of the modeling was performed during 2014, the results were updated in early 2015 to include additional enhancements and analyses.

Table 1. Timeline of RPU's Integrated Resource planning process.

Process / Activity	Time Period
IRP Pre-planning activities with internal & external stakeholders	Aug-Sept 2013
Initial IRP studies / simulations & drafting of initial document	Oct-2013 to May 2014
External review of initial draft IRP (outside independent consultant)	Jun-Jul 2014
Revised IRP studies / additional analyses	Aug-Oct 2014
Document revisions, additions & updates	Sept-Dec 2014
Presentation to Public Utilities Board	Feb 2015
Public 60 day review process	Mar-Apr 2015
Official recommendation of adoption of 2014 IRP (Public Utilities Board)	June 4, 2015
Official recommendation of adoption of 2014 IRP (Land Use Committee)	July 7, 2015
Official adoption of 2014 IRP (City Council)	July 28, 2015

Our revised 2014 Power Supply IRP provides an intermediate- and long-term impact analysis of, as well as the types and timing related to, Riverside's acquisition of new power resources, and the resulting impact on RPU's future projected cost of service in the 2014-2033 timeframe. The intermediate term (5-year forward) analyses examine RPUs near-term (a) projected capacity and resource adequacy needs, (b) renewable portfolio standard (RPS) mandates, (c) carbon emission goals and mandates, (d) power resource budgetary objectives, and (e) cash-flow risk metrics. The primary longer term (20-year forward) issues include (a) projected load growth impacts, (b) timing impacts associated with the termination of our Intermountain Power Project (IPP) contract, (c) how market price shocks could impact RPUs resource portfolio, (d) potential replacement options for RPUs IPP contract (including associated GHG impacts), (e) potential changes in future RPS mandates, and (f) the expected impacts from important secondary resource planning issues, including energy storage, customer solar PV (DER) trends, and vehicle electrification.

A detailed presentation of the IRP was presented to the Public Utilities Board (PUB) on February 20, 2015, followed by an extended discussion between Board members and RPU staff concerning some of the more important IRP findings. Higher level presentations were presented to the PUB, Land Use Committee and City Council on 6/4/15, 7/7/15 and 7/28/15, respectively, when the official IRP was formally approved and adopted. The full IRP document can be downloaded from RPU's website at

http://www.riversideca.gov/utilities/pdf/2015/RPU_2014IRP_revised_draft_forPUB_0219_2015.pdf

In summary, a significant number of diverse resource planning issues were discussed and analyzed in our 2014 IRP. A detailed discussion of findings can be found in both the Executive Summary and Chapter 14 of the online IRP document, along with recommendations for additional analyses and studies that should be undertaken in the future. The analyses, findings and recommendations presented in our 2014 Power Supply IRP are designed to assist RPU in continuing to provide the highest quality water and electric services at the lowest possible rates to benefit the Riverside community in a proactive, intelligent, and optimal manner.

2. RPU's Recommendations for Implementing SB 350 CEC IRP Guidelines

With respect to implementing guidelines, RPU respectfully recommends that the Energy Commission develop a set of SB 350 IRP guidelines that adhere to the following five principles:

a) **Provide a standardized checklist of key IRP components through an indexed table.** RPU recommends that the Energy Commission require that each local governing authority submit a completed index table identifying each section of their IRP where SB 350 components are addressed along with their IRP document. This would streamline the issue identification and content review process for all staff involved, while preserving the autonomy and long-term

planning process of local, publicly-owned utilities. In section 3 of this report we present a specific example of how such an index could be created, based on our 2014 IRP.

b) **Provide deference to local governing authorities.** The City of Riverside strongly believes that the CEC review process must not supersede or interfere with publicly owned utilities' existing and required local governing authority jurisdiction and approval processes. As advocated by SCPPA, the Energy Commission should involve and consult with the expertise offered by local governing authorities to meet the diverse needs of their local communities when setting SB 350 guidelines. Additionally, the Commission should recognize all of the efforts made by our local governing authorities to comply with these new requirements, within the parameters of maintaining affordable rates while ensuring a sufficient and operationally-viable power supply, as well as maintaining transmission and distribution system reliability.

c) **Streamline IRP requirements with the Western Area Power Administration (WAPA).** As highlighted in the Staff workshop, a number of POUs (including RPU) already submit IRPs to WAPA. RPU supports the Commission's collaboration with WAPA to ensure that entities will not be required to submit two separate IRPs with differing requirements to the respective agencies. (As shown in Appendix A, RPU's 2014 IRP was recently approved by WAPA.)

d) **Recognize that POU timelines are unique and heavily dependent upon staff resources.** As mentioned during our on-site presentation, RPU currently produces an IRP every four years (i.e., we are on a four-year cycle), and expect to release our next IRP in 2018. We strongly encourage the CEC to recognize that POUs each have established integrated resource planning timelines that reflect locally-driven planning priorities – none of which are identical or easily synchronized.

e) **Understand that long-term utility planning is directional and not determinative.** Again, as also advocated by SCPPA, it is important to note that IRPs are not detailed roadmaps for long-term utility operations, but rather wide-ranging analyses that lead to policy direction from governing bodies. This is especially true as our utility business model undergoes changes of an unprecedented magnitude, from energy efficiency and flattening load growth to renewable energy integration, increased adoption of energy storage and DER technology, and transportation electrification.

3. Index of SB 350 IRP Requirements Addressed in RPU's 2014 IRP

The following index presents an example of how RPU's 2014 IRP already addresses nearly all of the IRP requirements codified in SB 350. Such an index can be easily created and submitted to the CEC in order to assist CEC staff in their IRP requirements verification process.

(1) Meets the greenhouse gas emissions reduction targets established by the State Air Resources Board, in coordination with the Energy Commission, for the electricity sector and each publically-

owned utility that reflect the electricity sector's percentage in achieving the economy-wide greenhouse gas emissions reductions of 40 percent from 1990 levels by 2030.

- *1.2 Resource Planning: Guiding Principles and Current Strategies*
    - Carbon footprint reduction is a guiding principle of RPU's resource procurement decisions
- *5.1.2 AB 32 – California Greenhouse Gas (GHG) Reduction Mandate*
    - Overview of AB 32 and its impact on RPU
- *8.7 GHG Emissions, Allocations and Positions*
    - Overview of RPU's CO2 emissions and CO2 allowances in the 2015 to 2019 time period

(2) Ensures procurement of at least 50 percent eligible renewable energy resources by 2030 consistent with Article 16 (commencing with Section 399.11) of Chapter 2.3.

- *3.4 RPU Current Procurement Strategy*
    - Riverside has aggressively procured renewable resources to meet the RPS mandate
- *8.2 Renewable Energy Resources and RPS Mandate*
    - Overview of RPU's RPS percentage in the 2015 to 2019 time period
- *9.2 Long Term Renewable Energy Needs (2014-2033 Time Horizon)*
    - Analysis of RPU's long term renewable energy needs to meet and maintain a 33%, 40% and 50% RPS by 2030
- *10.3 Load Growth Rate and RPS Mandate Impacts on RPU's COS_{LN}*
    - Analysis of the effect of load growth and increasing RPS percentages on RPU's load normalized cost of service
- *11.2.3 New 75 MW Base-load Renewable Energy Contract*
    - Analysis of an additional 75 MW baseload renewable energy contract entering RPU's portfolio in 2021 to replace its retiring coal resource
- *12 Alternative Portfolio Analyses: Part II – A Higher RPS Mandate*
    - Analysis of potential cost impacts associated with a 50% by 2030 mandate

(3) Meets the goals specified in subparagraphs (C) to (H), inclusive of paragraph (1) of subdivision (a) of Section 454.52.

(C) Enable each electrical corporation to fulfill its obligation to serve its customers at just and reasonable rates.

- *1.2 Resource Planning: Guiding Principles and Current Strategies*
    - Ensuring wholesale and retail price stability is one of RPU's guiding principles of resource procurement
    - RPU's Mission: "RPU is committed to the highest quality water and electric services at the lowest possible rates to benefit the community"

(D) Minimize impacts on ratepayers' bills.

- *1.2 Resource Planning: Guiding Principles and Current Strategies*
  - See bullet points for (C) above
- *8.5 Forecasted Hedging % and Open Energy Positions*
  - Discussion of RPU's risk management and hedging strategies
- *8.6 Unhedged Energy Cost and Cost-at-Risk Metrics*
  - Analysis of RPU's open energy positions in the 2015 to 2019 time period
- *10.6 Market Price Shocks: Impacts on COS_{LN}*
  - Analysis of the effect of market price shocks on RPU's load normalized cost of service

(E) Ensure system and local reliability.

- *8.1 Capacity, System Peaks and Resource Adequacy*
  - Discussion and analysis of RPU's resource capacity, system peaks and Resource Adequacy needs in the CAISO paradigm in the 2015 to 2019 time period
- *8.1.2 New FRAC/MOO Paradigm*
  - Discussion of a new CAISO paradigm that imposes an additional resource adequacy requirement on RPU to mitigate the system ramping impacts caused by intermittent renewable resources
- *9.1 Long Term Capacity Needs (2014-2033 Time Horizon)*
  - Discussion and analysis of RPU's capacity needs through 2033

(F) Strengthen the diversity, sustainability, and resilience of the bulk transmission and distribution systems, and local communities.

- *3.2 Transmission Resources*
  - Discussion of RPU's transmission resources
- *3.3 California Independent System Operator*
  - Discussion of RPU's participation in the CAISO market
- *4 RPU Existing Electric System*
  - Discussion and overview of RPU's existing electric system
- *5.2 CAISO Market Initiatives*
  - Discussion of the various initiatives meant to strengthen the diversity, sustainability, and resilience of the bulk transmission system

(G) Enhance distribution systems and demand-side energy management.

- *13.3 An Ideal DSM/DR Program*
  - Analysis and discussion of an DSM/DR Program that would provide the greatest value to RPU

(H) Minimize localized air pollutants and other greenhouse gas emissions, with early priority on disadvantaged communities identified pursuant to Section 39711 of the Health and Safety Code.

- *8.7 GHG Emissions, Allocations and Positions*
    - Overview of RPU's CO2 emissions and CO2 allowances in the 2015 to 2019 time period

(c) (1) The integrated resource plan shall address procurement for the following:

(A) Energy efficiency and demand response resources pursuant to Section 9615.

- *5.1.6 AB 2021 – Energy Efficiency (EE) & Demand Side Management (DSM)*
    - Discussion of AB 2021
- *6 Energy Efficiency (EE) and Demand Side Management (DSM) Programs*
    - Discussion and analysis of RPU's EE programs
- *13.3 An Ideal DSM/DR Program*
    - See bullet point in (G) above

(B) Energy storage requirements pursuant to Chapter 7.7 (commencing with Section 2835) of Part 2 of Division 1.

- *5.1.5 AB 2514 – Energy Storage (ES)*
    - Discussion of AB 2514
- *13.2 Value Analysis: 10 MW of Energy Storage*
    - Valuation of a hypothetical energy storage system

(C) Transportation electrification.

- *13.5 Electric Vehicles (EVs)*
    - Discussion of electric vehicles and their potential for RPU

(D) A diversified procurement portfolio consisting of both short-term and long-term electricity, electricity-related, and demand response products.

- *3.1 Existing and Anticipated Generation Resources*
    - Discussion of RPU's existing and future generation resources
- *3.4 RPU Current Resource Procurement Strategy*
    - In recent procurement, RPU has focused on renewable resources
- *8.3 Resource Portfolio: Primary Metrics*
    - Overview and analysis of RPU's resource portfolio in the 2015 to 2019 time period
- *9.2 Long Term Renewable Energy Needs (2014-2033 Time Horizon)*
    - Analysis of RPU's need for additional renewable resources under different RPS mandates

- *10 Long Term (Twenty Year Forward) Portfolio Analyses*
    - Analysis and cost impact of two load growth patterns, RPS mandates, and coal resource replacement dates
- *11 Alternative Portfolio Analyses: Part I – Additional IPP Replacement Options*
    - Analysis and cost impact of additional coal resource replacement options
- *12 Alternative Portfolio Analyses: Part II – A Higher RPS Mandate*
    - Analysis of potential cost impacts associated with a 50% by 2030 mandate
- *13 Important Secondary Resource Planning Issues*
    - Discussion and analysis of Energy Storage, DSM/DR, Customer Solar PV, and Electric Vehicles

(E) The resource adequacy requirements established pursuant to Section 9620.

- *8.1 Capacity, System Peaks and Resource Adequacy Needs*
    - See bullet point in (E) above
- *9.1 Long Term Capacity Needs (2014-2033 Time Horizon)*
    - See bullet point in (E) above

Department of Energy
Western Area Power Administration
Desert Southwest Customer Service Region
P.O. Box 6457
Phoenix, AZ 85005-6457

MAY 0 9 2016

Via Email: najleach@riversideca.gov

Mr. Jeff Leach
Utilities Principal Resource Analyst
Riverside Public Utilities
3435 14th Street
Riverside, CA 92501

Re: 2014-2018 5-year Integrated Resource Plan

Dear Mr. Leach:

Thank you for submitting Riverside's 5-year Integrated Resource Plan (IRP), adopted February 8, 2016, which covers the reporting period of 2014 through 2018. This is your formal notice that this report has been reviewed and approved. Per our conversation, this resets your Western 5-year due date to coincide with the first IRP due to the State of California in 2019. Your next report is due April 27, 2019.

Western has a wide range of services and information on our Energy Services web site (*www.wapa.gov/es*) that includes: fliers and energy tip sheets with your logo to use as bill stuffers, and the Equipment Loan program to borrow equipment, like infrared cameras, at no charge (*https://www.wapa.gov/EnergyServices/BorrowEquipment/Pages/infared-cameras.aspx*). Kill-A-Watt meters are also available to help individuals learn how they use electricity.

Please do not hesitate to contact me at (602) 605-2659 or colletti@wapa.gov if I may be of assistance in any Energy Services related matter.

Sincerely,

Audrey Lynn Colletti
Public Utilities Specialist