



# RIVERSIDE PUBLIC UTILITIES

## Board Memorandum

**BOARD OF PUBLIC UTILITIES**

**DATE:** JULY 27, 2020

**ITEM NO:** 2

**SUBJECT:** PUBLIC UTILITIES 2020 RIVERSIDE RESOURCE ADEQUACY PROGRAM

**ISSUE:**

Recommend that the City Council adopt by resolution a 2020 Riverside Resource Adequacy Program governing the acquisition of capacity to serve forecasted customer electrical needs.

**RECOMMENDATION:**

That the Board of Public Utilities recommend that the City Council adopt by resolution the attached 2020 Riverside Resource Adequacy Program.

**BACKGROUND:**

Resource Adequacy refers to a utility's procurement of sufficient power supply capacity to fully serve its projected electric requirements (i.e., coincident adjusted monthly peak load forecasts), plus an additional amount to be held in reserve in case of unforeseen circumstances of transmission or generation outages.

The City of Riverside first established its Resource Adequacy ("RA") Program on May 23, 2006 through Resolution No. 21170 in response to California Independent System Operator's ("CAISO") tariff requirement regarding RA Programs. On June 5, 2012, the City Council adopted the Revised Resource Adequacy Program through Resolution No. 22389, updating the program to accommodate amended CAISO tariff requirements regarding Resource Adequacy as well as changing market conditions. The City's current RA Program contains the following elements:

1. The preparation and submittal of RA Plans including appropriate reserve margins;
2. Development of demand forecasts;
3. Criteria for defining the type and quantity of resources that will qualify for meeting the Resource Adequacy reserve margin requirements;
4. The availability of resources to the CAISO through bidding and scheduling; and
5. Resource Adequacy compliance monitoring.

## **DISCUSSION:**

Over the past eight years, the CAISO tariff has undergone further amendments regarding the RA Program. In addition, the RA market has progressively become more volatile and expensive as the State moves towards using more renewable energy and new Load Serving Entities such as Community Choice Aggregations (“CCA’s”) continue to emerge. Many natural gas generation facilities in California have retired in recent years, due to State mandates like Assembly Bill 32, Senate Bill X1-2, and Senate Bill 350 requiring utilities to procure more energy from renewable resources. This retired capacity is expected to ultimately be replaced by fast ramping storage resources; however, during the transition, the remaining natural gas generators within the CAISO Balancing Authority Area are heavily relied upon to maintain system reliability. Additionally, new CCA’s have concurrently emerged within Investor Owned Utilities (“IOU’s”) service territories. These CCA’s have obligations to procure RA, which creates more competition in an already scarce market.

For these reasons, the cost for RA resources has increased by over 300% within the last four years. Staff is recommending specific revisions to the City’s RA Program to eliminate provisions that are no longer applicable and to better facilitate the ability to acquire less expensive RA resources. The revisions are as follows:

1. *System, Local and Flexible RA* - Update the RA Program document to reflect current CAISO requirements for System RA, Local RA, and Flexible RA products.
2. *Annual System RA Plan Procurement Obligation* - Revise the Annual System RA Plan Procurement Obligation to be at least 90% of the City’s System RA Requirement (or 103.5% of the coincident adjusted, forecasted peak loads) for each month of the forthcoming compliance year.
3. *Revisions related to CAISO RA Counting Methodologies* - Revise the criteria for qualifying capacity to defer to the default RA counting methodologies used by the CAISO.
4. *Revisions related to CAISO Tariff and Protocols* - Revise certain sections of the RA Program document (regarding resource bidding and arrangements of provision of emergency power to the CAISO) to conform to the most recently adopted CAISO Tariff and protocols.
5. *Miscellaneous Language Revisions* - Make additional, miscellaneous changes to the language and organizational structure of the RA Program document to better clarify current RA policies and regulations.

The detailed changes to the program are included in Attachment 1 and explanations for each of these proposed changes is discussed below.

### *System, Local and Flexible RA*

The CAISO currently has three distinct requirements for Resource Adequacy Plans:

1. System RA requirements;
2. Local RA requirements; and
3. Flexible RA requirements.

System RA requirements are determined based on each utility's California Energy Commission ("CEC") coincident adjusted peak load forecasts, plus a planning reserve margin adopted by the Local Regulatory Authority. The City Council is the Local Regulatory Authority. Consistent with the City's current RA Program, the planning reserve margin for System RA requirements will continue to be set at 15% above the CEC's coincident adjusted peak load forecasts.

Local RA requirements are determined from an annual CAISO planning study using a 1-in-10 weather year and N-1-1 transmission contingency conditions. Likewise, Flexible RA requirements are derived from an annual CAISO simulation study that evaluates the ramping capacity needed in each month to ensure overall system reliability. The 2020 Riverside RA Program identifies Annual RA Plan Procurement Obligations for Flexible and Local RA, which are not included in the City's current RA Program. The Annual RA Plan Procurement Obligations for Flexible RA and Local RA are identified as: (a) at least 90% of the Flexible RA Requirements for each month of the coming compliance year; and (b) 100% of the Local RA Requirements for each month of the coming compliance year. Staff will meet the remaining Flexible RA Requirements in the Monthly RA Plan submitted to the CAISO prior to the start of the month. These proposed procurement obligations are consistent with the obligations of Load Serving Entities under the jurisdiction of the California Public Utilities Commission (CPUC), such as the IOU's and CCA's.

#### *Annual System RA Plan Procurement Obligation*

The current RA Program requires staff to present an Annual RA Plan to the Public Utilities Board for approval before submitting this same Plan to the CAISO, pursuant to the date specified in the CAISO Tariff and Business Practice Manuals - currently due October 31<sup>st</sup> each year. This Annual RA Plan identifies the City's monthly System RA requirements based on the utility's coincident adjusted peak load forecasts and identifies RPU's current power resources that will be used to meet these monthly requirements.

The City's existing RA Program currently requires that staff specify enough resources in the annual RA Plan to meet 100% of the RA needs (or 115% of the coincident adjusted, forecasted peak loads) for summer months (July, August and September). For all other months the Annual RA Plan must specify enough resources to meet 87% of the monthly RA requirements (or 100% of the forecasted monthly peak loads).

Once the Annual RA Plan is approved by the Board of Public Utilities and submitted to the CAISO, staff are then required to provide a Monthly RA Plan to the CAISO approximately 45 days prior to the beginning of each month. The City's current RA Program specifies that 100% of the System RA Requirements must be met for each month of the year in each Monthly RA Plan.

The proposed recommendation for the System RA Requirement submitted in the annual timeframe be changed from 100% in the summer and 87% during all other months to 90% for all months. The reduction in the Annual System RA Requirement will not jeopardize reliability as the 100% monthly System RA requirements will still be met prior to the start of each month. The proposal to adopt a consistent 90% Annual System RA Requirement is designed to provide more time and flexibility to meet the City's summer System RA needs. The additional time provided by this rule modification will allow staff to pursue cost saving RA procurement strategies to benefit the City's ratepayers. This

change will also bring RPU's Annual RA Plan into better alignment with current CPUC annual System RA filing rules for IOU's and CCA's.

#### *Revisions related to CAISO RA Counting Methodologies*

The 2020 Resource Adequacy Program updates the criteria for qualifying capacity to defer to the default RA counting methodologies used by the CAISO. These revisions include using annual Net Qualifying Capacity data and counting methodologies identified in the CAISO Tariff and Business Practice Manuals for all the City's power resources located within the CAISO Balancing Authority Area. Likewise, the City's power resources located outside of the CAISO Balancing Authority Area will qualify for RA up to the maximum import capability rights obtained by the City at each respective intertie point consistent with existing CAISO Tariff and Business Practice Manual rules.

#### *Revisions related to CAISO Tariff and Protocols*

Section 4 in the 2020 Riverside Resource Adequacy Program document has been updated to conform to the most recently adopted CAISO Tariff and protocols. Section 4 specifically addresses rules regarding resource bidding and arrangements of provision of emergency power to the CAISO.

#### *Miscellaneous Language Revisions*

The 2020 Riverside Resource Adequacy Program document language has been edited for clarification to current RA policies and regulations. The organizational structure of information in the document has been updated been made to improve clarity and readability.

The proposed revisions contained in the 2020 Riverside Resource Adequacy Program (Attachment 2) document are designed to bring City's RA Program up to date and in compliance with all current CAISO Tariffs and protocols. The changes to the Annual System RA are expected to optimize the City's RA resources, enhance system reliability and reduce RPU's annual RA costs.

#### **FISCAL IMPACT:**

There is no direct fiscal impact associated with the adoption of this 2020 Riverside Resource Adequacy Program. It is anticipated that once the program rules are implemented, there will be potential future cost savings realized in future budget years.

Prepared by:	Daniel E. Garcia, Utilities Deputy General Manager
Approved by:	Todd M. Corbin, Utilities General Manager
Approved by:	Al Zelinka, FAICP, City Manager
Approved as to form:	Gary G. Geuss, City Attorney

Certifies availability of funds:	Edward Enriquez, Chief Financial Officer/Treasurer
-------------------------------------	--

**Attachments:**

1. Redlined Revised Resource Adequacy Program
2. 2020 Riverside Resource Adequacy Program
3. Resolution
4. Presentation