Dear Mr. Woodward,

Attached you will find Riverside's Electricity Resource Plan and Narrative prepared in support of the 2009 Integrated Energy Policy Report.

Please contact me at (951) 715-3545, should you have questions.

Bill Armenta City of Riverside **DOCKET**

09-IEP-1B

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CITY OF RIVERSIDE PUBLIC UTILITIES DEPARTMENT



RESOURCE ADEQUACY PROGRAM

Adopted: _	May 23,2006
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This Resource Adequacy Program shall become effective upon the approval of the applicable provisions of the California Independent System Operator Corporation's ("CAISO") 2006 Interim Reliability Requirements Tariff—or a comparable CAISO filing—by the Federal Energy Regulatory Commission, and shall remain in effect until modified by the City Council of the City of Riverside. Capitalized terms not otherwise defined herein shall be defined as set forth in the Master Definitions Supplement of the CAISO's Operating Agreement and Tariff.

1. RESOURCE ADEQUACY PLANS:

The Public Utilities Department ("Department") shall develop Resource Adequacy Plans ("Plans") to guide the procurement of capacity resources adequate to serve the electrical requirements of the City's customers consistent with Good Utility Practice and applicable reliability requirements.

- 1.1 Annual Resource Adequacy Plan: The Department shall prepare an Annual Resource Adequacy Plan each year for the following calendar year. The Annual Resource Adequacy Plan shall identify capacity resources owned or contracted for by the City sufficient to meet 100% of the City's forecasted monthly peak demands for such year. The Department shall present the Plan to the Public Utilities Board and the City Council and shall submit the Plan approved by the City Council to the CAISO by September 30, or such other date as may be required by the CAISO Tariff. The first Annual Resource Adequacy Plan will be submitted to the CAISO by September 30, 2006 for calendar year 2007.
- 1.2 Monthly Resource Adequacy Plan: The Department shall also prepare a Monthly Resource Adequacy Plan. The Monthly Resource Adequacy Plan shall identify capacity resources owned or contracted for by the City sufficient to meet the greater of (i) 115% of the City's forecasted maximum peak demand for the month covered by the Plan or (ii) the most recently required minimum planning reserve and reliability criteria approved by the Board of Trustees of the Western Electricity Coordinating Council. The Public Utilities General Manager, or his designee, shall certify whether each such Plan does or does not comply with the requirements of this Resource Adequacy Program. The Public Utilities General Manager shall advise the Public Utilities Board and the City Council of any noncompliance with this Resource Adequacy Program. Each Monthly Resource Adequacy Plan shall be provided to the CAISO to the extent required by the CAISO Tariff.

1.3 Monthly Energy Plan: Each month, the Department shall prepare a Monthly Energy Plan. The Monthly Energy Plan shall plot, in load duration curve format, the City's hourly demand forecast, plus a planning reserve margin and, in resource duration curve format, the planned energy use from the City's capacity resources to meet the Resource Adequacy requirements of this Resource Adequacy Program. The Department shall take into account capacity resource limitations, such as energy limitations, run time limitations and operational limitations, in plotting the resource duration curve. The Public Utilities General Manager, or his designee, shall certify whether each such Plan does or does not comply with the requirements of this Resource Adequacy Program. Each Monthly Energy Plan shall be provided to the CAISO with the Department's Monthly Resource Adequacy Plan

2. DEMAND FORECASTS:

The Department shall be responsible for developing demand forecasts, consistent with Good Utility Practice, reflecting the projected maximum annual and monthly peak loads for the City's service area. Such demand forecasts shall be included in the annual and monthly Resource Adequacy Plans.

3. CRITERIA FOR QUALIFYING CAPACITY:

- 3.1 Thermal Facilities Owned by the City Within the City's Service Area: The qualifying capacity of thermal generating facilities owned by the City, in whole or in part, located within the City's service area, and subject to a Participating Generator Agreement, will be based on net dependable capacity as defined by North American Electric Reliability Council ("NERC") Generating Availability Data System ("GADS") information. If the facility is owned jointly with another entity, the City will provide information in its Resource Adequacy and Energy Plans demonstrating the City's entitlement to the output of the jointly-owned facility's qualified capacity and an explanation of how that entitlement may change if the facility's output is restricted.
- 3.2 Facilities Owned by the City Within the CAISO Control Area: The qualifying capacity of thermal generating facilities owned by the City, in whole or in part, and located within the CAISO Control Area but outside the City's service area will be based on its net dependable capacity as specified by GADS. If the facility is jointly owned with another entity, the City will provide information in its Resource Adequacy and Energy Plans listing the City's entitlement to the output of a jointly-owned facility's qualified capacity and an explanation of how that entitlement may change if the facility's output is restricted.
- 3.3 Dynamically Scheduled System Resources: The qualifying capacity of a Dynamically Scheduled System Resource shall be the amount of the City's capacity entitlement, subject to any deliverability screen under the CAISO Tariff. To the extent the City has transmission rights at the intertie pursuant to an existing transmission contract or contracts, Converted Rights, or Firm Transmission Rights over which such Dynamically Scheduled System Resource is received in an amount no less than the qualifying capacity for such resource, then such Dynamically Scheduled System Resource shall be deemed to have satisfied the deliverability test. However, eligibility as a Resource Adequacy resource is contingent upon the City securing firm (not subject to economic curtailment) transmission through any intervening Control Areas for the resource entitlement. Furthermore, such resource shall have an allocation

of import capacity at the import Scheduling Point that is not less than the Resource Adequacy Capacity provided by the Dynamically Scheduled System Resource.

- 3.4 Non-Dynamically Scheduled System Resources: The qualifying capacity of a System Resource to which the City has an entitlement that is not dynamically scheduled shall be the amount of the City's capacity entitlement. Non-Dynamically Scheduled System Resources acquired by the City after February 15, 2006 shall be subject to any deliverability screen applicable under the CAISO Tariff. To the extent the City has transmission rights at the intertie pursuant to an existing transmission contract or contracts, Converted Rights, or Firm Transmission Rights over which such Non-Dynamically Scheduled System Resource is received in an amount no less than the qualifying capacity for such resource, then such Non-Dynamically Scheduled System Resource shall be deemed to have satisfied the deliverability test. For any Non-Dynamically Scheduled System Resource, the City shall use its best efforts to secure or cause to be secured transmission through any intervening Control Areas for the resource entitlement that cannot be curtailed for economic reasons. System Resources that are not unit-contingent must not be subject to curtailment for economic reasons. Any inter-temporal constraints, such as multi-hour run blocks, will be explicitly identified in the City's monthly Resource Adequacy Plan.
- 3.5 Contracts with Liquidated Damage Provisions: Firm energy contracts with liquidated damages provisions, as generally reflected in Service Schedule C of the Western Systems Power Pool Agreement or the Firm Liquidated Damage product of the Edison Electric Institute pro forma agreement, or any other similar firm energy contract that does not require the seller to source the energy from a particular unit and that specifies a delivery within the CAISO Control Area, shall be eligible to count as qualifying capacity until the end of 2010. The City, however, will not have more than 75% of its portfolio contain qualifying capacity met by contracts with liquidated damage provisions for 2006. This percentage will be reduced to 50% for 2007 and 25% for 2008–2010.
- **3.6 Energy Limited/Renewable Resources:** The qualifying capacity for any operationally limited resources, such as energy limitations, run time limitations, or a contract with a renewable resource as defined under the City of Riverside's Renewable Portfolio Standard, will be determined as follows:
 - (1) Large Hydroelectric (Boulder Canyon Project) monthly energy and capacity values shall be those specified by the Boulder Canyon Project Master Schedule published by the Western Area Power Administration.
 - (2) Wind and Solar monthly energy and capacity values will be based on the monthly historic performance using the previous two-year average. New wind or solar units that do not have two years of historical data will be assigned qualifying capacity for each year with historic data for generation located in the same regime and having similar technology. Wind and solar units must be participants in the CAISO's Participating Intermittent Resource Program.
 - (3) Landfill Gas monthly energy and capacity values will be based on the monthly historic performance using a previous two year average. New landfill gas units that do not have two years of historical data will be assigned qualifying

capacity for each year with historic data for generation located in the same regime and having similar technology.

- 3.7 Inter-Scheduling Coordinator Trades: Qualifying capacity for Inter-Scheduling Coordinator trades entered into prior to February 15, 2006 shall be counted commensurate with the contract capacity for the term of the transaction. Transactions entered into after February 15, 2006, must specify the generating resources within the CAISO Control Area providing the contract capacity. The amount of such capacity counted must be deliverable pursuant to CAISO generation deliverability criteria for the term of the transaction.
- 3.8 Resource Adequacy Capacity-Only Resources: Contracts for capacity under which the seller has pledged to follow the CAISO's scheduling and operating protocols, including any Must Offer Obligation, may be a source of Resource Adequacy qualifying capacity, provided that the contract: (i) identifies the generating unit(s) dedicated to providing the Resource Adequacy Capacity, (ii) specifies that the seller shall not simultaneously sell the capacity covered by the contract to other parties, and (iii) specifies that the seller will comply with the applicable CAISO Tariff provisions.
- 3.9 Demand Response Programs: Qualifying capacity from energy efficiency, conservation, and demand response programs may be a source of Resource Adequacy Capacity and shall be deemed to directly reduce the City's Resource Adequacy Capacity requirement. The Department shall document the effects of such demand reduction in the City's Resource Adequacy Plans.
- **3.10 Load Reduction Resources:** The amount of qualifying capacity attributable to load reduction resources, such as City-owned generating units not subject to a Participating Generator Agreement and located within the City's service area, shall be equal to the net operating capability of such resources. The operation of such resources shall reduce the City's CAISO metered load.

4. AVAILABILITY OF RESOURCES TO THE CAISO:

- **4.1 Availability During Normal Operating Conditions:** Prior to the effective date of the CAISO's Market Redesign and Technology Upgrade Tariff, the City shall utilize its Resource Adequacy Resources as necessary and appropriate to serve its customers. The City may, but shall not be obligated to, submit bids to sell capacity and/or energy from Resource Adequacy Resources in the CAISO's markets.
- **4.2 Availability During System Emergencies:** If the CAISO declares a System Emergency pursuant to its Operating Procedures, the City shall make available to the CAISO any available energy (including load reduction resources) from the City's Resource Adequacy Resources that is not required to serve the City's customers. In the event that the City provides such energy to the CAISO during a System Emergency, the terms and conditions for the sale of such energy shall be documented in a written communication affirmed by an authorized representative of the CAISO in the form attached hereto as Appendix A.

5. COMPLIANCE PROCESS:

In the event of non-compliance—or a reasonable expectation of non-compliance—with the provisions herein, the Department shall compile a report stating the reason(s) for non-compliance and the corrective actions to be undertaken. The Department shall promptly provide such report to the CAISO to the extent required by the CAISO Tariff. The Public Utilities General Manager, or his designee, shall advise the Public Utilities Board and the City Council of each non-compliance incident pursuant to Sections 1.2 and 1.3. Any reports to the Public Utilities Board and the City Council must identify clearly the incident or incidents of non-compliance, describe in detail the actions the Department has taken or will take to re-establish full compliance with this program, and set forth a timeline for such actions.