



SAS MASTER LICENSE AGREEMENT WITH THE CITY OF RIVERSIDE TO LICENSE THE SAS OFFICE ANALYTICS SOFTWARE PACKAGE

Riverside Public Utilities
Power Resources Division

Board of Public Utilities
May 22, 2017

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BACKGROUND

1. Statistical Analysis System (SAS) is one of the most widely adopted statistical analysis and data processing software packages commercially available.
2. The Power Resources Division has used SAS for data processing, reporting and advanced analytics for the last six years.



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BACKGROUND

3. The SAS software is currently used by staff to develop
 - a. RPU system and retail load forecasting equations
 - b. Congestion revenue models
 - c. Retail sales projections



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BACKGROUND

4. The SAS software is also routinely used to analyze
 - a. CAISO energy, ancillary service and congestion revenue data
 - b. Various types of California and Western US energy data
 - c. Historical RPU customer billing information
5. Additionally, the SAS software serves as the backbone software platform for running the Ascend Production Cost modeling software (used in RPU's Integrated Resource Planning process).

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SAS LICENSING REQUIREMENTS

1. RPU currently pays for 10 SAS desktop (individual PC) licenses.
2. Under the current SAS licensing arrangement, RPU must purchase a new PC SAS license for each additional analyst who wishes to use the software.
3. Due to the need for additional licensing, the Power Resources Division investigated the advantages of alternatively licensing a SAS Office Analytics Server platform.
4. The server based SAS suite includes all of the PC SAS functionalities, along with the additional advantages of a server-based enterprise environment that would *extend SAS to all staff across the entire utility.*

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SAS LICENSING COSTS

1. The SAS Office Analytics server licensing agreement will cost \$65,870 with \$20,342 of ongoing annual maintenance support.
2. We currently pay \$18,639 for ongoing annual maintenance support for our ten PC licenses. (This cost would be eliminated if we switch to a server licensing agreement.)
3. Each new PC license will cost RPU approximately \$5,000 in initial licensing fees and \$1,800 in additional annual maintenance support fees.

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COST/BENEFIT ANALYSIS

1. Staff estimates that if RPU expects to add just three additional SAS licenses per year for the next three years, switching to a server license makes financial sense.

Year	PC Licensing Option				Server Licensing Option	
	Annual Maintenance Fee	# of New PC Licenses	New PC License Fee	Additional Maintenance Fee	Server License Fee	Server Maintenance Fee
2017	\$18,639	3	\$15,000	\$5,400	\$65,870	\$20,342
2018	\$24,039	3	\$15,000	\$5,400		\$20,342
2019	\$29,439	3	\$15,000	\$5,400		\$20,342
			Total 3 year costs:	\$133,317	Total 3 year costs:	\$126,896

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COST/BENEFIT ANALYSIS

2. The Power Resources Division would like to give 10 additional employees access to the SAS software platform.
3. Additionally, at least 15 employees within the Finance, Public Benefits and Operations Technology Divisions would benefit from access to the software platform.
4. If RPU acquires 25 additional SAS licenses over the next two years, the utility would save more than \$127,000 in licensing costs under the server licensing option.

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SAS OFFICE ANALYTICS PRICE QUOTE

Product	Description	Cost
Software	SAS Office Analytics – Enterprise Server with SAS/ETS, Access to Oracle, Access to OSI-Pi	\$65,870
Bundled Services	Includes installation and configuration service and two days of training/knowledge transfer	\$11,950
City IT Infrastructure (Innovation & Technology Department)	Hardware cost contribution to increase density within existing City Datacenter VMWare infrastructure	\$20,500
	Total Cost:	\$98,320

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SOLE SOURCE PROCUREMENT

1. This is a sole source procurement for goods, because RPU needs to expand the licensing of an existing software product and this software is only available through SAS Institute Inc.
2. The City's Purchasing Services Manager has reviewed and approved this sole source purchase request.

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RECOMMENDATIONS

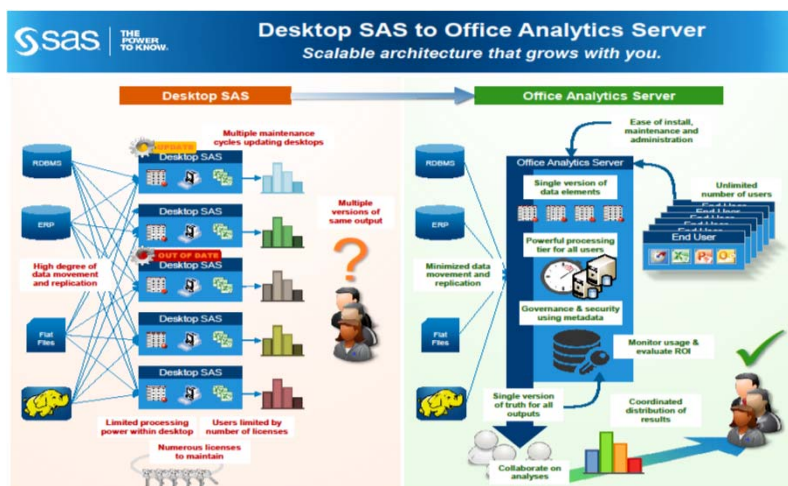
That the Board of Public Utilities:

1. Approve the Master Software License Agreement and Supplement Agreement with SAS Institute Inc. to license an Enterprise server version of a bundled SAS Office Analytics software platform on behalf of Riverside Public Utilities for an initial amount of \$98,320 which includes the primary software licensing costs (\$65,870), supplemental software installation and training support (\$11,950), and anticipated IT hardware costs (\$20,500); and
2. Authorize the City Manager, or his designee, to execute the Master Software License Agreement and Supplement Agreement with SAS Institute Inc.

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APPENDIX: ADDITIONAL CONSIDERATIONS



1. Collaborative Development Environment
2. IT Governance and Security
3. Operational Technology Considerations

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COLLABORATIVE DEVELOPMENT ENVIRONMENT

1. The SAS server environment facilitates
 - a. A common code development environment
 - b. The centralized administration of versions and users
2. These features help
 - a. Increase the adoption rate amongst staff
 - b. Reduce the number of staff hours needed to maintain the overall software platform

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IT GOVERNANCE AND SECURITY

1. The Innovation and Technology (IT) Department currently has no visibility to the PC SAS software and utility employees have no centralized repository to store and secure mission critical data.
2. A SAS Server environment would provide for a centralized metadata server with significantly enhanced data governance and security.
3. Data governance and security is extremely problematic in a non-enterprise environment; centrally located server platforms represent the only effective way to ensure that adequate data security requirements are effectively enforced.

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ALIGNMENT OF OPERATIONAL TECHNOLOGY

1. The Operational Technology Division is currently overseeing the RPU-wide deployment of the OSI Pi software platform.
2. The goal of this 2.7 million dollar software investment is to provide a centralized Operational Data Management System for the integration and dissemination of all mission critical utility data.
3. The analytical usefulness of the OSI Pi software platform can be significantly improved by linking this environment with the advanced analytic capabilities of the SAS software platform.
4. Integrating SAS with OSI Pi will allow RPU to implement improved data processing and analytics to support multiple Utility 2.0 objectives.