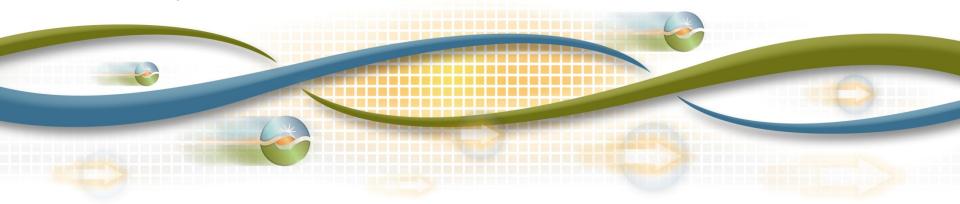# California ISO

Decision on energy management system replacement project budget

Petar Ristanovic

Vice President, Technology

Board of Governors Meeting

General Session

February 3, 2016

The ISO is working to replace the aging energy management system (EMS)

- The ISO's energy management system is a mission critical grid operations decision support monitoring and control system.

- The requirements for the current EMS were completed prior to the full network model expansion over the last several years.

- As a response to operational events the ISO had to expand network model significantly and increase frequency of security applications execution.

- The EMS performance and sizing requirements will continue to grow over the next several years.

- ISO information system requirements continue to evolve for EMS application architecture robustness, security, flexibility and manageability.

- Current quarterly enterprise data model updates do not meet requirements for the expanding market.

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In support of the ISO Strategic Vision, the new EMS will …

- Support the ISO market program through enhanced scalability, performance, and robustness

- Improve reliability, security, and compliance through the introduction of new technology and continued CIP standard compliance

- Facilitate the integration of renewable energy resources, storage devices, and demand response through support for an expanded enterprise data model supporting more frequent model promotions

- Support a high-availability architecture that improves business continuity

- Provide improved tools for system monitoring, patching, and maintenance

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An advanced user interface will improve situational awareness for Operations through …

- Enhanced visualization and data presentation tools

- A single framework with the ability to present data from multiple systems (EMS, RTCA, SE, market information, forecast, weather, etc.) within the same user interface

- A reduced number of tools needed for viewing critical information

- A standardized look and feel designed specifically for the ISO

- A web based architecture and user interface

- The use of a service oriented architecture that provides flexibility and transparency

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Management recommends the Board approve the energy management system replacement project budget.