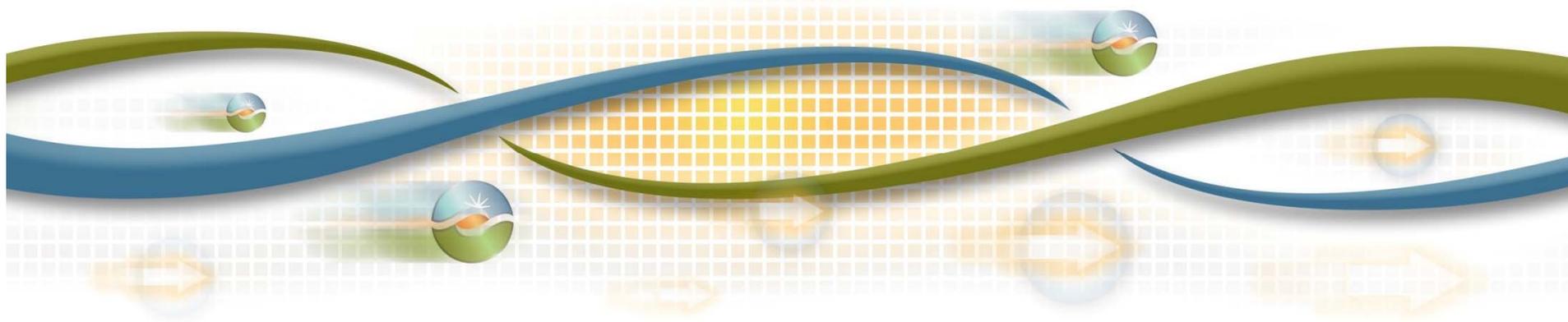




# Briefing on Draft 2018 Budget

Ryan Seghesio  
Chief Financial Officer & Treasurer

Stakeholder Meeting  
November 7, 2017



The budget development timeline extends from July through December.

Previous Events	Date
Introduction of 2018 budget process to stakeholders	July 25
Internal budgeting process	July – October
Preliminary budget posted to public website	October 25
Preliminary budget reviewed by Board of Governors (Executive Session)	November 1-2
Upcoming Events	Date
Stakeholder budget workshop	November 7
Stakeholder comments due to ISO Send to <a href="mailto:initiativecomments@caiso.com">initiativecomments@caiso.com</a>	November 14
ISO response to comments and meeting minutes posted to ISO website	November 21
Board decision on budget (General Session)	December 13-14
2018 Rates and budget documentation posted to ISO website	December 18

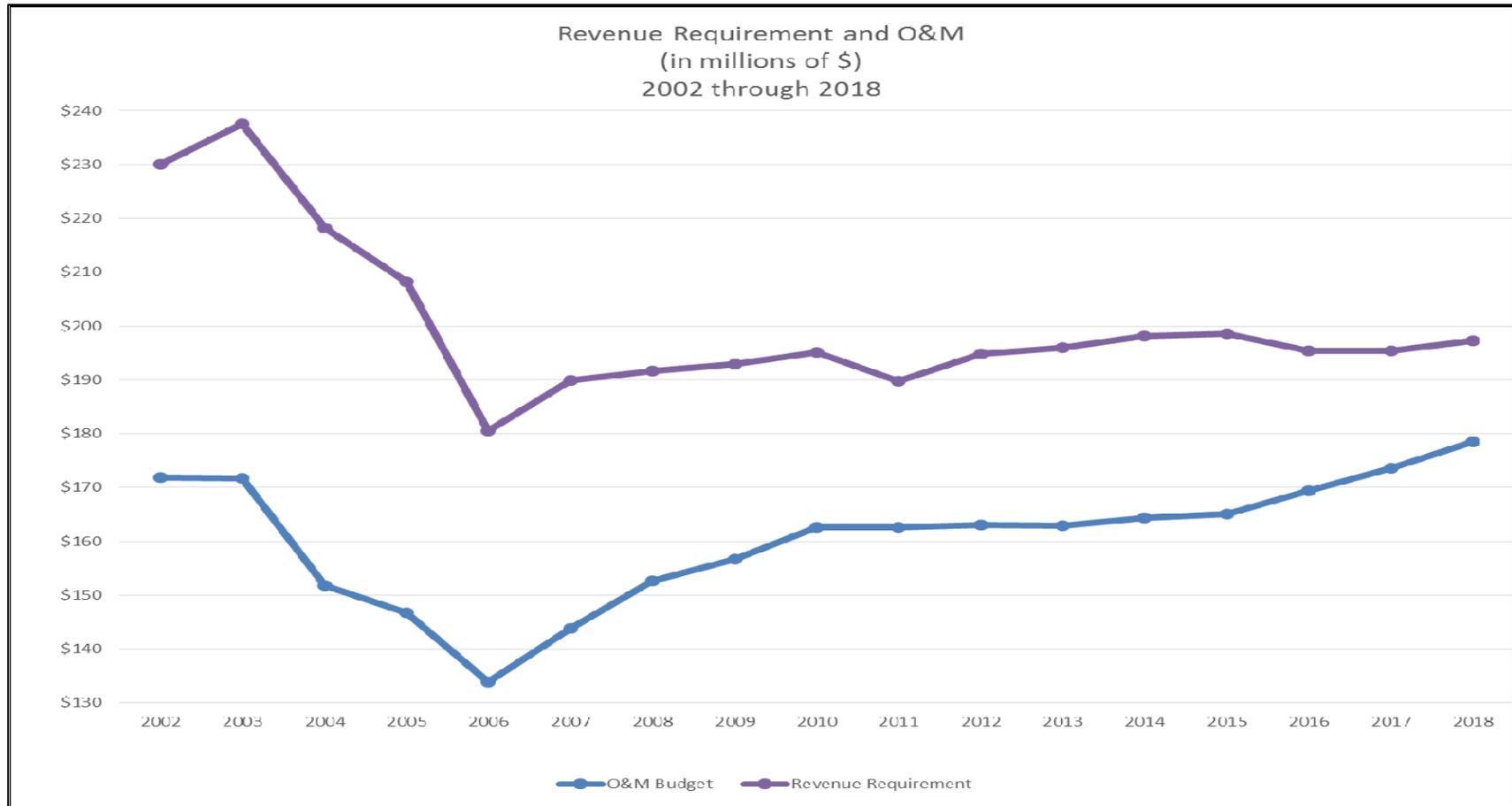
## Additional labor expense offset by additional revenue and lower cash funded capital yields 1.0% increase in Revenue Requirement

- Operations and maintenance budget increases by \$4.9M
  - 14 additional headcount, and other labor expense increases; all of which are offset by decreases in non-personnel expenses such as contractors, outside legal and telecommunications.
- Revenue increase of \$3.4M primarily driven by additional EIM and intermittent resource forecasting activity

Higher revenue requirement offset by higher projected volumes yield less than 1% increase to bundled cost per MWh.

<b>Revenue Requirement Component (\$ in millions)</b>	<b>2018 Proposed Budget</b>	<b>2017 Budget</b>	<b>Change</b>
Operations & Maintenance Budget	<b>\$178.5</b>	\$173.6	\$4.9
Debt Service (including 25% reserve)	<b>16.9</b>	16.9	-
Cash Funded Capital	<b>22.0</b>	24.0	(2.0)
Other Costs and Revenues	<b>(16.7)</b>	(13.3)	(3.4)
Operating Costs Reserve Adjustment	<b>(3.5)</b>	(5.9)	2.4
<b>Total Revenue Requirement</b>	<b>\$197.2</b>	\$195.3	\$1.9
Transmission Volume in TWh	<b>241.3</b>	240.7	0.6
Pro-forma bundled cost per MWh	<b>\$0.817</b>	\$0.811	\$0.006

# Management remains committed to a stable revenue requirement.



- Revenue requirement is 17% lower than its peak in 2003
- Average annual growth rate is less than 1% since 2007

**O&M Budget**: The proposed O&M budget increases by \$4.9 million to \$178.5 million.

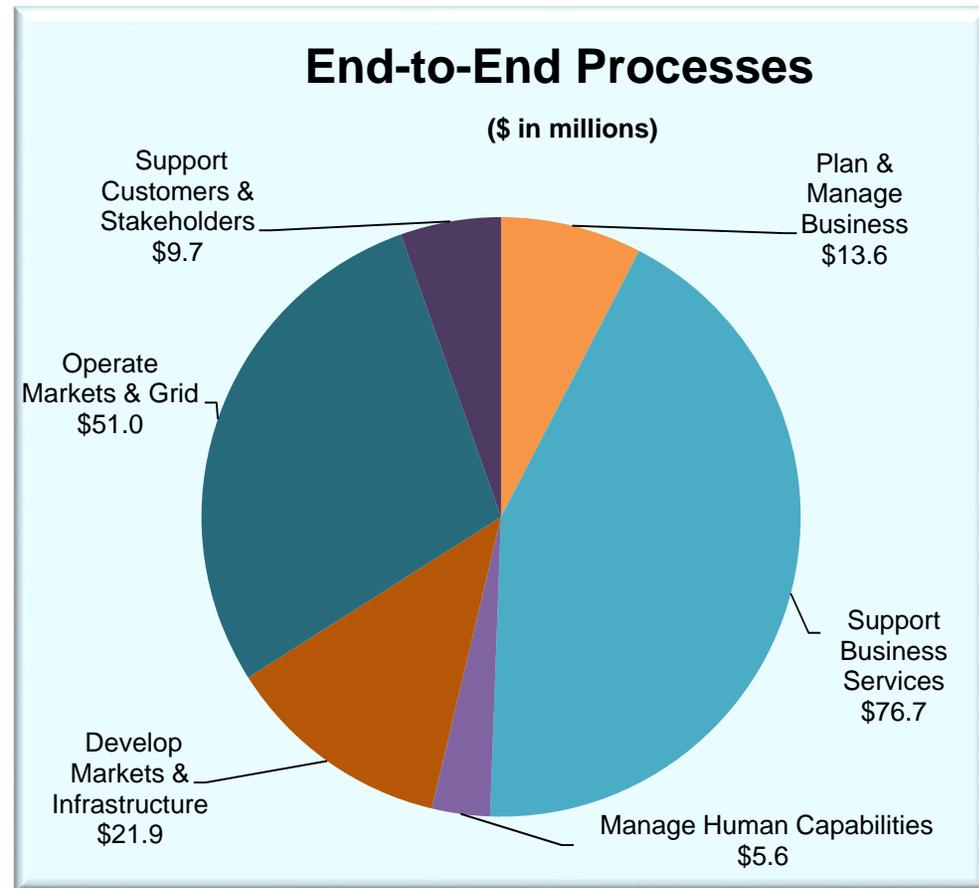
<b>O&amp;M Budget by Resource (\$ in millions)</b>	<b>2018 Proposed Budget</b>	<b>2017 Budget</b>	<b>Change</b>
Salaries and Benefits	<b>\$132.1</b>	\$126.0	\$6.1
Occupancy Costs and Equipment Leases	<b>3.1</b>	3.1	-
Telecommunication and Hardware and Software Maintenance Costs	<b>14.0</b>	14.5	(0.5)
Consultants and Contract Staff	<b>11.1</b>	11.8	(0.7)
Outsourced Contracts and Professional Fees	<b>10.2</b>	10.2	-
Training, Travel, and Other costs	<b>8.0</b>	8.0	-
<b>Total</b>	<b>\$178.5</b>	\$173.6	\$4.9

**O&M Budget**: The divisional changes are largely driven by personnel costs.

<b>O&amp;M Budget by Division (\$ in millions)</b>	<b>2018 Proposed Budget</b>	<b>2017 Budget</b>	<b>Change</b>
Chief Executive Officer Division	<b>\$20.6</b>	\$19.3	\$1.3
Market and Infrastructure Development	<b>16.1</b>	15.7	0.4
Technology	<b>65.8</b>	63.4	2.4
Operations	<b>44.0</b>	43.1	0.9
General Counsel	<b>13.4</b>	13.5	(0.1)
Market Quality and Renewables Integration	<b>7.8</b>	7.5	0.3
Customer and State Affairs	<b>8.0</b>	8.2	(0.2)
Regional and Federal Affairs	<b>2.8</b>	2.9	(0.1)
<b>Total</b>	<b>\$178.5</b>	\$173.6	\$4.9

## O&M Budget: We leverage an activity based costing structure for further transparency.

- Six summary activities identified at the first level
- Tracking time by level II activities
- ABC utilized to develop 2015 GMC update with great stakeholder support
- ABC provides further insight into resource utilization



**Debt Service**: Annual requirement remains at \$16.9 million on outstanding 2013 bonds.

- \$178.3 million of bond principal outstanding
- \$16.9 million requirement consists of:
  - \$13.5 million in debt payments due to bondholders, and
  - \$3.4 million to be collected for required reserve
- Level annual debt service until February 2039
  - Bonds are callable February 2023

**Capital/Project**: The proposed annual capital/project budget is currently targeted at \$18 million.

- Proposed revenue requirement contains a \$22 million cash funded capital component
- Total project approvals are targeted at \$18 million for further market enhancements and regular capital
- \$4 million difference will add to capital reserves
- Draft of potential projects is contained within the budget book, which ultimately will be prioritized down to the final budgeted amount

**Other Costs and Revenues:** EIM growth remains the main driver in the reduction of the revenue requirement.

<b>Other Costs and Revenue (\$ in millions)</b>	<b>2018 Proposed Budget</b>	<b>2017 Budget</b>	<b>Change</b>
Energy Imbalance Market Administrative Charges	<b>\$7.4</b>	\$4.8	\$2.6
Intermittent Resource Forecasting Fees	<b>3.2</b>	2.1	1.1
Interest Earnings	<b>2.5</b>	2.1	0.4
California-Oregon Intertie Path Operator Fees	<b>2.0</b>	2.0	-
Large Generator Interconnection Projects	<b>1.2</b>	1.9	(0.7)
Other Fees and Charges	<b>0.4</b>	0.4	-
<b>Total</b>	<b>\$16.7</b>	\$13.3	\$3.4

**Operating Cost Reserve Adjustment:** Annual true-up will reduce the revenue requirement by \$3.5 million.

<b>Operating Cost Reserve Adjustment (\$ in millions)</b>	<b>2018 Proposed Budget</b>	<b>2017 Budget</b>	<b>Change</b>
Increase in 15% reserve for O&M budget	<b>\$(0.7)</b>	\$(0.6)	\$0.1
25% debt service collection from prior year	<b>3.4</b>	3.4	-
True-up of actual to forecast revenues and expenses	<b>0.8</b>	3.1	2.3
<b>Total</b>	<b>\$3.5</b>	\$5.9	\$2.4

## 2018 GMC rates developed using updated cost category percentages.

<b>Grid Management Charges</b>	<b>2018 Proposed Rates <sup>(1)</sup></b>	<b>2017 Rates</b>	<b>Change</b>
<b>Market Services</b>	<b>\$0.1051</b>	\$0.0854	\$0.0197
<b>System Operations<sup>(2)</sup></b>	<b>\$0.2834</b>	\$0.3025	(\$0.0191)
<b>CRR Services</b>	<b>\$0.0043</b>	\$0.0059	(\$0.0016)
<b><u>Miscellaneous Fixed Fees</u></b>			
Bid segment fee	<b>\$0.005</b>	\$0.005	n/a
Inter-SC trade fee	<b>\$1.00</b>	\$1.00	n/a
CRR auction bid fee	<b>\$1.00</b>	\$1.00	n/a
TOR charges	<b>\$0.24</b>	\$0.24	n/a
Monthly SC-ID fee	<b>\$1,000</b>	\$1,000	n/a

CRR = Congestion Revenue Rights; SC = Scheduling Coordinator; TOR = Transmission Ownership Rights

(1) Rates will be finalized during December 2018 Board meeting.

(2) System Operations volumes exclude specified grandfathered contracts.

## Key calendar dates and next steps.

Upcoming Events	Date
Stakeholder comments due to ISO Send to <a href="mailto:initiativecomments@caiso.com">initiativecomments@caiso.com</a>	November 14
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