



Memorandum

To: ISO Board of Governors

From: Ryan Seghesio, Vice President, Chief Financial Officer & Treasurer

Date: December 9, 2020

Re: **Decision on 2021 budget**

This memorandum requires Board action.

This memorandum summarizes the final 2021 GMC revenue requirement proposal that the Board is requested to approve and which will become effective January 1, 2021. A high-level review of the key budget sections follows in the discussion and analysis section; however, a more detailed description and review of the budget can be found in the 2021 Budget and Grid Management Charge Rates book, included as *Attachment A*.

At \$181.6 million, the proposed GMC revenue requirement is the lowest revenue requirement since 2006. The proposed amount is \$5.4 million less than the 2020 GMC revenue requirement. The ISO is able to propose this lower GMC revenue requirement primarily due to the diversified revenue streams achieved through the RC, EIM, and Nodal Pricing Model supplemental services. As a result of the diversified revenue streams and corporate fiscal management the ISO is able to develop well-rounded budgets for its capital and operational needs all at an overall lower cost to its stakeholders.

Management recommends the following motion:

Moved, that the ISO Board of Governors approves the 2021 GMC revenue requirement, capital/project budget, and resulting rates as set forth in Attachment A to the memorandum dated December 9, 2020.

DISCUSSION AND ANALYSIS

The annual revenue requirement is an integral component of the ISO's planning process and reflects the priorities and commitments made in the ISO's strategic vision.

The 2021 GMC revenue requirement, at \$181.6 million, is approximately \$20.4 million less than the FERC-approved \$202 million cap. The 2021 GMC revenue requirement is also \$5.4 million lower in comparison to the 2020 GMC revenue requirement. The ISO

projects that the 2021 transmission volume will decrease to 237.3 terawatt-hours (TWh), which results in a pro-forma bundled cost per megawatt-hour (MWh) of \$0.7653, or a decrease of \$0.0191 per MWh from 2020.

The 2021 GMC revenue requirement was developed using the most recent cost of service study results. The ISO completed its scheduled triennial cost of service study in 2020, in accordance with its tariff. The study used activity based costing to analyze cost and time data from 2019 to determine how much time and effort staff uses to support varying cost categories and supplemental services. The updated cost percentage allocations and fees, as a result of the cost of service study, will be used to develop the 2021 through 2023 GMC revenue requirement and resulting charges. The updated cost category allocation percentages are used to allocate the revenue requirement to the market services, system operations, and congestion revenue rights (CRR) services. The study results are also used to update the energy imbalance market cost category percentages and the recently developed reliability coordinator (RC) funding percentage. In addition, as part of the cost of service study, the ISO analyzed its cost to support supplemental services.

The GMC revenue requirement has five components:

- operating and maintenance (O&M) budget
- debt service;
- cash funded capital;
- other costs and revenues; and
- operating cost reserve adjustment from prior year.

A summary of the 2021 GMC revenue requirement compared to 2020 is as follows.

GMC Revenue Requirement (\$ in millions)	2021 Budget	2020 Budget	Change \$	Change %
Operations & Maintenance Budget	\$200.8	\$195.0	\$5.8	3%
Debt Service (including 25% reserve)	16.9	16.9	0.0	0%
Cash Funded Capital	28.0	28.0	0.0	0%
Other Costs and Revenues	(50.5)	(41.3)	(9.2)	22%
Operating Costs Reserve Adjustment	(13.6)	(11.6)	(2.0)	17%
Total GMC Revenue Requirement	\$181.6	\$187.0	(\$5.4)	-3%
Transmission Volume Estimate in TWh	237.3	238.4	(1.1)	0%
Pro-forma bundled cost per MWh	\$0.7653	\$0.7844	(\$0.0191)	-2%

Operating and Maintenance Budget

The O&M budget is the largest component of the revenue requirement; it accounts for the majority of the total revenue requirement. The 2021 proposed O&M budget is \$200.8 million, representing a \$5.8 million increase over 2020. The 2021 Budget and Grid Management Charge Rates book, included as *Attachment A*, presents the O&M budget in three different perspectives: delivery of services (objectives and processes), utilization of resources, and divisional costs.

A summary of the 2021 O&M budget by resource compared to 2020 is as follows.

O&M Budget by Resource (\$ in millions)	2021 Budget	2020 Budget	Change
Salaries and Benefits	\$150.7	\$145.7	\$5.0
Occupancy Costs and Equipment Leases	3.0	2.9	0.1
Telecom, HW/SW Maintenance Costs	14.2	14.4	(0.2)
Consultants and Contract Staff	13.1	12.7	0.4
Outsourced Contracts and Professional Fees	12.0	11.7	0.3
Training, Travel, and Other costs	7.8	7.6	0.2
Total	\$200.8	\$195.0	\$5.8

- The salaries and benefits category will increase primarily due to 10 additional positions, merit increases and other compensation increases; these increases are slightly offset by a reduced benefit burden need.
- The occupancy costs and equipment category will see a nominal increase due to planned cyclical non-capital equipment replacements.
- The telecommunications and hardware and software maintenance category will decrease slightly due to reduced negotiated telecommunication costs.
- The consultants and contract staff category will increase due to need for additional outsourced resources.
- The outsourced contacts and professional fees will increase due to additional outsourced tools to support RC services.

- The travel, training and other costs category will increase primarily due an anticipated insurance premium increase.

Debt Service

The debt service component of the 2021 GMC revenue requirement will remain at \$16.9 million. Debt service includes the principal and interest amounts due, plus the required 25 percent reserve. The outstanding bond principal going into 2021 is \$158 million (assuming the GMC revenue requirement cycle).

A summary of debt service is as follows.

Debt Service (\$ in millions)	2021 Budget	2020 Budget	Change
Principal payments	\$5.6	\$5.4	\$0.2
Interest payments	7.9	8.1	(0.2)
Subtotal	13.5	13.5	-
25% debt service reserve	3.4	3.4	-
Total Debt Service	\$16.9	\$16.9	\$-

Capital and Project Budget / Cash Funded Capital

The proposed GMC revenue requirement includes a collection of \$28 million for cash funded capital.

The 2021 capital/project budget is requested to be set at \$22 million. The current list of proposed projects that would consume the \$22 million budget is contained in *Attachment A*. These projects, and other proposed projects, will continue to be prioritized in 2021 under the ISO’s capital/project approval process.

The excess capital amount collected, or \$6 million, will be contributed to the long term capital reserve. The reserve contributes to the ability of the ISO to offer stable GMC revenue requirements year over year.

Other Costs and Revenues

Other costs and revenue will increase by \$9.2 million to \$50.5 million, primarily due to increased revenues from the, new to 2021, Nodal Pricing Model fee and additional EIM participants. This component, representing net revenues received outside of the GMC, lowers the overall GMC revenue requirement. By diversifying its revenue streams, the ISO is able to maintain a favorable revenue requirement (and ultimately favorable rates) while still developing well-rounded O&M and capital budgets that serves its needs.

A summary of other costs and revenues is as follows.

Other Costs and Revenue (\$ in millions)	2021 Budget	2020 Budget	Change
Reliability Coordinator Funding Requirement	\$18.0	\$18.5	(\$0.5)
Energy Imbalance Market Administrative Charges	11.4	9.5	1.9
Nodal Pricing Model Fee	8.4	-	8.4
Intermittent Resource Forecasting Fees	4.5	4.5	-
Interest Earnings	4.2	3.9	0.3
Generation Interconnection Project Fees	1.6	1.4	0.2
HANA Administrative Fees	0.9	0.9	-
Scheduling Coordinator Application and Other Fees	0.8	0.6	0.2
California-Oregon Intertie Path Operator Fees	0.7	2.0	(1.3)
Total Other Costs and Revenue	\$50.5	\$41.3	\$9.2

EIM administrative charges are projected to increase to \$11.4 million in 2021 due to increased participation in the market. The Western EIM currently has ten participating members in eight western states and produced over \$1 billion dollars in gross benefits (as of the third quarter of 2020) since its launch in 2014. New participants scheduled for 2021 include Balancing Authority of Northern California (phase 2), Los Angeles Department of Water and Power, NorthWestern Energy, Public Service Company of New Mexico, and Turlock Irrigation District.

New to 2021 is the nodal pricing model fee, which stems from an agreement between the ISO and PacifiCorp. Per the agreement, the ISO will modify its existing day-ahead optimization systems to provide a nodal pricing model solution for PacifiCorp. The ISO will produce separate day-ahead nodal pricing results within PacifiCorp's balancing authority areas (i.e., PacifiCorp East and PacifiCorp West), without a financial settlement or impact to the ISO's day-ahead market. The annual revenue to offset the costs necessary to provide this service is \$8.4 million

The ISO is proposing to decrease the California-Oregon intertie (COI) path operator fee from \$2 million to \$0.7 million. The fee reduction is primarily driven by the ISO's recent RC service provider offering; specifically, because some of the responsibilities as COI path operator and RC service provider are redundant. The fee reduction is also supported by the 2019 cost of service study results. The ISO is currently in the process of renegotiating the fee with the COI path operator agreement participants and filing the request with FERC.

Operating Cost Reserve Adjustment

The operating cost reserve adjustment is primarily the cumulative result of the actual results versus the budgeted revenue requirement and the 25% debt service reserve collection from

the prior year. For 2021, the ISO forecasts a credit from the operating reserve account of \$13.6 million based on the trued-up activity from 2019.

As with other revenue, this credit adjustment helps bring the revenue requirement below the \$202 million cap.

A summary of the operating reserve adjustment is as follows.

Operating Cost Reserve Adjustment (\$ in millions)	2021 Budget	2020 Budget	Change
Change in the 15% reserve for O&M budget	(\$0.9)	(\$0.9)	\$0.0
25% debt service collection from prior year	3.4	3.4	(0.0)
True-up of budget to actual revenues and other	11.1	9.1	2.0
Total Operating Cost Reserve Credit / (Debit)	\$13.6	\$11.6	\$2.0

Grid Management Charge Rates, Fees, and Charges

The 2021 GMC and other rates were developed using the updated cost category percentages derived from the 2019 cost of service study.

The study results indicate a 17% shift of resources (time and dollars) from the system operations cost category to the market services cost category; the CRR service cost category percentage remains the same. The shift from the system operations cost category to the market services cost category is primarily driven by process efficiencies, system improvements, the introduction of the RC services cost category, and automation of services.

A summary of GMC cost category percentage changes is provided below.

Cost Category	2016 Study Effective 2018 GMC	2019 Study Effective 2021 GMC	Increase / (Decrease) from Prior
Market Services	32%	49%	17%
System Operations	66%	49%	-17%
CRR Services	2%	2%	0%

The results also indicate a shift of EIM related resources as well. The study shows that 16% of market services' resources shifted from the real time market functions to day ahead market functions. In addition, 11% of system operations' resources shifted from balancing authority functions to real time dispatch functions. The driver of the shifts is a balancing of efforts between the market services and system operations functions and responsibilities.

A summary of the EIM cost category percentage changes is provided below.

Cost Category	Sub-Category	2016 Study Effective 2018 GMC	2019 Study Effective 2021 GMC	Increase / (Decrease) from Prior
Market Services	Real Time Market	79%	63%	-16%
	Day Ahead Market	21%	37%	16%
System Operations	Real Time Dispatch	39%	50%	11%
	Balancing Authority	61%	50%	-11%

New to the triennial cost of service study is the analysis of RC services efforts. The study results indicate there is no change in the RC funding percentage from that of the initial calculation as part of ISO's Reliability Coordinator Rate Design, Terms and Conditions proposal; the funding percentage will remain at 9%.

The ISO also used the 2019 cost of service study to analyze efforts that support other supplemental services. The study results indicate resources to process statements increased. Whereas, resources to support transmission ownership rights (TOR) efforts decreased. The ISO is changing its Scheduling Coordinator ID fee and TOR fee based on the study results. The revenue collected from the fees offset the costs recovered through GMC rates.

A comparison of the proposed 2021 rates and 2020 rates is as follows (\$ per unit).

Charge Code	Summary of Charges, Fees, and Rates	2021 Rate	2020 Rate	Change \$	Billing Unit
Grid Management Charges					
4560	Market Service Charge	\$0.1485	\$0.0994	\$0.0491	per MWh
4561	Systems Operations Charge	\$0.2043	\$0.2788	(\$0.0745)	per MWh
4562	CRR Services Charge	\$0.0048	\$0.0078	(\$0.0030)	per MWh
Miscellaneous Fixed Fees					
701	EIR Forecast Fee	\$0.1000	\$0.1000	\$0.0000	per MWh
4512	Inter-SC Trade Fees	\$1.00	\$1.00	\$0	per # of trades
4515	Bid Segment Fees	\$0.0050	\$0.0050	\$0.0000	per # of bid segments
4516	CRR Auction Bid Fees	\$1.00	\$1.00	\$0.0000	per # of nominations and bids
4563	TOR Fees	\$0.1800	\$0.2400	(\$0.0600)	per MWh
4575	SCID Fees (monthly)	\$1,500	\$1,000	\$500	per # of SCID
Supplemental Services Rates					
4564	EIM Market Service	\$0.0936	\$0.0785	\$0.0150	per MWh
4564	EIM System Operations	\$0.1022	\$0.1087	(\$0.0066)	per MWh
5701	RC Service Rate	\$0.0278	\$0.0278	\$0.0000	per MWh

Budget Process

The ISO has provided several opportunities for public review and comment on the draft budget. This public input process commenced with a July budget kickoff meeting with stakeholders and followed with a stakeholder call held in November. The ISO posted materials from the meetings as well as stakeholder comments and ISO responses on its website. The stakeholder comments consisted of clarifying questions regarding items such as planned 2021 projects, additional headcount drivers, 2020 financial summaries, division budget increase drivers, along with general O&M questions; the consensus was the stakeholders were supportive of the GMC revenue requirement. With Board approval, the ISO will post the proposed GMC rates on its website to be effective on January 1, 2021.

It should be noted that post-decision minor adjustments are sometimes required to align line items within the O&M budget due to final year-end headcount and cost center reorganizations. These year-end adjustments will not affect the final total approved budget.

Conclusion

The proposed 2021 GMC revenue requirement will provide sufficient funding to enable the ISO to deliver on the commitments it made to achieve its vision while still maintaining costs for stakeholders. Therefore, Management recommends that the Board approve the GMC revenue requirement attached to this memorandum.