

Memorandum

To: ISO Board of Governors

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

Date: December 9, 2021

Re: Decision on 2022 budget

This memorandum requires Board action.

This memorandum summarizes the final 2022 GMC revenue requirement proposal that the Board is requested to approve and which will become effective January 1, 2022. 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 2022 Budget and Grid Management Charge Rates book, included as *Attachment A*.

At \$182.6 million, the proposed 2022 GMC revenue requirement is \$1 million higher than the 2021 GMC revenue requirement. The ISO is able to propose a nominal increase over the prior year's revenue requirement despite considerable upward cost pressures in the labor market and additional headcount primarily due to a large cost reserve adjustment credit, additional energy imbalance market (EIM) revenue, and a reduction in debt service needs. The result provides for well-rounded capital and operational budgets all at an overall reasonable cost to its stakeholders.

Management recommends the following motion:

Moved, that the ISO Board of Governors approves the 2022 GMC revenue requirement, capital/project budget, and resulting rates as set forth in Attachment A to the memorandum dated December 9, 2021.

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 2022 GMC revenue requirement, at \$182.6 million, is approximately \$19.4 million less than the FERC-approved \$202 million cap. The 2022 GMC revenue requirement is \$1 million higher in comparison to the 2021 GMC revenue requirement. The draft final (current) version of GMC revenue requirement is \$0.5 million higher than the draft

Finance/FPP/A. Gordon Page 1 of 7

version presented in November 2021. The additional amount is due to additional operations and maintenance (O&M budget) and a slight decrease in the operating cost reserve credit, offset by an increase in other revenue. The additional O&M budget is primarily driven by 3 additional positions, additional consultant work, and additional subscription fees; the additional budget needs are slightly offset by an increase in the vacancy discount credit. The decrease in the operating cost reserve credit is due to the change in the O&M budget reserve. The other revenue increase is driven by higher projected forecasting fees due to additional EIM entities coming on board in the spring of 2022.

The ISO projects that the 2022 transmission volume will decrease to 233.5 terawatt-hours (TWh), which results in a pro-forma bundled cost per megawatt-hour (MWh) of \$0.7820, or a decrease of \$0.0167 per MWh from 2021.

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 EIM 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:

- · operations and maintenance budget;
- debt service;
- cash funded capital;
- other costs and revenues; and
- operating cost reserve adjustment.

FINANCE/FPP/A. Gordon Page 2 of 7

A summary of the 2022 GMC revenue requirement compared to 2021 is as follows.

GMC Revenue Requirement	2022 Budget	Change in	2022	2021	Change
(\$ in millions)	DRAFT	Versions	Budget	Budget	\$
Operations & Maintenance Budget	\$209.8	\$0.9	\$210.7	\$200.8	\$9.9
Debt Service (including 25% reserve)	14.7	-	14.7	16.9	(2.2)
Cash Funded Capital	30.0	-	30.0	28.0	2.0
Other Costs and Revenues	(53.2)	(0.5)	(53.7)	(50.5)	(3.2)
Operating Cost Reserve Adjustment	(19.2)	0.1	(19.1)	(13.6)	(5.5)
Total GMC Revenue Requirement	\$182.1	\$0.5	\$182.6	\$181.6	\$1.0
Transmission Volume Estimate in TWh	233.5	0.0	233.5	237.3	(3.8)
Pro-forma bundled cost per MWh	\$0.7799	\$0.0021	\$0.7820	\$0.7653	\$0.0167

Operations 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 2022 proposed O&M budget is \$210.7 million, representing a \$9.9 million increase over 2021. 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 functional costs.

A summary of the 2022 O&M budget by resource compared to 2021 is as follows.

- The salaries and benefits category will increase primarily due to 25 additional positions, merit increases and other compensation increases; these increases are slightly offset by a reduced benefit burden rate and a vacancy discount rate.
- The occupancy costs and equipment category will see a nominal decrease 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 and decreased software maintenance needs.
- The consultants and contract staff category will increase due to need for additional outsourced resources.

FINANCE/FPP/A. Gordon Page 3 of 7

- The outsourced contracts and professional fees category will increase due to additional outsourced tools and a migration of software licenses to subscription based support.
- The travel, training and other costs category will increase primarily due to anticipated insurance premium increases.

Debt Service

The debt service component of the 2022 GMC revenue requirement will reduce by \$2.2 million to \$14.7 million. Debt service includes the principal and interest amounts due on the Series 2021 bonds, plus the required 25 percent reserve. The outstanding bond principal going into 2022 is \$174.4 million (assuming the GMC revenue requirement cycle).

The Series 2021 bonds were issued in January 2021 to refinance the 2013 bonds. The refinancing of the 2013 bonds will save the ISO approximately \$30 million in principal and interest over the life of the bonds. The 2013 bonds were issued to finance the ISO's headquarters facility in Folsom, California and to fund other capital expenditures. Below is the future amortization schedule for the 2021 bonds. Note: The bonds are callable on February 1, 2031

A summary of debt service is as follows.

Debt Service (\$ in millions)	2022 Budget	2021 Budget	Change
Principal payments	\$8.7	\$5.6	\$3.1
Interest payments	3.0	7.9	(4.9)
Subtotal	11.7	13.5	(1.8)
25% debt service reserve	3.0	3.4	(0.4)
Total Debt Service	\$14.7	\$16.9	(\$2.2)

Capital and Project Budget / Cash Funded Capital

The proposed GMC revenue requirement includes a collection of \$30 million for cash funded capital.

The 2022 capital/project budget is requested to be set at \$20 million. The current list of proposed projects that would consume the \$20 million budget is contained in *Attachment A*. These projects, and other proposed projects, will continue to be prioritized in 2022 under the ISO's capital/project approval process.

The excess capital amount collected, or \$10 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.

FINANCE/FPP/A. Gordon Page 4 of 7

Other Costs and Revenues

Other costs and revenue will increase by \$3.2 million to \$53.7 million, primarily due to increased revenues from 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 serve its needs.

A summary of other costs and revenues is as follows.

Other Costs and Revenue (\$ in millions)	2022 Budget	2021 Budget	Change
Reliability Coordinator Funding Requirement	\$18.0	\$18.0	\$0.0
Energy Imbalance Market Administrative Charges	14.1	11.4	2.7
Nodal Pricing Model Fee	8.4	8.4	-
Intermittent Resource (wind and solar) Forecasting Fees	5.0	4.5	0.5
Interest Earnings	3.8	4.2	(0.4)
Generation Interconnection Project Fees	2.0	1.6	0.4
HANA Administrative Fees	0.9	0.9	-
Scheduling Coordinator Application and Other Fees	0.8	0.8	-
California-Oregon Intertie Path Operator Fees	0.7	0.7	-
Total Other Costs and Revenue	\$53.7	\$50.5	\$3.2

EIM administrative charges are projected to increase to \$14.1 million in 2022 due to increased participation in the market. The Western EIM currently has fifteen participating members in eight western states and produced over \$1.4 billion dollars in gross benefits since its launch in November 2014. New participants scheduled for 2022 include Avista, Bonneville Power Administration, Tacoma Power, and Tucson Electric Power.

Forecasting fees are projected to increase as additional EIM entities onboard and as indicated by prior year trends.

Interest earnings are projected to decrease to \$3.8 million due to an anticipated rising interest rate environment in 2022, which could lead to lower overall returns for the year.

Fees for conducting generator interconnection project studies are expected to increase to \$2 million due to an increase in project requests.

All other components of this category are projected to remain unchanged.

FINANCE/FPP/A. Gordon Page 5 of 7

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 2022, the operating cost reserve credit adjustment of \$19.1 million is based on the trued-up activity from 2020.

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)	2022 Budget	2021 Budget	Change
Change in the 15% reserve for O&M budget	(\$1.5)	(\$0.9)	(\$0.6)
25% debt service collection from prior year	3.4	3.4	(0.0)
True-up of budget to actual revenues and expenses	17.2	11.1	6.1
Total Operating Cost Reserve Credit / (Debit)	\$19.1	\$13.6	\$5.5

Grid Management Charge Rates, Fees, and Charges

The 2022 GMC and other rates were developed using the updated cost category percentages derived from the 2019 cost of service study.

A comparison of the proposed 2022 rates and 2021 rates is as follows (\$ per unit).

Charge	Summary of Charges, Fees, and	2022	2021	Change			
Code	Rates	Rate	Rate	\$	Billing Unit		
	Grid Management Charges						
4560	Market Service Charge	\$0.1484	\$0.1485	(\$0.0001)	per MWh		
4561	Systems Operations Charge	\$0.2004	\$0.2043	(\$0.0039)	per MWh		
4562	CRR Services Charge	\$0.0055	\$0.0048	\$0.0007	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	\$0.1800	\$0.0000	per MWh		
4575	SCID Fees (monthly)	\$1,500	\$1,500	\$0	per # of SCID		
Supplemental Services Rates							
4564	EIM Market Service	\$0.0935	\$0.0936	(\$0.0001)	per MWh		
4564	EIM System Operations	\$0.1002	\$0.1022	(\$0.0020)	per MWh		
5701	RC Service Rate	\$0.0282	\$0.0278	\$0.0004	per MWh		

FINANCE/FPP/A. Gordon Page 6 of 7

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 inquiries into and / or clarifying questions regarding current projects, planned 2022 projects, and potential budget impacts as a result of the Board of Governors and EIM Governing Body joint authority model. There was also a request for additional project information (e.g., project descriptions and costs) to be shared as part of the GMC revenue requirement stakeholder process to which the ISO team is working collaboratively to address the request going into the next revenue requirement cycle. The general 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, 2022.

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 2022 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.

FINANCE/FPP/A. Gordon Page 7 of 7