

Executive Committee Meeting

June 12, 2023

Agenda

- Call to Order / Roll Call
- Public Comment (for items not on the Agenda)
- Action to set the Agenda
 - Public Comment
- Regular Agenda
- Committee Members Reports
- Adjourn



Chair Report

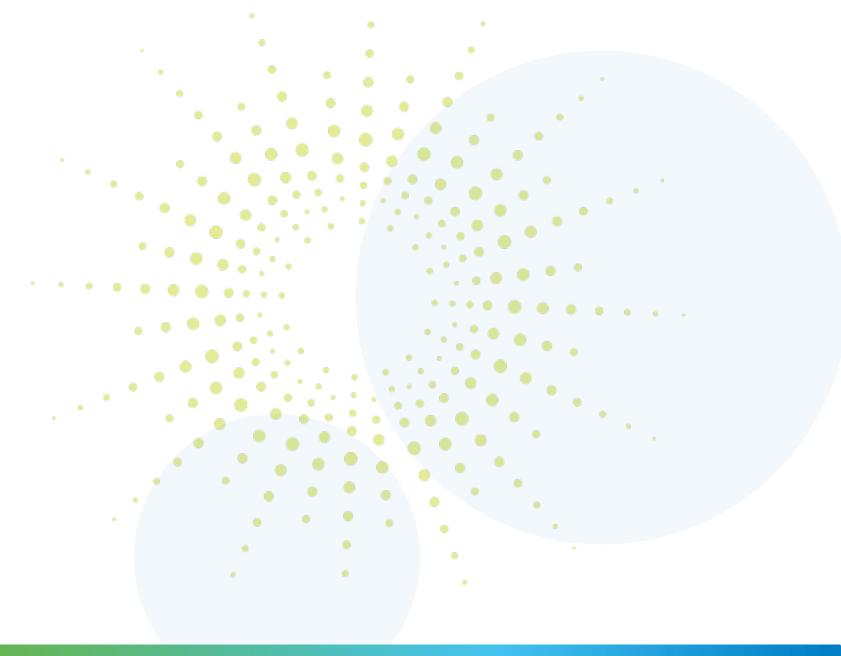
Item 1





CEO Report

Item 2



Open Positions

Currently posted:

- Power Resources Analyst / Specialist
- Account Services Specialist
- Senior Analyst, Account Services
- Senior Manager, Local Power Development



Coming soon:

o CFO

FY 2023-2024 (July 1, 2023 – June 30, 2024)

Budget Review

Revised Draft

Schedule – Budget Review and Approval

- May 16, 2023 Review Initial Draft Budget with Audit & Finance Committee
- May 25, 2023 Review Initial Draft Budget with Board of Directors
- June 12, 2023 Review Revised Draft Budget with Audit & Finance Committee
- June 12, 2023 Review Revised Draft Budget with Executive Committee
- June 22, 2023 Approve Final Budget by Board of Directors

Revisions Since Initial Draft Budget

- Update to year-end FY23 forecast reflecting April 2023 financial results
- Minor adjustments to Programs Budget
- Modification to assumptions of Gov PV prepayment for conservatism
- Minor modifications to Days Cash on Hand calculation

Draft Budget FY2023-2024 – Key Assumptions (Page 1 of 2)

Revenues

- PG&E Generation Rates Slight decline in rates for next 4 years
 - January 1, 2024 Increase 1%
- o PCIA Rates Continuing decrease in rates as of January 1, 2024
 - January 1, 2024
 - San Mateo Drop to \$0.00 from already low rate
 - Los Banos Drop to \$0.00 from already low rate
 - o After 2024
 - Significant increases for next 4 years, near to rates of 2022, but still not approaching rates of 2021
- Customer Rates to PCE Relatively flat for next 3 years, then lower in 2027 and 2028 (but still well above low year of 2021)

Draft Budget FY2023-2024 – Key Assumptions (Page 2 of 2)

Cost of Energy –

- Budgeted at \$311 million Increase of \$39 million (14%) over FY23 forecast
- Overall budget includes 2 conservatism contingencies
 - Energy Cost Volatility = \$15 million/year
 - 99% of 24x7 Hourly Renewable Project Delays = \$56 million over 5 years; \$770K in FY24
- Total cost is 9% higher than FY23 forecast without conservatism adders

Non-expense Capital Outflows/Inflows

- Solar and Storage on Public Buildings
 - Capital Outlay and Investment Tax Credit
 - o PV1 \$7.4 million outflow in FY24; \$2.2 million ITC inflow in FY26
 - PV2 \$43.0 million in FY25; \$15.0 million ITC inflow in FY27
 - Repayment based on usage over 20-year period
- Ongoing On-Bill Finance Programs

Revised Draft Budget (FY23 Forecast and FY24 Summary)

		Fiscal Year			
	Fiscal Year 2023 2023		2023	2024	
	Budget	Forecast	Variance - Fav/(Unf)	Revised Draft Budget	
OPERATING REVENUES					
Electricity Sales, net	364,961,141	429,685,416	64,724,275	471,670,872	
Green electricity premium	2,822,550	2,999,401	176,851	2,953,162	
	367,783,691	432,684,817	64,901,127	474,624,034	
OPERATING EXPENSES					
Cost of energy	264,208,440	270,221,267	(6,012,827)	311,261,389	
Staff compensation	8,583,221	7,939,828	643,393	10,922,801	
Data Manager	3,600,000	3,583,331	16,669	3,871,152	
Service Fees - PG&E	1,350,000	1,309,818	40,182	1,400,000	
Consultants & Professional Services	1,431,813	1,001,289	430,524	1,788,491	
Legal	1,474,000	1,299,487	174,513	1,574,558	
Communications and Noticing	2,686,208	1,409,113	1,277,095	2,850,940	
General and Administrative	2,359,806	2,286,167	73,639	4,027,236	
Community Energy Programs	8,640,000	7,946,237	693,763	12,726,000	
Depreciation	96,000	78,870	17,130	234,750	
Total Operating Expenses	294,429,488	297,075,405	(2,645,917)	350,657,317	
Operating Income (Loss)	73,354,203	135,609,412	62,255,209	123,966,717	
NON-OPERATING REVENUES (EXP.)					
Total Nonoperating Income/(Expense)	600,000	3,033,812	2,433,812	645,192	
CHANGE IN NET POSITION	73,954,203	138,643,224	64,689,022	124,611,909	
			,,,,,,		
Net Position at the beginning of period	174,211,272	167,670,734	(6,540,538)	300,430,872	
Net Position at the end of period	248,165,475	306,313,958	58,148,484	425,042,781	
Total Cash & Cash Equivalents (after GOV PV programs)		262,859,728		377,161,637	
Unrestricted Cash Days on Hand		323		393	



FY24 Budget Approval: Total **Operating Expenses**

Revised Draft Budget FY2024-2028 – 5-year Outlook

			Fiscal Year			
	2024 2025 2026 2027 20					
	Revised Draft Budget	Forecast (FY)	Forecast (FY)	Forecast (FY)	Forecast (FY)	
OPERATING REVENUES						
Electricity Sales, net	471,670,872	484,233,036	482,737,236	452,054,000	402,863,67	
Green electricity premium	2,953,162	2,961,637	2,978,004	2,994,557	3,019,18	
	474,624,034	487,194,674	485,715,240	455,048,558	405,882,85	
OPERATING EXPENSES						
Cost of energy	311,261,389	383,611,464	382,474,223	344,299,885	329,946,42	
Staff compensation	10,922,801	11,578,169	12,272,859	13,009,231	13,789,78	
Data Manager	3,871,152	4,103,421	4,349,626	4,610,604	4,887,24	
Service Fees - PG&E	1,400,000	1,484,000	1,573,040	1,667,422	1,767,46	
Consultants & Professional Services	1,788,491	1,091,949	1,119,665	1,168,642	1,199,67	
Legal	1,574,558	1,633,099	1,707,767	1,786,843	1,870,62	
Communications and Noticing	2,850,940	2,964,912	3,048,580	3,134,757	3,223,52	
General and Administrative	4,027,236	3,748,298	3,929,634	4,121,293	4,336,55	
Community Energy Programs	12,726,000	22,130,000	25,781,000	30,355,000	32,935,00	
Depreciation	234,750	1,062,250	2,466,694	2,616,000	2,616,00	
Total Operating Expenses	350,657,317	433,407,562	438,723,088	406,769,676	396,572,28	
Operating Income (Loss)	123,966,717	53,787,112	46,992,152	48,278,882	9,310,57	
NON-OPERATING REVENUES (EXP.)						
Total Nonoperating Income/(Expense)	645,192	673,580	703,218	734,160	766,46	
CHANGE IN NET POSITION	124,611,909	54,460,692	47,695,370	49,013,041	10,077,03	
Net Position at the beginning of period	300,430,872	425,132,781	479,688,873	527,485,368	576,605,60	
Net Position at the end of period	425,042,781	479,593,473	527,384,244	576,498,409	586,682,63	
Fotal Cash & Cash Equivalents (after GOV PV programs)	377,161,637	385,717,729	432,714,223	493,834,456	501,025,11	
Unrestricted Cash Days on Hand	393	326	362	446	46	

Revised Draft Budget FY2024-2028 – 5-year Outlook Impact of Gov PV Programs on Cash Position

	Fiscal Year					
	2024	2025	2026	2027	2028	
	Revised Draft Budget	Forecast (FY)	Forecast (FY)	Forecast (FY)	Forecast (FY)	
OPERATING REVENUES						
Electricity Sales, net	471,670,872	484,233,036	482,737,236	452,054,000	402,863,671	
Green electricity premium	2,953,162	2,961,637	2,978,004	2,994,557	3,019,185	
	474,624,034	487,194,674	485,715,240	455,048,558	405,882,856	
OPERATING EXPENSES						
Total Operating Expenses	350,657,317	433,407,562	438,723,088	406,769,676	396,572,285	
Operating Income (Loss)	123,966,717	53,787,112	46,992,152	48,278,882	9,310,571	
NON-OPERATING REVENUES (EXP.)						
Total Nonoperating Income/(Expense)	645,192	673,580	703,218	734,160	766,463	
CHANGE IN NET POSITION	124,611,909	54,460,692	47,695,370	49,013,041	10,077,033	
Total Cash & Cash Equivalents (before GOV PV programs)	387,561,637	431,717,729	433,514,223	481,834,456	503,275,113	
Net Gov PV Programs (Outflow)/Inflow	(10,400,000)	(46,000,000)	(800,000)	12,000,000	(2,250,000)	
Total Cash & Cash Equivalents (after GOV PV programs)	377,161,637	385,717,729	432,714,223	493,834,456	501,025,113	
Unrestricted Cash Days on Hand	393	326	362	446	464	



24/7 Renewable Energy

Updating Strategic Priority to Deliver 100% Renewable Energy Annually by 2025 and on a 99% Time-Coincident Basis by 2027

June 12, 2023

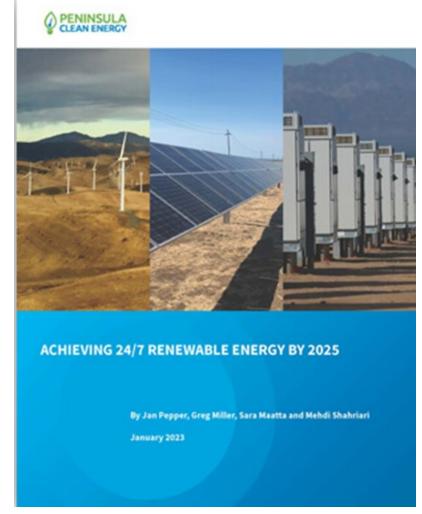
Presentation Outline

- Background
- Challenges with meeting the 24/7 goal in 2025
- Available resources in 2027
- Benefits to shifting the 24/7 target date to 2027
- Recommendation

Background: 24/7 Renewable by 2025

In November 2022, the Board of Directors adopted staff's recommendation* on delivering 100% renewable energy annually on a 99% time-coincident basis by 2025.

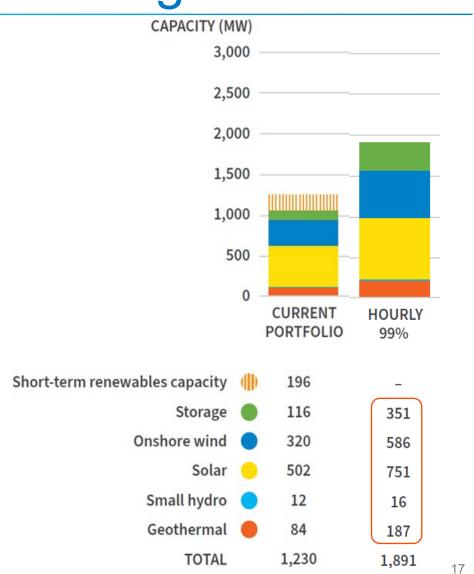
*This recommendation was based on mid-2022 market conditions.



Challenges in Achieving the 2025 Target

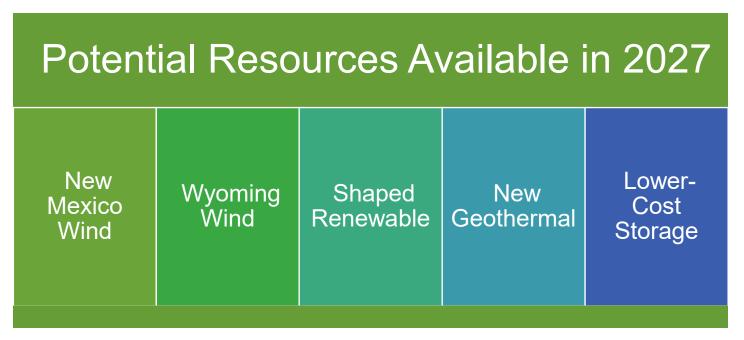
- Delays in resource development have resulted in fewer resources available to deliver renewable energy to PCE by 2025 -
 - Global Supply Chain Disruption
 - Labor Shortage
 - Rising Financing Costs
 - Interconnection Delays
- Short-term contracts with existing renewable resources are unavailable

Achieving the goal in 2025, given the limited resources that are expected to be available and online, would be infeasible.



Resources Available in 2027

• Staff has been updating the 24/7 modeling with information from the 2023 RFOs and bilateral reach-outs to counterparties, and focusing on the possibility of achieving the 24/7 goal by 2027 when more resources are available:



Benefits to Meeting the 24/7 Goal in 2027

Shifting the 99% time-coincident renewable target year from 2025 to 2027 has the following benefits:

- Opportunity to contract a more diverse set of resources
- Opportunity to avoid excessive over-procurement
- Opportunity to reduce long-term cost and risk exposure
- Opportunity to build a more optimal resource portfolio

Recommendation to Board of Directors

Update Peninsula Clean Energy's Strategic Plan Priority to:

- 1. Deliver 100% renewable energy annually by 2025, and
- 2. Deliver 100% renewable energy annually on a 99% time-coincident basis by 2027.





June 12, 2023



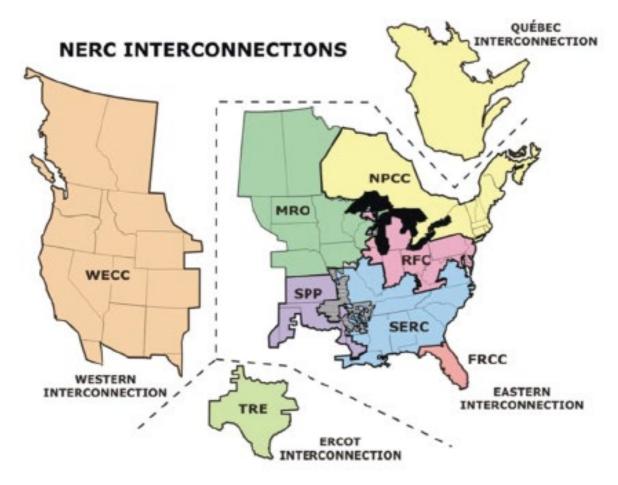
Summary

- The California Legislature is considering a bill that would enable the State's grid operator (CAISO) to expand to other states
- This is a significant policy question that the State has previously considered
- Key stakeholders are split on how the State should approach this issue
- Staff is seeking feedback from the Board on how PCE should approach this issue



The U.S. Power Grid and California

- The U.S. power grid consists of the bulk power system, high-voltage transmission equipment, and the lower-voltage distribution system.
- It is broken into 3 independent grids.
 - The Western Interconnect, which includes 38 separate balancing authorities, including CAISO.
 - The Eastern Interconnect, which includes 36 balancing authorities
 - The Electric Reliability Council of **Texas** (ERCOT)
- The Western Interconnect is overseen by the Western Electric Coordinating Council (WECC)



1. https://www.tanc.us/understanding-transmission/the-western-us-power-system/

Electric System Operations

- The actual operations of the electric system are managed by balancing authorities (BA), which manage the supply and demand of energy across their territory, and transfer of electricity with other BAs
- There are 38 BAs within the WECC, representing about 20% of all generation capacity in the U.S. and Canada.
- BAs are regulated by both the Federal **Energy Regulatory Commission (FERC)** and the North American Electric Reliability Corporation (NERC).



Western Interconnection Balancing Authorities (38)

AESO - Alberta Electric System Operator

AVA - Avista Corporation

AZPS - Arizona Public Service Company

BANC - Balancing Authority of Northern California

BCHA - British Columbia Hydro Authority

BPAT - Bonneville Power Administration - Transmission

CFE - Comision Federal de Electricidad

CHPD - PUD No. 1 of Chelan County

CISO - California Independent System Operator

DEAA - Arlington Valley, LLC

DCPD - PUD No. 1 of Douglas County

EPI - El Paso Electric Company

GCPD - PUD No. 2 of Grant County

GRD - Gridforce

GRF - Griffith Energy, LLC

GRMA - Sun Devil Power Holdings, LLC

GWA - NaturEner Power Watch, LLC

HGMA - New Harquahala Generating Company, LLC

IID - Imperial Irrigation District

IPCO - Idaho Power Company

LOWP - Los Angeles Department of Water and Power

NEVP - Nevada Power Company

NWMT - North Western Energy

PACE - PacifiCorp East

PACW - PacifiCorp West

PGE - Portland General Electric Company

PNM - Public Service Company of New Mexico

PSCO - Public Service Company of Colorado

PS81 - Puget Sound Energy

SCI - Seattle City Light

SRP - Salt River Project

TEPC - Tucson Electric Power Company

TIDC - Turlock Irrigation District

TPWR - City of Tacoma, Department of Public Utilities

WACM - Western Area Power Administration, Colorado-Missouri Region

WALC - Western Area Power Administration, Lower Colorado Region

WALTW - Western Area Power Administration, Upper Great Plains West

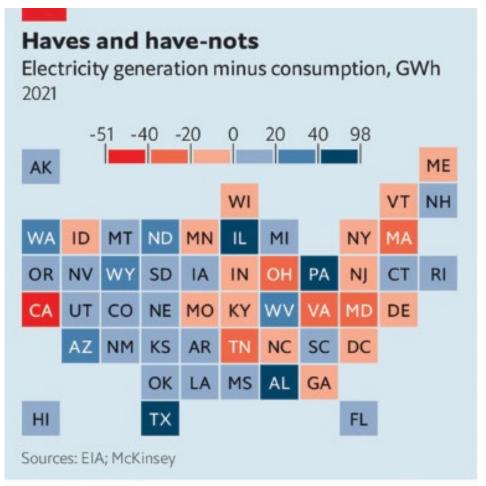
WWA - NaturEner Wind Watch, LLC

CAISO Today

- Overview: The CAISO is both a BA and regional transmission operator that manages the flow of electricity across the high-voltage bulk power system that makes up 80% of California's and a small part of Nevada's electric grid.
- Governance: CAISO is regulated by both the Federal Energy Regulatory Commission (FERC) and the North American Electric Reliability Corporation (NERC).
 - Unlike other RTOs, the CAISO's 5-person governing board is appointed by the California Governor and confirmed by the Senate
- Interstate Markets: CAISO operates 2 markets that involve multiple states and participants:
 - WEIM: The Western Energy Imbalance Market (WEIM), a real-time bulk power trading market that involves 19 voluntary participants (and more coming) across 10 western states
 - EDAM: Building on the success of WEIM, the extended day-ahead market (EDAM) is a voluntary day-ahead electricity market that CAISO will launch in early 2024
- Both market programs are designed to deliver economic, environmental, and reliability benefits to participants by increasing regional coordination

The Need to Revisit Regionalization

- California has set ambitious climate goals to reach 100% clean energy by 2045. CPUC's integrated resource planning analysis shows that the grid would need an additional 86 GWs, more than double what is currently on the grid.
- California needs to import electricity to meet its Resource Adequacy requirements, and to meet the demand of extreme summer heat events.
- There are doubts as to whether California can build the new 86 GW of resources it needs fast enough inside California to both meet climate goals and reliability needs if the supply of imports begins to decline.



The Economist

The Need to Revisit Regionalization, continued

- An existing RTO, the Southwest Power Pool (SPP), is asking Western States to join their new market, called Markets+, similar to CAISO's WEIM and EDAM. Unlike WEIM and EDAM, Markets+ will be operated by a governance board that is not appointed by a specific state or participant.
- Many WEIM participants have already made commitments to leave WEIM for Markets+, jeopardizing resources
 available to WEIM and CAISO.
- Supporters of regionalization have raised concerns that if California doesn't expand to an RTO, resources across Western states will become less and less available to California.



Arguments in Support of Regionalization

- Improved reliability: Better coordination on Resource Adequacy by pooling generation resources across a larger region
- Accelerated decarbonization: Easier to match variable demand and renewable generation across the region; less curtailment of wind and solar resources
- Improved transmission planning: Streamlining the process of long-term resource planning
- Cost reduction: Reduce transmission congestion costs, streamlining the cost of RA/operating reserve to maintain reliability, more efficient use of renewables are estimated to save \$379 Million to \$574 million annually for California electricity customers, approx. 4.5% of total annual costs

Key Supporters

Environmental

- NRDC
- Environmental Defense Fund
- California Environmental Voters (formally CLCV)
- Ceres

Business

- CalChamber
- CA Manufacturing & Technology Association
- CA Community Economic Development Association
- Microsoft
- San Jose Chamber of Commerce
- Silicon Valley Leadership Group

Energy

- CAISO
- American Clean Power
- Apex Clean Energy
- CA Energy Storage Association
- EDF Renewable Energy
- Engie North America
- Independent Energy Producers
- MCE
- Pattern Energy
- Southern California Edison
- Solar Energy Industry Association
- CA Wind Energy Association

Arguments Against Regionalization

- Loss of state control: A regional board of directors will likely be less accountable to California ratepayers and California's environmental and energy policy goals. California will likely only have one vote whereas California's load is much larger than other Western states
- Federal oversight: FERC may have greater oversight over California policies that express preferences for renewable or carbon-free resources and is more subject to national politics and policies
- **Job Creation:** More projects may be built outside of California and California LSEs may purchase more of those resources
- State-level decarbonization: While more states have adopted renewable/carbon-free electricity goals, fossil fuel resources will still be more abundant across the west and therefore may be imported into California more easily

Key Opponents

Environmental

- Sierra Club
- Clean Coalition
- Food and Water Watch
- The Climate Center
- CA Alliance for Community Energy
- CA Climate Voters
- CFROG
- Climate Reality Project Ventura County
- Various 350 chapters
- All indivisible chapters

Labor

- California Labor Federation
- Coalition of California Utility Employees
- CA State Association of Electrical Workers
- CA State Council of Laborers
- CA State Pipe Trades Council

Ratepayer/Other

- Consumer Watchdog
- CMUA
- TURN

AB 538: Regionalization Process

Enable the transition of the CAISO to a regional transmission operator with independent governance. Process:

- Introduced by Asm. Holden, it is possibly a 2-year bill
- CAISO develops and submits a governance proposal to the CEC to meet specific governance requirements (next slide)
- CEC, in consultation with CPUC and CARB, reviews the governance proposal and holds at least 5 public hearings (plus additional verification between agencies)
- Legislature reviews and provides feedback on the structure
- CAISO implements a governance structure, if there is intention from non-participating transmission owners to join and the FERC has approved any changes to CAISO tariff that are necessary. Open to transmission owners, retails sellers, POUs
- Additional checks and balances to ensure compliance with FERC requirements, CEC, CAISO, and the Secretary of State

AB 538: Regionalization Process

Governance requirements include:

- Governance by a western states' committee with an equal number of representatives from each state. California rep is appointed by Governor and confirmed by Senate
- Open meeting standards consistent with Bagley-Keene Act plus public access to records
- Maintaining state authority over state matters related to procurement policy, resource
 planning, and resource or transmission siting within the state, including setting resource
 adequacy standards, and prohibiting the operation of a centralized capacity market
- Ensuring the dispatch of resources appropriately reflects the costs for resources to comply with California's climate policies
- Establishing a clear structure for state regulators to provide guidance to the organization
- Enabling participation of demand response, storage, and distributed energy resources
- Maintaining California's renewable portfolio standard compliance requirements that favor in-state renewable energy development over out-of-state development

Questions and Discussion





Committee Members' Reports

Item 5