



MEETING of the Legislative & Regulatory Committee of the Clean Power Alliance of Southern California

Wednesday, October 26, 2022

10:00 a.m.

SPECIAL NOTICE: Pursuant to the Proclamation of the State of Emergency by Governor Newsom on March 4, 2020, AB 361, and enacting Resolutions, and as a response to mitigating the spread of COVID19, the Legislative & Regulatory Committee will conduct this meeting remotely.

[Visit CPA's YouTube Channel to watch a Live Stream of the Meeting](#)

If the YouTube stream is not working, please use the zoom link.

*There may be a streaming delay of up to 60 seconds. This is a view-only live stream.

To Participate in the Meeting:

<https://us06web.zoom.us/j/88054055308>

or

Dial: (720) 707-2699 Meeting ID: 880 5405 5308

PUBLIC COMMENT: Members of the public may submit their comments by one of the following options:

- **Email Public Comment:** Members of the public are encouraged to submit written comments on any agenda item to clerk@cleanpoweralliance.org up to four hours before the meeting. Written public comments will be announced at the meeting and become part of the meeting record. Public comments received in writing will not be read aloud at the meeting.
- **Provide Public Comment During the Meeting:** Please notify staff via email at clerk@cleanpoweralliance.org at the beginning of the meeting but no later than immediately before the agenda item is called.
 - You will be asked for your name and phone number (or other identifying information) and agenda item similar to filling out a speaker card so that you can be called on when it is your turn to speak.
 - You will be called upon during the comment section for the agenda item on which you wish to speak on. When it is your turn to speak, a staff member will unmute your phone or computer audio.
 - You will be able to speak to the Committee for the allotted amount of time. Please be advised that all public comments must otherwise comply with our Public Comment Policy.
 - Once you have spoken, or the allotted time has run out, you will be muted during the meeting.

If preferred, you may also submit written comments during the meeting via email to: clerk@cleanpoweralliance.org. The written comments will be shared with the Committee.

*While downloading the Zoom application may provide a better meeting experience, Zoom does not need to be installed on your computer to participate. After clicking the webinar link above, click "start from your browser."

Clean Power Alliance Legislative & Regulatory Committee
October 26, 2022

Meetings are accessible to persons with disabilities. Individuals who need special assistance or a disability-related modification or accommodation to participate in this meeting, or who have a disability and wish to request an alternative format for the meeting materials, should contact the Clerk of the Board at least two (2) working days before the meeting at clerk@cleanpoweralliance.org or (323) 640-7664. Notification in advance of the meeting will enable us to make reasonable arrangements to ensure accessibility to this meeting and the materials related to it.

PUBLIC COMMENT POLICY: *The General Public Comment item is reserved for persons wishing to address the Board on any Clean Power Alliance-related matters not on today's agenda. Public comments on matters on today's Consent Agenda and Regular Agenda shall be heard at the time the matter is called. Comments on items on the Consent Agenda are consolidated into one public comment period. Members of the public who wish to address the Board are requested to contact the Board Clerk, as specified above, at the beginning of the meeting but no later than immediately prior to the time an agenda item is called. Each speaker is limited to two (2) minutes (in whole minute increments) per agenda item with a cumulative total of five (5) minutes to be allocated between the General Public Comment, the entire Consent Agenda, or individual items in the Regular Agenda. Please refer to Policy No. 8 – Public Comment for additional information.*

CALL TO ORDER & ROLL CALL

GENERAL PUBLIC COMMENT

CONSENT AGENDA

1. Approve Minutes from September 28, 2022, Legislative & Regulatory Committee Meeting

REGULAR AGENDA

2. Presentation on Reliability Incentive Framework Proposal

COMMITTEE MEMBER COMMENTS

ADJOURN – NEXT MEETING IS NOVEMBER 23, 2022

Public Records: *Public records that relate to any item on the open session agenda for a Committee Meeting are available for public inspection. Those records that are distributed less than 72 hours prior to the meeting are available for public inspection at the same time they are distributed to all, or a majority of, the members of the Committee. Those documents are available for inspection online at www.cleanpoweralliance.org/agendas.*

MINUTES

MEETING of the Legislative & Regulatory Committee of the
 Clean Power Alliance of Southern California
 Wednesday, September 28, 2022, 10:00 a.m.

The Legislative & Regulatory Committee conducted this meeting in accordance with California Governor Newsom’s Executive Order N-29-20 and COVID-19 pandemic protocols.

CALL TO ORDER & ROLL CALL

Committee Chair Lindsey Horvath called the meeting to order at 10:00 a.m. and Raynette Tom, Executive Assistant, conducted roll call.

Roll Call			
Agoura Hills	Deborah Klein Lopez	Committee Member	Remote
Carson	Cedric L. Hicks, Sr.	Committee Member	Remote
West Hollywood	Lindsey Horvath	Chair	Remote

All votes are unanimous unless otherwise stated.

GENERAL PUBLIC COMMENT

There was no public comment.

CONSENT AGENDA

1. Approve Minutes from July 27, 2022, Legislative & Regulatory Committee Meeting

Motion: Committee Member Hicks, Carson
Second: Committee Member Lopez, Agoura Hills
Vote: The consent agenda was approved by a roll call vote.

REGULAR AGENDA

2. Discussion and Q&A on Memo Distributed to the Board of Directors Regarding the 2022 California Legislative Session

Gina Goodhill, Director of Government Affairs, provided a summary of the 2022 California Legislative Session decisions affecting CPA; including the 5-year extension of Diablo Canyon and the Governor’s proposed five-pronged energy package that includes goals around greenhouse gas emission reductions, new zero-carbon resource goals, new carbon capture rules, and new interim targets to meet California’s SB 1020 goals. Ms. Goodhill also discussed budget bills building off the May budget which includes money for rebates for research and development around clean energy technologies such as green hydrogen.

Responding to Committee Member Lopez' question regarding the reliance on Diablo Canyon for power, Ms. Goodhill stated that projections from the California Independent System Operator (CAISO) indicate it will be fully operational for the next five years. Ted Bardacke, CEO, added that the law requires long-term forecasting to exclude Diablo Canyon. With regard to increases in calls to CPA's customer support center with concerns about future blackouts, staff indicated that there were no noticeable increase in calls and added that staff monitored social media and criticism was not directed at CPA. Addressing Committee Member Hicks' question regarding Diablo Canyon's replacement, Mr. Bardacke indicated that the focus will be on a large increase of battery energy storage and building out new clean resources; the state of California also created a State Electricity Reliability Reserve which will be activated in emergencies; and a decreased reliance on hydro power due to its unreliability because of droughts. Responding to Chair Horvath's question regarding future legislation, Ms. Goodhill suggested that there may be more reliability-focused bills and the creation of a more consistent framework to reduce the state's reliability on nuclear power plants. Mr. Bardacke added that CPA staff is analyzing a potential budget-driven state incentive program to increase capacity, reliability, and lower market prices. Chair Horvath commented that there is still a need to educate legislators about CPA's role in the energy market and its priorities ahead of the next legislative session. In response to Committee Member Hicks' question about legislation at the federal level, Ms. Goodhill explained that staff is working in conjunction with other Community Choice Aggregations (CCAs) to monitor and participate in opportunities. Committee Member Hicks expressed a continued desire to find ways to lower consumer costs. Mr. Bardacke indicated the Committee will receive further information about legislative plans regarding reliability at the October meeting.

3. Green Hydrogen Overview

Rich Viebrock, Project Manager, Power Supply, provided a presentation on green hydrogen, noting that it is an abundant element with potential to provide carbon free and clean energy across multiple sectors, including electricity generation. Mr. Viebrock reviewed the capabilities of hydrogen and types of production; explained the three stages of the supply chain of green hydrogen, including production, storage, and distribution. Mr. Viebrock explained that green hydrogen can be used to efficiently store energy over long periods of time to then provide on-demand power, in a similar way that lithium-ion batteries are used. Green hydrogen can be produced using combustion turbines and hydrogen fuel cells. Mr. Viebrock addressed the production, cost, storage, distribution and use challenges to green hydrogen production, including high costs and the requirement of large quantities of water. The presentation concluded with a summary of the Alliance for Renewable Clean Hydrogen Energy Systems (ARCHES), which intends to leverage federal funding to accelerate the deployment of hydrogen projects and infrastructure in the state.

Committee Member Lopez expressed a concern for the environmental impacts of water usage with green hydrogen production in a drought-stricken state. Mr. Viebrock indicated that hydrogen production requires less water in comparison to

the water usage in oil production. Responding to Committee Member Lopez' questions regarding the risks of separating oxygen out of water, Mr. Viebrock noted that oxygen would be emitted but further research is needed to fully understand the concerns. Mr. Bardacke added that a large issue with hydrogen transportation is that it is a highly combustible and flammable gas, and Mr. Viebrock noted that if the combustion turbines or hydrogen fuel cells were compromised, greenhouse gas emissions could become a concern. Chair Horvath requested that the Committee revisit the topic once staff has a more robust understanding of what the potential unintended consequences, biproducts, and environmental and safety concerns would be, adding that the potential for green job growth and opportunities are possible. Committee Member Hicks expressed a further desire for a clearer understanding of the battery storage life cycles and their disposal. Staff indicated that some specific questions would be answered via a follow up email.

COMMITTEE MEMBER COMMENTS

There were no committee member comments.

ADJOURN

Chair Horvath adjourned the meeting at 11:01 a.m.

DRAFT



Staff Report – Agenda Item 2

To: Clean Power Alliance (CPA) Legislative & Regulatory Committee

From: Gina Goodhill, Director of Government Affairs
C.C. Song, Director of Regulatory Affairs
Matt Langer, Chief Operating Officer

Subject: Reliability Incentive Framework

Date: October 26, 2022

Staff will provide a presentation on the item.

ATTACHMENT

1. Reliability Incentive Framework Proposal Presentation

Item 2 Reliability Incentive Framework Proposal

October 2022

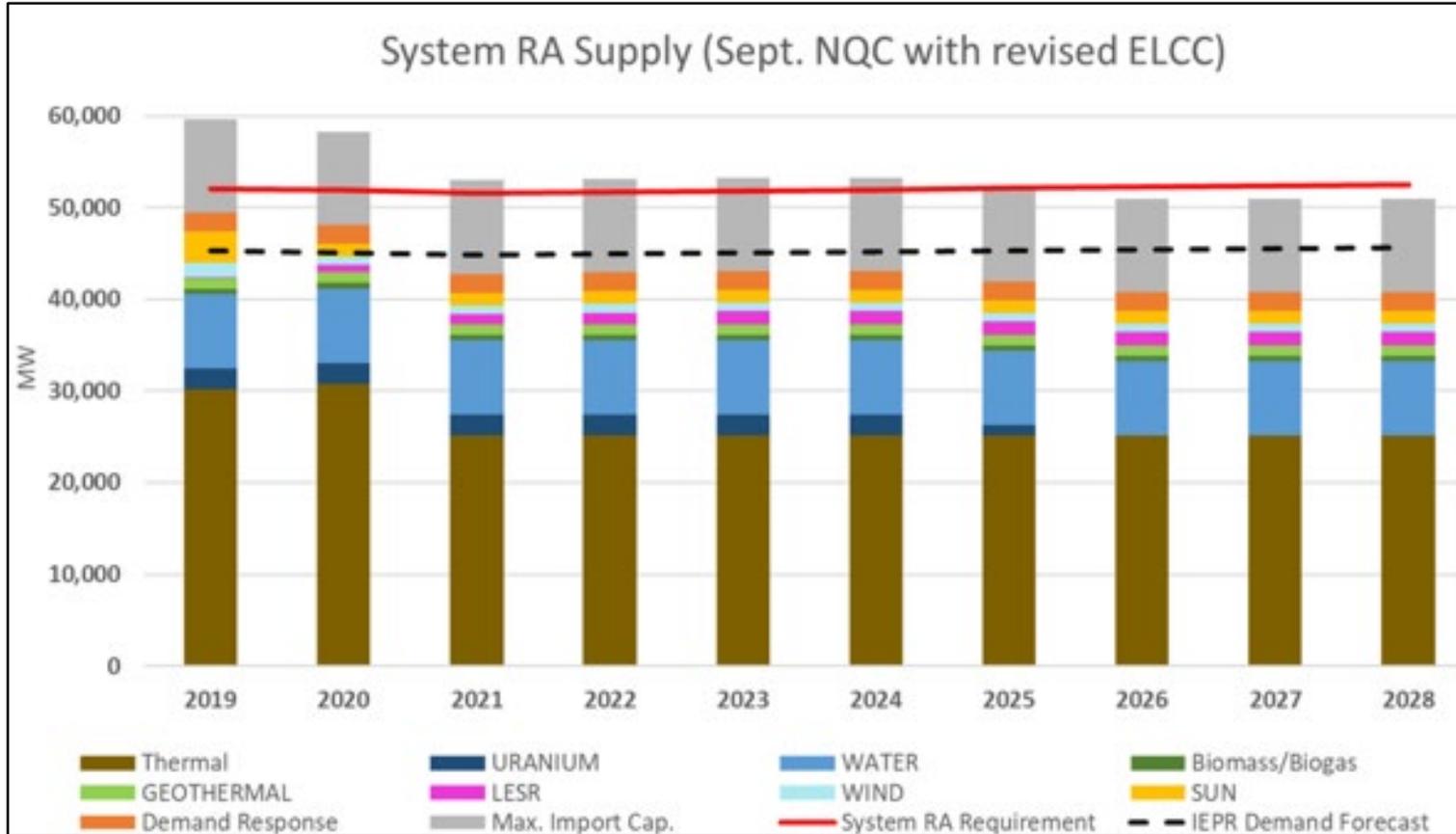


Background

- ⚡ Over the last several years CA has seen numerous retirements of fossil fuel generators, regulatory changes, and other issues that have reduced system capacity to critical levels
- ⚡ While system capacity has decreased, demand continues to increase due to climate change; further increases are expected due to electrification of transportation and buildings
- ⚡ Result: More frequent grid emergencies and a dramatic spike in capacity prices
- ⚡ Current state policy (IRP, MTR procurement orders, emergency DR) will result in new capacity, but only to replace what has been/will be lost and the replacement capacity will be acquired at scarcity prices. At best, the current problem won't get worse.
- ⚡ A long-term plan for new capacity is needed to meet growing needs of the grid, build resiliency, and create a liquid market. A liquid market will reduce consumer costs



Not Enough Capacity – Increasing Costs



Annual RA Prices*		
Year	Annual Average RA Price (\$/kw-mo)	Sept. Average RA Price (\$/kw-mo)
2019	3.46	4.08
2020	4.97	6.10
2021	5.89	16.00
2022	9.35	40.00
2023	11.00	40.50
2024	9.50	35.00

*2019-2021 values are from CPUC reporting; 2022-2024 are based on recent broker quotes

Source: CPUC, Assigned Commissioner and Administrative Law Judge's Ruling Initiating Procurement Track and Seeking Comment on Potential Reliability Issues, June 20, 2019 (R.16-02-007)

Reliability Incentive Framework Proposal

- ⚡ California should create an incentive program to get new, clean capacity online
- ⚡ This new program has two parts:
 1. **Reliability Target:** ensures enough new capacity to meet reliability needs while minimizing costs and allowing flexible compliance (developed by CPUC)
 2. **Incentive:** encourages early compliance to promote near-term reliability, bring additional liquidity to the resource adequacy market, and drive down prices (enacted through the legislature)
- ⚡ While the Reliability Target could be set high enough to ensure sufficient grid capacity, the incentive mechanism provides added market liquidity to lower costs of resource adequacy

Reliability Target

- ⚡ California LSEs will build at least 45,000 MW of new clean capacity by 2035, with the exact need and trajectory determined by the CPUC
- ⚡ How it should work:
 - ⚡ All CAISO LSEs will be assigned a proportional share of the new capacity obligation
 - ⚡ LSEs must bring on new resources over 3-year compliance periods
 - ⚡ Excess procurement in one compliance period can be carried forward to future periods
 - ⚡ Penalties will apply for LSEs who fail to comply with compliance period targets subject to a waiver process similar to current one in place for local RA
 - ⚡ Eligible resources will be new, incremental, carbon free resources, including demand response
 - ⚡ Capacity needs could be assessed each compliance period, looking out at least 10 years
- ⚡ Path to success:
 - ⚡ The Reliability Target and compliance mechanisms draw from elements and success of the RPS program
 - ⚡ CPA is actively engaging in conversations with CalCCA and other CCAs to coalesce around a cohesive proposal, and will be soliciting feedback from other stakeholders



Incentive Mechanism

- ⚡ LSEs will receive payments through an incentive mechanism for bringing resources online ahead of or in excess of reliability targets
- ⚡ How it should work:
 - ⚡ Any LSE who exceeds their compliance target in a given year will receive an incentive payment equal to the current year resource adequacy market price benchmark for each eligible MW
 - ⚡ Capacity must be online and participating in the CAISO market to be eligible for incentives
 - ⚡ An LSE exceeding their targets can receive incentive payments for the duration of the program (i.e. until 2035) at the then-current price
 - ⚡ If an LSE needs the excess capacity to meet its requirements in a future compliance period, incentive payments will be halted
 - ⚡ Funding for the incentive, initially set at \$100M per year, sourced from state budget funding,
- ⚡ Path to success:
 - ⚡ Tie incentive payment to reliability
 - ⚡ Will need support from Administration, legislators and stakeholders to ensure proposal progresses
 - ⚡ Providing incentives to new, incremental, carbon free resources is an important tool to achieve the SB 100 mandate



Targets and Incentive for Example LSE

Year	2027	2028	2029
Compliance Period Requirement	x	x	900 MW
Annual Target (cumulative)	300 MW	600 MW	900 MW
Online Capacity (cumulative)	500 MW	500 MW	1000 MW
Excess/(Deficiency)	200 MW	(100) MW	100 MW
RA Market Price	\$12/kW-mo	\$10/kW-mo	\$8/kW-mo
Incentive Payment	\$2.4M	\$0	\$0.8M

Framework Benefits

- ⚡ This framework addresses a number of key issues currently facing the CA energy markets:
 - ⚡ Ensure enough reliable capacity is coming online over a long time horizon
 - ⚡ Provide predictability in future targets to break the cycle of expensive, near-term procurement
 - ⚡ Allow flexible compliance to ensure LSEs are not needlessly penalized for short term market disruptions
 - ⚡ Encourage LSEs to bring additional capacity online beyond the minimum requirements, leading to a healthier resource adequacy market



Next Steps

- ⚡ Engage various stakeholders to generate support for the proposal (ongoing)
- ⚡ Staff will meet with the Administration to discuss creation and funding of the incentive program
- ⚡ Legislative and stakeholder support for the proposal will be important as the legislative year progresses
- ⚡ In parallel, staff is engaging in the CPUC integrated resources planning proceeding to influence the development of a long-term procurement target and framework.





MEETING of the Legislative & Regulatory Committee of the Clean Power Alliance of Southern California

Wednesday, October 26, 2022

10:00 a.m.

SPECIAL NOTICE: Pursuant to the Proclamation of the State of Emergency by Governor Newsom on March 4, 2020, AB 361, and enacting Resolutions, and as a response to mitigating the spread of COVID19, the Legislative & Regulatory Committee will conduct this meeting remotely.

[Visit CPA's YouTube Channel to watch a Live Stream of the Meeting](#)

If the YouTube stream is not working, please use the zoom link.

*There may be a streaming delay of up to 60 seconds. This is a view-only live stream.

To Participate in the Meeting:

<https://us06web.zoom.us/j/88054055308>

or

Dial: (720) 707-2699 Meeting ID: 880 5405 5308

PUBLIC COMMENT: Members of the public may submit their comments by one of the following options:

- **Email Public Comment:** Members of the public are encouraged to submit written comments on any agenda item to clerk@cleanpoweralliance.org up to four hours before the meeting. Written public comments will be announced at the meeting and become part of the meeting record. Public comments received in writing will not be read aloud at the meeting.
- **Provide Public Comment During the Meeting:** Please notify staff via email at clerk@cleanpoweralliance.org at the beginning of the meeting but no later than immediately before the agenda item is called.
 - You will be asked for your name and phone number (or other identifying information) and agenda item similar to filling out a speaker card so that you can be called on when it is your turn to speak.
 - You will be called upon during the comment section for the agenda item on which you wish to speak on. When it is your turn to speak, a staff member will unmute your phone or computer audio.
 - You will be able to speak to the Committee for the allotted amount of time. Please be advised that all public comments must otherwise comply with our Public Comment Policy.
 - Once you have spoken, or the allotted time has run out, you will be muted during the meeting.

If preferred, you may also submit written comments during the meeting via email to: clerk@cleanpoweralliance.org. The written comments will be shared with the Committee.

*While downloading the Zoom application may provide a better meeting experience, Zoom does not need to be installed on your computer to participate. After clicking the webinar link above, click "start from your browser."

Clean Power Alliance Legislative & Regulatory Committee
October 26, 2022

Meetings are accessible to persons with disabilities. Individuals who need special assistance or a disability-related modification or accommodation to participate in this meeting, or who have a disability and wish to request an alternative format for the meeting materials, should contact the Clerk of the Board at least two (2) working days before the meeting at clerk@cleanpoweralliance.org or (323) 640-7664. Notification in advance of the meeting will enable us to make reasonable arrangements to ensure accessibility to this meeting and the materials related to it.

PUBLIC COMMENT POLICY: *The General Public Comment item is reserved for persons wishing to address the Board on any Clean Power Alliance-related matters not on today's agenda. Public comments on matters on today's Consent Agenda and Regular Agenda shall be heard at the time the matter is called. Comments on items on the Consent Agenda are consolidated into one public comment period. Members of the public who wish to address the Board are requested to contact the Board Clerk, as specified above, at the beginning of the meeting but no later than immediately prior to the time an agenda item is called. Each speaker is limited to two (2) minutes (in whole minute increments) per agenda item with a cumulative total of five (5) minutes to be allocated between the General Public Comment, the entire Consent Agenda, or individual items in the Regular Agenda. Please refer to Policy No. 8 – Public Comment for additional information.*

CALL TO ORDER & ROLL CALL

GENERAL PUBLIC COMMENT

CONSENT AGENDA

1. Approve Minutes from September 28, 2022, Legislative & Regulatory Committee Meeting

REGULAR AGENDA

2. Presentation on Reliability Incentive Framework Proposal

COMMITTEE MEMBER COMMENTS

ADJOURN – NEXT MEETING IS NOVEMBER 23, 2022

Public Records: *Public records that relate to any item on the open session agenda for a Committee Meeting are available for public inspection. Those records that are distributed less than 72 hours prior to the meeting are available for public inspection at the same time they are distributed to all, or a majority of, the members of the Committee. Those documents are available for inspection online at www.cleanpoweralliance.org/agendas.*

MINUTES

MEETING of the Legislative & Regulatory Committee of the

Clean Power Alliance of Southern California

Wednesday, September 28, 2022, 10:00 a.m.

The Legislative & Regulatory Committee conducted this meeting in accordance with California Governor Newsom's Executive Order N-29-20 and COVID-19 pandemic protocols.

CALL TO ORDER & ROLL CALL

Committee Chair Lindsey Horvath called the meeting to order at 10:00 a.m. and Raynette Tom, Executive Assistant, conducted roll call.

Roll Call			
Agoura Hills	Deborah Klein Lopez	Committee Member	Remote
Carson	Cedric L. Hicks, Sr.	Committee Member	Remote
West Hollywood	Lindsey Horvath	Chair	Remote

All votes are unanimous unless otherwise stated.

GENERAL PUBLIC COMMENT

There was no public comment.

CONSENT AGENDA

1. Approve Minutes from July 27, 2022, Legislative & Regulatory Committee Meeting

Motion: Committee Member Hicks, Carson

Second: Committee Member Lopez, Agoura Hills

Vote: The consent agenda was approved by a roll call vote.

REGULAR AGENDA

2. Discussion and Q&A on Memo Distributed to the Board of Directors Regarding the 2022 California Legislative Session

Gina Goodhill, Director of Government Affairs, provided a summary of the 2022 California Legislative Session decisions affecting CPA; including the 5-year extension of Diablo Canyon and the Governor's proposed five-pronged energy package that includes goals around greenhouse gas emission reductions, new zero-carbon resource goals, new carbon capture rules, and new interim targets to meet California's SB 1020 goals. Ms. Goodhill also discussed budget bills building off the May budget which includes money for rebates for research and development around clean energy technologies such as green hydrogen.

Responding to Committee Member Lopez' question regarding the reliance on Diablo Canyon for power, Ms. Goodhill stated that projections from the California Independent System Operator (CAISO) indicate it will be fully operational for the next five years. Ted Bardacke, CEO, added that the law requires long-term forecasting to exclude Diablo Canyon. With regard to increases in calls to CPA's customer support center with concerns about future blackouts, staff indicated that there were no noticeable increase in calls and added that staff monitored social media and criticism was not directed at CPA. Addressing Committee Member Hicks' question regarding Diablo Canyon's replacement, Mr. Bardacke indicated that the focus will be on a large increase of battery energy storage and building out new clean resources; the state of California also created a State Electricity Reliability Reserve which will be activated in emergencies; and a decreased reliance on hydro power due to its unreliability because of droughts. Responding to Chair Horvath's question regarding future legislation, Ms. Goodhill suggested that there may be more reliability-focused bills and the creation of a more consistent framework to reduce the state's reliability on nuclear power plants. Mr. Bardacke added that CPA staff is analyzing a potential budget-driven state incentive program to increase capacity, reliability, and lower market prices. Chair Horvath commented that there is still a need to educate legislators about CPA's role in the energy market and its priorities ahead of the next legislative session. In response to Committee Member Hicks' question about legislation at the federal level, Ms. Goodhill explained that staff is working in conjunction with other Community Choice Aggregations (CCAs) to monitor and participate in opportunities. Committee Member Hicks expressed a continued desire to find ways to lower consumer costs. Mr. Bardacke indicated the Committee will receive further information about legislative plans regarding reliability at the October meeting.

3. Green Hydrogen Overview

Rich Viebrock, Project Manager, Power Supply, provided a presentation on green hydrogen, noting that it is an abundant element with potential to provide carbon free and clean energy across multiple sectors, including electricity generation. Mr. Viebrock reviewed the capabilities of hydrogen and types of production; explained the three stages of the supply chain of green hydrogen, including production, storage, and distribution. Mr. Viebrock explained that green hydrogen can be used to efficiently store energy over long periods of time to then provide on-demand power, in a similar way that lithium-ion batteries are used. Green hydrogen can be produced using combustion turbines and hydrogen fuel cells. Mr. Viebrock addressed the production, cost, storage, distribution and use challenges to green hydrogen production, including high costs and the requirement of large quantities of water. The presentation concluded with a summary of the Alliance for Renewable Clean Hydrogen Energy Systems (ARCHES), which intends to leverage federal funding to accelerate the deployment of hydrogen projects and infrastructure in the state.

Committee Member Lopez expressed a concern for the environmental impacts of water usage with green hydrogen production in a drought-stricken state. Mr. Viebrock indicated that hydrogen production requires less water in comparison to

the water usage in oil production. Responding to Committee Member Lopez' questions regarding the risks of separating oxygen out of water, Mr. Viebrock noted that oxygen would be emitted but further research is needed to fully understand the concerns. Mr. Bardacke added that a large issue with hydrogen transportation is that it is a highly combustible and flammable gas, and Mr. Viebrock noted that if the combustion turbines or hydrogen fuel cells were compromised, greenhouse gas emissions could become a concern. Chair Horvath requested that the Committee revisit the topic once staff has a more robust understanding of what the potential unintended consequences, biproducts, and environmental and safety concerns would be, adding that the potential for green job growth and opportunities are possible. Committee Member Hicks expressed a further desire for a clearer understanding of the battery storage life cycles and their disposal. Staff indicated that some specific questions would be answered via a follow up email.

COMMITTEE MEMBER COMMENTS

There were no committee member comments.

ADJOURN

Chair Horvath adjourned the meeting at 11:01 a.m.

DRAFT



Staff Report – Agenda Item 2

To: Clean Power Alliance (CPA) Legislative & Regulatory Committee

From: Gina Goodhill, Director of Government Affairs
C.C. Song, Director of Regulatory Affairs
Matt Langer, Chief Operating Officer

Subject: Reliability Incentive Framework

Date: October 26, 2022

Staff will provide a presentation on the item.

ATTACHMENT

1. Reliability Incentive Framework Proposal Presentation

Item 2 Reliability Incentive Framework Proposal

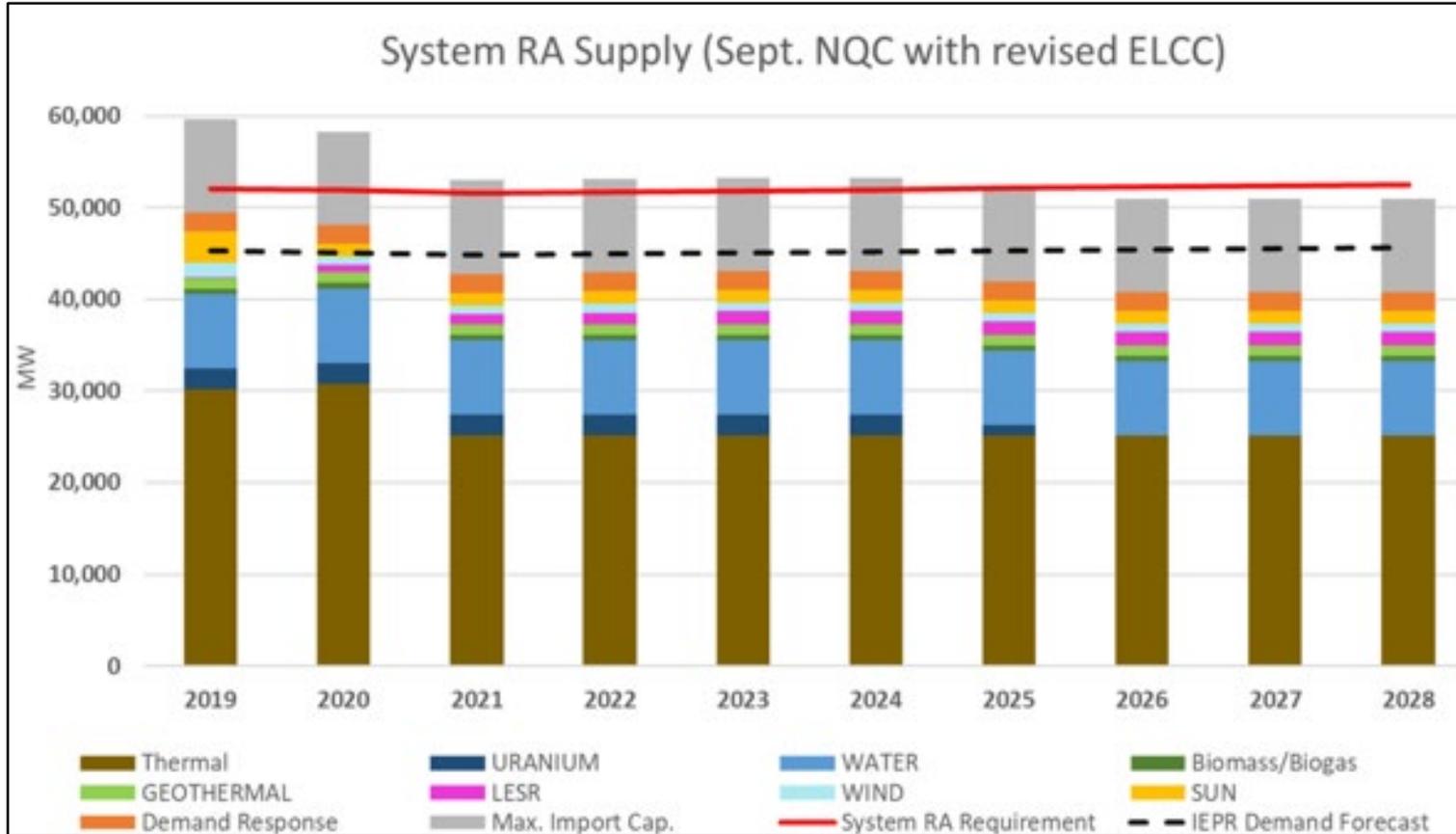
October 2022



Background

- ⚡ Over the last several years CA has seen numerous retirements of fossil fuel generators, regulatory changes, and other issues that have reduced system capacity to critical levels
- ⚡ While system capacity has decreased, demand continues to increase due to climate change; further increases are expected due to electrification of transportation and buildings
- ⚡ Result: More frequent grid emergencies and a dramatic spike in capacity prices
- ⚡ Current state policy (IRP, MTR procurement orders, emergency DR) will result in new capacity, but only to replace what has been/will be lost and the replacement capacity will be acquired at scarcity prices. At best, the current problem won't get worse.
- ⚡ A long-term plan for new capacity is needed to meet growing needs of the grid, build resiliency, and create a liquid market. A liquid market will reduce consumer costs

Not Enough Capacity – Increasing Costs



Annual RA Prices*		
Year	Annual Average RA Price (\$/kw-mo)	Sept. Average RA Price (\$/kw-mo)
2019	3.46	4.08
2020	4.97	6.10
2021	5.89	16.00
2022	9.35	40.00
2023	11.00	40.50
2024	9.50	35.00

*2019-2021 values are from CPUC reporting; 2022-2024 are based on recent broker quotes

Source: CPUC, Assigned Commissioner and Administrative Law Judge's Ruling Initiating Procurement Track and Seeking Comment on Potential Reliability Issues, June 20, 2019 (R.16-02-007)

Reliability Incentive Framework Proposal

- ⚡ California should create an incentive program to get new, clean capacity online
- ⚡ This new program has two parts:
 1. **Reliability Target:** ensures enough new capacity to meet reliability needs while minimizing costs and allowing flexible compliance (developed by CPUC)
 2. **Incentive:** encourages early compliance to promote near-term reliability, bring additional liquidity to the resource adequacy market, and drive down prices (enacted through the legislature)
- ⚡ While the Reliability Target could be set high enough to ensure sufficient grid capacity, the incentive mechanism provides added market liquidity to lower costs of resource adequacy

Reliability Target

- ⚡ California LSEs will build at least 45,000 MW of new clean capacity by 2035, with the exact need and trajectory determined by the CPUC
- ⚡ How it should work:
 - ⚡ All CAISO LSEs will be assigned a proportional share of the new capacity obligation
 - ⚡ LSEs must bring on new resources over 3-year compliance periods
 - ⚡ Excess procurement in one compliance period can be carried forward to future periods
 - ⚡ Penalties will apply for LSEs who fail to comply with compliance period targets subject to a waiver process similar to current one in place for local RA
 - ⚡ Eligible resources will be new, incremental, carbon free resources, including demand response
 - ⚡ Capacity needs could be assessed each compliance period, looking out at least 10 years
- ⚡ Path to success:
 - ⚡ The Reliability Target and compliance mechanisms draw from elements and success of the RPS program
 - ⚡ CPA is actively engaging in conversations with CalCCA and other CCAs to coalesce around a cohesive proposal, and will be soliciting feedback from other stakeholders



Incentive Mechanism

- ⚡ LSEs will receive payments through an incentive mechanism for bringing resources online ahead of or in excess of reliability targets
- ⚡ How it should work:
 - ⚡ Any LSE who exceeds their compliance target in a given year will receive an incentive payment equal to the current year resource adequacy market price benchmark for each eligible MW
 - ⚡ Capacity must be online and participating in the CAISO market to be eligible for incentives
 - ⚡ An LSE exceeding their targets can receive incentive payments for the duration of the program (i.e. until 2035) at the then-current price
 - ⚡ If an LSE needs the excess capacity to meet its requirements in a future compliance period, incentive payments will be halted
 - ⚡ Funding for the incentive, initially set at \$100M per year, sourced from state budget funding,
- ⚡ Path to success:
 - ⚡ Tie incentive payment to reliability
 - ⚡ Will need support from Administration, legislators and stakeholders to ensure proposal progresses
 - ⚡ Providing incentives to new, incremental, carbon free resources is an important tool to achieve the SB 100 mandate



Targets and Incentive for Example LSE

Year	2027	2028	2029
Compliance Period Requirement	x	x	900 MW
Annual Target (cumulative)	300 MW	600 MW	900 MW
Online Capacity (cumulative)	500 MW	500 MW	1000 MW
Excess/(Deficiency)	200 MW	(100) MW	100 MW
RA Market Price	\$12/kW-mo	\$10/kW-mo	\$8/kW-mo
Incentive Payment	\$2.4M	\$0	\$0.8M

Framework Benefits

- ⚡ This framework addresses a number of key issues currently facing the CA energy markets:
 - ⚡ Ensure enough reliable capacity is coming online over a long time horizon
 - ⚡ Provide predictability in future targets to break the cycle of expensive, near-term procurement
 - ⚡ Allow flexible compliance to ensure LSEs are not needlessly penalized for short term market disruptions
 - ⚡ Encourage LSEs to bring additional capacity online beyond the minimum requirements, leading to a healthier resource adequacy market



Next Steps

- ⚡ Engage various stakeholders to generate support for the proposal (ongoing)
- ⚡ Staff will meet with the Administration to discuss creation and funding of the incentive program
- ⚡ Legislative and stakeholder support for the proposal will be important as the legislative year progresses
- ⚡ In parallel, staff is engaging in the CPUC integrated resources planning proceeding to influence the development of a long-term procurement target and framework.





MEETING of the Legislative & Regulatory Committee of the Clean Power Alliance of Southern California

Wednesday, October 26, 2022

10:00 a.m.

SPECIAL NOTICE: Pursuant to the Proclamation of the State of Emergency by Governor Newsom on March 4, 2020, AB 361, and enacting Resolutions, and as a response to mitigating the spread of COVID19, the Legislative & Regulatory Committee will conduct this meeting remotely.

[Visit CPA's YouTube Channel to watch a Live Stream of the Meeting](#)

If the YouTube stream is not working, please use the zoom link.

*There may be a streaming delay of up to 60 seconds. This is a view-only live stream.

To Participate in the Meeting:

<https://us06web.zoom.us/j/88054055308>

or

Dial: (720) 707-2699 Meeting ID: 880 5405 5308

PUBLIC COMMENT: Members of the public may submit their comments by one of the following options:

- **Email Public Comment:** Members of the public are encouraged to submit written comments on any agenda item to clerk@cleanpoweralliance.org up to four hours before the meeting. Written public comments will be announced at the meeting and become part of the meeting record. Public comments received in writing will not be read aloud at the meeting.
- **Provide Public Comment During the Meeting:** Please notify staff via email at clerk@cleanpoweralliance.org at the beginning of the meeting but no later than immediately before the agenda item is called.
 - You will be asked for your name and phone number (or other identifying information) and agenda item similar to filling out a speaker card so that you can be called on when it is your turn to speak.
 - You will be called upon during the comment section for the agenda item on which you wish to speak on. When it is your turn to speak, a staff member will unmute your phone or computer audio.
 - You will be able to speak to the Committee for the allotted amount of time. Please be advised that all public comments must otherwise comply with our Public Comment Policy.
 - Once you have spoken, or the allotted time has run out, you will be muted during the meeting.

If preferred, you may also submit written comments during the meeting via email to: clerk@cleanpoweralliance.org. The written comments will be shared with the Committee.

*While downloading the Zoom application may provide a better meeting experience, Zoom does not need to be installed on your computer to participate. After clicking the webinar link above, click "start from your browser."

Clean Power Alliance Legislative & Regulatory Committee
October 26, 2022

Meetings are accessible to persons with disabilities. Individuals who need special assistance or a disability-related modification or accommodation to participate in this meeting, or who have a disability and wish to request an alternative format for the meeting materials, should contact the Clerk of the Board at least two (2) working days before the meeting at clerk@cleanpoweralliance.org or (323) 640-7664. Notification in advance of the meeting will enable us to make reasonable arrangements to ensure accessibility to this meeting and the materials related to it.

PUBLIC COMMENT POLICY: *The General Public Comment item is reserved for persons wishing to address the Board on any Clean Power Alliance-related matters not on today's agenda. Public comments on matters on today's Consent Agenda and Regular Agenda shall be heard at the time the matter is called. Comments on items on the Consent Agenda are consolidated into one public comment period. Members of the public who wish to address the Board are requested to contact the Board Clerk, as specified above, at the beginning of the meeting but no later than immediately prior to the time an agenda item is called. Each speaker is limited to two (2) minutes (in whole minute increments) per agenda item with a cumulative total of five (5) minutes to be allocated between the General Public Comment, the entire Consent Agenda, or individual items in the Regular Agenda. Please refer to Policy No. 8 – Public Comment for additional information.*

CALL TO ORDER & ROLL CALL

GENERAL PUBLIC COMMENT

CONSENT AGENDA

1. Approve Minutes from September 28, 2022, Legislative & Regulatory Committee Meeting

REGULAR AGENDA

2. Presentation on Reliability Incentive Framework Proposal

COMMITTEE MEMBER COMMENTS

ADJOURN – NEXT MEETING IS NOVEMBER 23, 2022

Public Records: *Public records that relate to any item on the open session agenda for a Committee Meeting are available for public inspection. Those records that are distributed less than 72 hours prior to the meeting are available for public inspection at the same time they are distributed to all, or a majority of, the members of the Committee. Those documents are available for inspection online at www.cleanpoweralliance.org/agendas.*

MINUTES

MEETING of the Legislative & Regulatory Committee of the
 Clean Power Alliance of Southern California
 Wednesday, September 28, 2022, 10:00 a.m.

The Legislative & Regulatory Committee conducted this meeting in accordance with California Governor Newsom’s Executive Order N-29-20 and COVID-19 pandemic protocols.

CALL TO ORDER & ROLL CALL

Committee Chair Lindsey Horvath called the meeting to order at 10:00 a.m. and Raynette Tom, Executive Assistant, conducted roll call.

Roll Call			
Agoura Hills	Deborah Klein Lopez	Committee Member	Remote
Carson	Cedric L. Hicks, Sr.	Committee Member	Remote
West Hollywood	Lindsey Horvath	Chair	Remote

All votes are unanimous unless otherwise stated.

GENERAL PUBLIC COMMENT

There was no public comment.

CONSENT AGENDA

1. Approve Minutes from July 27, 2022, Legislative & Regulatory Committee Meeting

Motion: Committee Member Hicks, Carson
Second: Committee Member Lopez, Agoura Hills
Vote: The consent agenda was approved by a roll call vote.

REGULAR AGENDA

2. Discussion and Q&A on Memo Distributed to the Board of Directors Regarding the 2022 California Legislative Session

Gina Goodhill, Director of Government Affairs, provided a summary of the 2022 California Legislative Session decisions affecting CPA; including the 5-year extension of Diablo Canyon and the Governor’s proposed five-pronged energy package that includes goals around greenhouse gas emission reductions, new zero-carbon resource goals, new carbon capture rules, and new interim targets to meet California’s SB 1020 goals. Ms. Goodhill also discussed budget bills building off the May budget which includes money for rebates for research and development around clean energy technologies such as green hydrogen.

Responding to Committee Member Lopez' question regarding the reliance on Diablo Canyon for power, Ms. Goodhill stated that projections from the California Independent System Operator (CAISO) indicate it will be fully operational for the next five years. Ted Bardacke, CEO, added that the law requires long-term forecasting to exclude Diablo Canyon. With regard to increases in calls to CPA's customer support center with concerns about future blackouts, staff indicated that there were no noticeable increase in calls and added that staff monitored social media and criticism was not directed at CPA. Addressing Committee Member Hicks' question regarding Diablo Canyon's replacement, Mr. Bardacke indicated that the focus will be on a large increase of battery energy storage and building out new clean resources; the state of California also created a State Electricity Reliability Reserve which will be activated in emergencies; and a decreased reliance on hydro power due to its unreliability because of droughts. Responding to Chair Horvath's question regarding future legislation, Ms. Goodhill suggested that there may be more reliability-focused bills and the creation of a more consistent framework to reduce the state's reliability on nuclear power plants. Mr. Bardacke added that CPA staff is analyzing a potential budget-driven state incentive program to increase capacity, reliability, and lower market prices. Chair Horvath commented that there is still a need to educate legislators about CPA's role in the energy market and its priorities ahead of the next legislative session. In response to Committee Member Hicks' question about legislation at the federal level, Ms. Goodhill explained that staff is working in conjunction with other Community Choice Aggregations (CCAs) to monitor and participate in opportunities. Committee Member Hicks expressed a continued desire to find ways to lower consumer costs. Mr. Bardacke indicated the Committee will receive further information about legislative plans regarding reliability at the October meeting.

3. Green Hydrogen Overview

Rich Viebrock, Project Manager, Power Supply, provided a presentation on green hydrogen, noting that it is an abundant element with potential to provide carbon free and clean energy across multiple sectors, including electricity generation. Mr. Viebrock reviewed the capabilities of hydrogen and types of production; explained the three stages of the supply chain of green hydrogen, including production, storage, and distribution. Mr. Viebrock explained that green hydrogen can be used to efficiently store energy over long periods of time to then provide on-demand power, in a similar way that lithium-ion batteries are used. Green hydrogen can be produced using combustion turbines and hydrogen fuel cells. Mr. Viebrock addressed the production, cost, storage, distribution and use challenges to green hydrogen production, including high costs and the requirement of large quantities of water. The presentation concluded with a summary of the Alliance for Renewable Clean Hydrogen Energy Systems (ARCHES), which intends to leverage federal funding to accelerate the deployment of hydrogen projects and infrastructure in the state.

Committee Member Lopez expressed a concern for the environmental impacts of water usage with green hydrogen production in a drought-stricken state. Mr. Viebrock indicated that hydrogen production requires less water in comparison to

the water usage in oil production. Responding to Committee Member Lopez' questions regarding the risks of separating oxygen out of water, Mr. Viebrock noted that oxygen would be emitted but further research is needed to fully understand the concerns. Mr. Bardacke added that a large issue with hydrogen transportation is that it is a highly combustible and flammable gas, and Mr. Viebrock noted that if the combustion turbines or hydrogen fuel cells were compromised, greenhouse gas emissions could become a concern. Chair Horvath requested that the Committee revisit the topic once staff has a more robust understanding of what the potential unintended consequences, biproducts, and environmental and safety concerns would be, adding that the potential for green job growth and opportunities are possible. Committee Member Hicks expressed a further desire for a clearer understanding of the battery storage life cycles and their disposal. Staff indicated that some specific questions would be answered via a follow up email.

COMMITTEE MEMBER COMMENTS

There were no committee member comments.

ADJOURN

Chair Horvath adjourned the meeting at 11:01 a.m.

DRAFT



Staff Report – Agenda Item 2

To: Clean Power Alliance (CPA) Legislative & Regulatory Committee

From: Gina Goodhill, Director of Government Affairs
C.C. Song, Director of Regulatory Affairs
Matt Langer, Chief Operating Officer

Subject: Reliability Incentive Framework

Date: October 26, 2022

Staff will provide a presentation on the item.

ATTACHMENT

1. Reliability Incentive Framework Proposal Presentation

Item 2 Reliability Incentive Framework Proposal

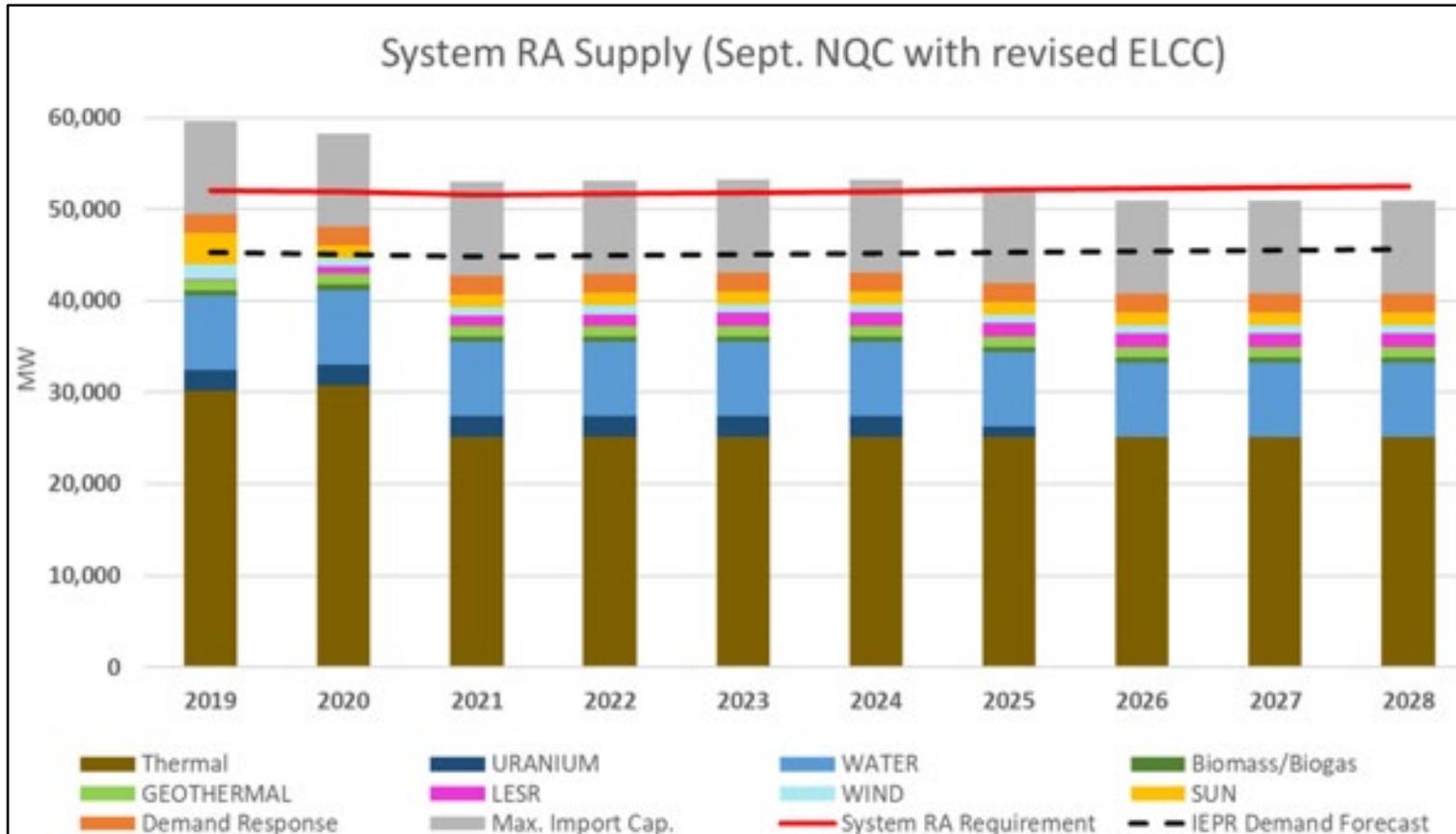
October 2022



Background

- ⚡ Over the last several years CA has seen numerous retirements of fossil fuel generators, regulatory changes, and other issues that have reduced system capacity to critical levels
- ⚡ While system capacity has decreased, demand continues to increase due to climate change; further increases are expected due to electrification of transportation and buildings
- ⚡ Result: More frequent grid emergencies and a dramatic spike in capacity prices
- ⚡ Current state policy (IRP, MTR procurement orders, emergency DR) will result in new capacity, but only to replace what has been/will be lost and the replacement capacity will be acquired at scarcity prices. At best, the current problem won't get worse.
- ⚡ A long-term plan for new capacity is needed to meet growing needs of the grid, build resiliency, and create a liquid market. A liquid market will reduce consumer costs

Not Enough Capacity – Increasing Costs



Annual RA Prices*		
Year	Annual Average RA Price (\$/kw-mo)	Sept. Average RA Price (\$/kw-mo)
2019	3.46	4.08
2020	4.97	6.10
2021	5.89	16.00
2022	9.35	40.00
2023	11.00	40.50
2024	9.50	35.00

*2019-2021 values are from CPUC reporting; 2022-2024 are based on recent broker quotes

Source: CPUC, Assigned Commissioner and Administrative Law Judge's Ruling Initiating Procurement Track and Seeking Comment on Potential Reliability Issues, June 20, 2019 (R.16-02-007)

Reliability Incentive Framework Proposal

- ⚡ California should create an incentive program to get new, clean capacity online
- ⚡ This new program has two parts:
 1. **Reliability Target:** ensures enough new capacity to meet reliability needs while minimizing costs and allowing flexible compliance (developed by CPUC)
 2. **Incentive:** encourages early compliance to promote near-term reliability, bring additional liquidity to the resource adequacy market, and drive down prices (enacted through the legislature)
- ⚡ While the Reliability Target could be set high enough to ensure sufficient grid capacity, the incentive mechanism provides added market liquidity to lower costs of resource adequacy

Reliability Target

- ⚡ California LSEs will build at least 45,000 MW of new clean capacity by 2035, with the exact need and trajectory determined by the CPUC
- ⚡ How it should work:
 - ⚡ All CAISO LSEs will be assigned a proportional share of the new capacity obligation
 - ⚡ LSEs must bring on new resources over 3-year compliance periods
 - ⚡ Excess procurement in one compliance period can be carried forward to future periods
 - ⚡ Penalties will apply for LSEs who fail to comply with compliance period targets subject to a waiver process similar to current one in place for local RA
 - ⚡ Eligible resources will be new, incremental, carbon free resources, including demand response
 - ⚡ Capacity needs could be assessed each compliance period, looking out at least 10 years
- ⚡ Path to success:
 - ⚡ The Reliability Target and compliance mechanisms draw from elements and success of the RPS program
 - ⚡ CPA is actively engaging in conversations with CalCCA and other CCAs to coalesce around a cohesive proposal, and will be soliciting feedback from other stakeholders



Incentive Mechanism

- ⚡ LSEs will receive payments through an incentive mechanism for bringing resources online ahead of or in excess of reliability targets
- ⚡ How it should work:
 - ⚡ Any LSE who exceeds their compliance target in a given year will receive an incentive payment equal to the current year resource adequacy market price benchmark for each eligible MW
 - ⚡ Capacity must be online and participating in the CAISO market to be eligible for incentives
 - ⚡ An LSE exceeding their targets can receive incentive payments for the duration of the program (i.e. until 2035) at the then-current price
 - ⚡ If an LSE needs the excess capacity to meet its requirements in a future compliance period, incentive payments will be halted
 - ⚡ Funding for the incentive, initially set at \$100M per year, sourced from state budget funding,
- ⚡ Path to success:
 - ⚡ Tie incentive payment to reliability
 - ⚡ Will need support from Administration, legislators and stakeholders to ensure proposal progresses
 - ⚡ Providing incentives to new, incremental, carbon free resources is an important tool to achieve the SB 100 mandate



Targets and Incentive for Example LSE

Year	2027	2028	2029
Compliance Period Requirement	x	x	900 MW
Annual Target (cumulative)	300 MW	600 MW	900 MW
Online Capacity (cumulative)	500 MW	500 MW	1000 MW
Excess/(Deficiency)	200 MW	(100) MW	100 MW
RA Market Price	\$12/kW-mo	\$10/kW-mo	\$8/kW-mo
Incentive Payment	\$2.4M	\$0	\$0.8M

Framework Benefits

- ⚡ This framework addresses a number of key issues currently facing the CA energy markets:
 - ⚡ Ensure enough reliable capacity is coming online over a long time horizon
 - ⚡ Provide predictability in future targets to break the cycle of expensive, near-term procurement
 - ⚡ Allow flexible compliance to ensure LSEs are not needlessly penalized for short term market disruptions
 - ⚡ Encourage LSEs to bring additional capacity online beyond the minimum requirements, leading to a healthier resource adequacy market



Next Steps

- ⚡ Engage various stakeholders to generate support for the proposal (ongoing)
- ⚡ Staff will meet with the Administration to discuss creation and funding of the incentive program
- ⚡ Legislative and stakeholder support for the proposal will be important as the legislative year progresses
- ⚡ In parallel, staff is engaging in the CPUC integrated resources planning proceeding to influence the development of a long-term procurement target and framework.

