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October 15, 2024

TO: Rio Dell City Council

FROM: Kyle Knopp, City Manager

SUBJECT: Discussion on Diablo Canyon Power Plant Nuclear Allocation and Redwood Coast Energy Authority (RCEA)

IT IS RECOMMENDED THAT THE CITY COUNCIL:

Provide comment.

BACKGROUND AND DISCUSSION

The City of Rio Dell's representative on the Redwood Coast Energy Authority Board of Directors is Councilmember Frank Wilson. The Councilmember and City Council has requested that RCEA provide a presentation to the Council related to the acceptance of nuclear power allocations, which has shown to be a controversial/political subject matter. The purpose of this meeting item is for the Council to become more aware of this issue and to provide comment to your RCEA representative so that he better understand the position of the Council and other public speakers on this matter which may inform his vote. At this point, the issue may be raised again at the RCEA Board level before the end of 2024 for another vote.

Attached are materials from RCEA on this subject.

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STAFF REPORT

AGENDA DATE:	October 15, 2024
TO:	Rio Dell City Council
PREPARED BY:	Faith Carlson, Regulatory and Legislative Policy Manager Richard Engel, Director of Power Resources Eileen Verbeck, Interim Executive Director
SUBJECT:	Diablo Canyon Power Plant Nuclear Allocations

BACKGROUND

At its September 26, 2024, meeting the RCEA Board of Directors opted not to accept an allocation of nuclear power from the Diablo Canyon power plant. However, staff discovered a process error when the Board was discussing the nuclear allocation. The Board was mistakenly told that all 5 Community Choice Energy voting members present would need to vote affirmative for an action to pass. This information was in error, and this mistaken information could have influenced the vote. The Board will be given an opportunity to evaluate whether a correct understanding of the voting process would have changed the outcome of the Board's vote at the October 24, 2024, meeting. The Board will have an option to make and pass a motion to reconsider based on the updated understanding of the voting process. If the motion to reconsider passes, the Board will have a second opportunity to vote on the nuclear allocation.

The following is adapted from the staff report that was presented to the Board at its September 26 meeting.

Diablo Canyon Nuclear Power Plant Extension

Diablo Canyon Nuclear Power Plant (DCPP), located in Morro Bay, was opened in 1985 and provides 10% of energy in the California grid.¹ In 2016, PG&E applied to retire the plant in 2025, citing increasing costs of operation. The California Public Utilities Commission (CPUC) approved this application in September of 2020.²

In August of 2020, one month prior to the approval of the retirement, a heat wave led to load spikes, and the state saw rolling outages due to insufficient reliability resources.³

In September of 2022, during another heat wave, policymakers became concerned that with DCPP replacement resources not yet online, the state could see an increase in future outages. As a result, the California state legislature passed SB 846 (Dodd, 2022). SB 846 invalidates the CPUC's approval to retire the plant and requires PG&E and state agencies "to take all actions necessary and prudent to

¹ See PG&E [Nuclear Power \(pge.com\)](https://www.pge.com)

² CPUC Decision Approving Retirement of Diablo Canyon Nuclear Power Plant [205090240.PDF \(ca.gov\)](https://www.cpuc.ca.gov/2020/09/24/205090240.PDF)

³ [CAISO, CPUC, CEC Issue Final Report on Causes of August 2020 Rotating Outages](https://www.caiso.com/2020/08/20/CAISO_CPUC_CEC_Issue_Final_Report_on_Causes_of_August_2020_Rotating_Outages)

extend Diablo Canyon powerplant operations." As a result, the CPUC issued a decision in December of 2023 to extend operation of DCP's two generating units to 10/31/2029 and 10/31/2030.⁴

Load Serving Entity (LSE) Allocation of Power

Redwood Coast Energy Authority, along with most other California electricity providers, automatically receives an allocation of the reliability benefits (a.k.a. resource adequacy or RA) from Diablo Canyon. Now that Diablo Canyon operation has been extended because clean replacement resources were not added to the state's grid as early as anticipated, there is an additional option to receive an allocation of the clean energy attributes alongside those already received reliability benefits associated with the plant. Once the CPUC announces final allocation amounts, each LSE will have 30 days to accept or reject their allocation. The CPUC allocation is now expected to occur in early November 2024.

RCEA's customers, like all other electricity users served by providers subject to California Public Utilities Commission regulation, are required to pay a portion of the costs of operating this nuclear plant, which is deemed by the CPUC an important resource for grid reliability in California over the next several years. The funds will be collected through future electric bills. These ratepayers may receive a share of this carbon-free energy that they have funded.

Each electricity provider can choose whether or not to accept their proportional allocation of the clean energy attribute. Some providers choose to accept the allocation since their customers are already paying for it and accepting it does not result in additional nuclear power generation or development. In addition, the costs of other carbon-free resources such as large hydropower or renewable energy certificates from sources such as wind, solar, and geothermal power have increased sharply in the past couple of years, making the nuclear allocation more attractive financially as a means of reducing the greenhouse gas emissions associated with a provider's power portfolio.

In prior years, RCEA has been offered separate allocations of nuclear and hydropower carbon-free energy from PG&E's portfolio paid for by RCEA's customers through the power charge indifference adjustment (PCIA) line item on their bills. To date, RCEA has rejected this annual nuclear allocation, given our policy of not procuring nuclear power,⁵ and because we had other cost-effective means of meeting our renewable and carbon-free energy targets. RCEA accepts the hydropower allocation as it is not in conflict with our Energy Risk Management Policy.

The extension of Diablo Canyon and increased cost of other emissions-free resources cited above has caused RCEA and other electricity providers to revisit their decisions to reject the nuclear allocation. To accept RCEA's nuclear allocation for 2025 only, the Board would need to authorize a short-term exception to the nuclear power prohibition in RCEA's Energy Risk Management Policy. The Policy itself does explicitly allow for such short-term exceptions. In that case, the nuclear power would have appeared as part of RCEA's portfolio on our power content label, which is mailed annually to all RCEA customers. Specific allocation amounts have not yet been published, but if accepted, staff expect the allocation in the coming year to meet about 2% of RCEA's total electricity load.

The Board will be able to revisit this in future years and decide year by year from 2026-2030 whether to accept or decline the nuclear power allocation.

⁴ Decision Implementing Senate Bill 846 [499622197.PDF \(ca.gov\)](https://www.cpuc.ca.gov/Pages/Decision-Implementing-Senate-Bill-846)

⁵ Documented in RCEA's Energy Risk Management Policy: <https://redwoodenergy.org/wp-content/uploads/2022/12/RCEA-Energy-Risk-Management-Policy-2022-Update-with-Addendum-A.pdf>

Actions of Other CCAs

As of 10/2/2024, these CCAs have chosen to accept their allocation: Ava Community Energy, Desert Community Energy, MCE, Peninsula Clean Energy, Pioneer Community Energy, San Jose Clean Energy, Sonoma Clean Power, and Silicon Valley Clean Energy.

The Diablo Canyon Nuclear Power Plant is located in Central Coast Community Energy's (3CE) service territory. Like RCEA, 3CE currently has a no nuclear policy. They have yet to bring a request for a decision to their Board, but in previous conversations with the Board related to allocations, there has not yet been a directive to reconsider the no nuclear policy.

SUMMARY OF SCENARIOS

RCEA staff and The Energy Authority presented preliminary information on this potential nuclear allocation to the Board in August as part of our quarterly energy risk update. The following is an updated analysis that the Board considered at their September meeting, consisting of three scenarios.

- Scenario 1 was a "business as usual" one where RCEA does not accept its nuclear allocation.
- Scenario 2 has RCEA accepting the nuclear allocation and using it as a means to reduce procurement costs by substituting the nuclear power for other carbon-free resources.
- In Scenario 3, RCEA uses the allocation as a means to reduce overall GHG emissions without incurring additional costs.

Table 1 compares these scenarios in terms of net revenue impacts, power portfolio makeup, and expected greenhouse gas (GHG) intensity of the portfolio.

Table 1. Comparison of nuclear allocation scenarios

	Scenario 1: No nuclear RPS allocation (business as usual)	Scenario 2: Accept nuclear RPS allocation, use to cut costs while keeping GHGs constant (by selling more expensive hydropower)	Scenario 3: Accept nuclear allocation, use to reduce GHGs while keeping costs constant
2025 Net Revenue	\$(9.4M)	\$(8.9M)	\$(9.4M) same as Scenario 1
2025 Expected Carbon Free Nuclear in MWh	-	16,483	16,483
2025 % Nuclear in Power Content Label (REpower Portfolio)	0%	2%	2%
2025 % Renewable + Carbon Free (REpower Portfolio)	88%	88% same as Scenario 1	91%
2025 GHG emission factor (lbs CO ₂ e/MWh) (REpower portfolio)	308	308 same as Scenario 1	285

Scenario 2 would result in an improvement of RCEA's 2025 net revenue position of approximately \$505,000. This is about a 5.4% reduction in currently projected net losses for the year. Scenario 3 would result in about a 7.5% reduction in GHG emissions for the year by replacing generic system power with emissions-free nuclear power.

The nuclear allocation if accepted would appear only in RCEA's REpower base portfolio. Because nuclear power is not deemed renewable, it would not be included in RCEA's REpower+ 100% renewable opt-up portfolio. REpower+ would continue to contain only carbon-free and renewable solar, wind, and small hydro resources.

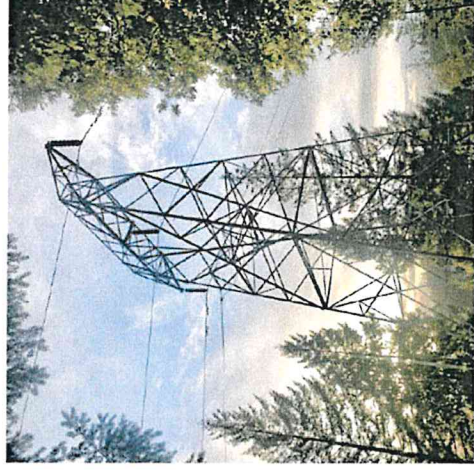
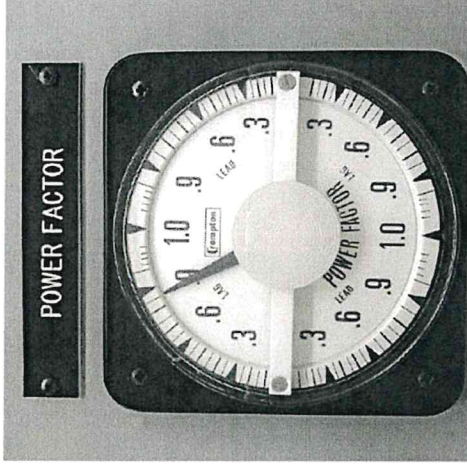
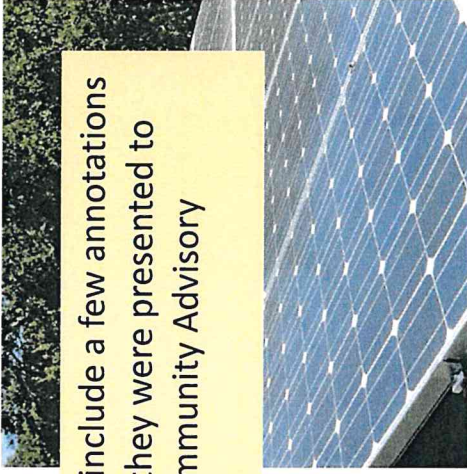
Whether or not RCEA rejects the nuclear clean energy allocation, due to the automatic allocation of the reliability benefits (RA) of the Diablo Canyon Resource, RCEA will still receive the RA associated with nuclear power as in previous years.

Apart from the allocation decision before the Board, RCEA has the opportunity to reinforce and clarify the anti-nuclear stance in its Energy Risk Management Policy by including a position on nuclear power in its Policy Platform. As directed by the Board in September, staff will bring forth a proposal for such an addition to the Platform at a future Board meeting.

FINANCIAL IMPACT

Scenarios 1 and 3 would have no financial impact on RCEA. Under Scenario 2, RCEA is projected to achieve an estimated \$505,000 in cost savings for 2025 by selling an equivalent amount of alternative carbon-free resources expected to be allocated to RCEA in 2025.

These slides include a few annotations added after they were presented to the RCEA Community Advisory Committee



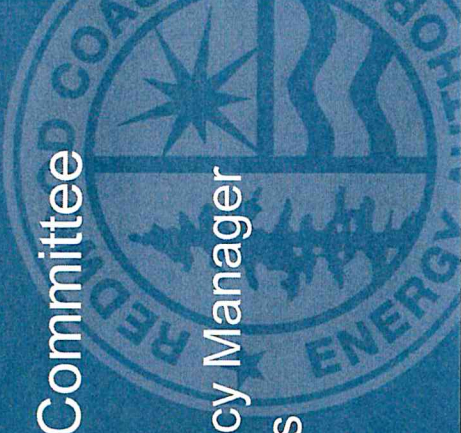
Diablo Canyon Power Plant Nuclear Allocation

Presentation to Community Advisory Committee

October 8, 2024

Faith Carlson, Regulatory & Legislative Policy Manager

Richard Engel, Director of Power Resources



Introduction

- At its September 26, 2024, meeting the RCEA Board of Directors did not take action on a decision to accept an allocation of nuclear power. The result of not taking action is RCEA not accepting the allocation.
- However, staff discovered a process error was made during Board discussion that may have had bearing on the Board vote.
- The Board will be given an opportunity to evaluate whether a correct understanding of the voting process would have changed the outcome of the Board's vote at their October 24, 2024, meeting.
- The Board will have an option to make and pass a motion to reconsider based on the updated understanding of the voting process. If the motion to reconsider passes, the Board will have a second opportunity to vote on the nuclear allocation.
- If the decision is reconsidered, the CAC will have an opportunity to provide the Board with input. Today's item allows the CAC to discuss the matter and provide that input for staff to pass on to the Board.

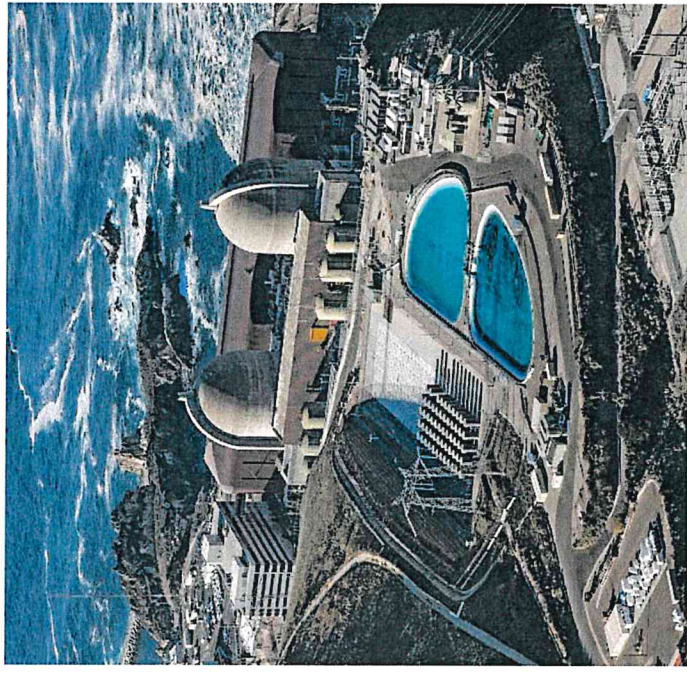
Background – Diablo Canyon Power Plant

Diablo Canyon Nuclear Power Plant

- Located in Morro Bay, CA
- Opened in 1985.
- Provides 10% of energy in the California grid.

Plant Retirement

- In 2016, PG&E applied to retire the plant in 2025.
- California Public Utilities Commission (CPUC) approved this application in 2020.



Policy Changes

Heat Waves and Outages:

- August 2020 heat wave led to rolling outages.
- Delays in replacement resources and a September 2022 heat wave led to fear of more outages.

SB 846 (Dodd, 2022) passed to prevent outages:

- Invalidates the CPUC's approval to retire the plant
- Requires PG&E and state agencies "to take all actions necessary and prudent to extend Diablo Canyon powerplant operations."
- To comply, the CPUC issued a decision in December of 2023 to extend operation of Diablo Canyon through 2030.

Allocation of Reliability and Clean Energy Benefits:

- Most California power providers automatically receive an allocation of the reliability benefits (Resource Adequacy) from Diablo Canyon.
- Acceptance of clean energy attributes allocation is optional.
- RCEA had 30 days from CPUC allocation announcement (still pending) to accept or reject their allocation. Now expected to occur in early November
- If accepted, power would have appeared in Power Content Label.
- CPUC has ordered that CA state ratepayers are required to pay the costs of Diablo Canyon operations.

Allocation of Reliability and Clean Energy Benefits:

- If RCEA had accepted the allocation:
 - Would have received Clean Energy benefit customers are already paying for.
 - No additional nuclear power generation or development.
 - Would have shown on our Power Content Label.
- By rejecting allocation:
 - Will not receive Clean Energy benefit customers are paying for.
 - No additional nuclear power generation or development.
 - Will retain RA benefits without disclosure on our Power Content Label.

Why was this taken to the Board?

- RCEA has prohibited procurement of nuclear power since its 2016 Energy Risk Management Policy (details on next slide)
- To align with the Risk Policy, RCEA has declined the carbon-free allocations of nuclear offered annually by PG&E while accepting carbon-free allocations of large hydro power
- The nuclear allocation for 2025 onward is new, specifically due to the extension of Diablo Canyon nuclear plant out to 2030
- Recently increased costs of procuring carbon-free power from alternative sources such as large hydro or renewables has motivated RCEA and other CCAs to bring this matter to their Boards for consideration

Several CCA Boards have voted to accept the allocations: MCE, Sonoma Clean Power, Peninsula Clean Energy, Ava (East Bay), Desert Community Energy, Pioneer Community Energy, and Silicon Valley Clean Energy. Others have yet to decide. We have not yet heard of any other CCA declining the allocations.

Energy Risk Management Policy language

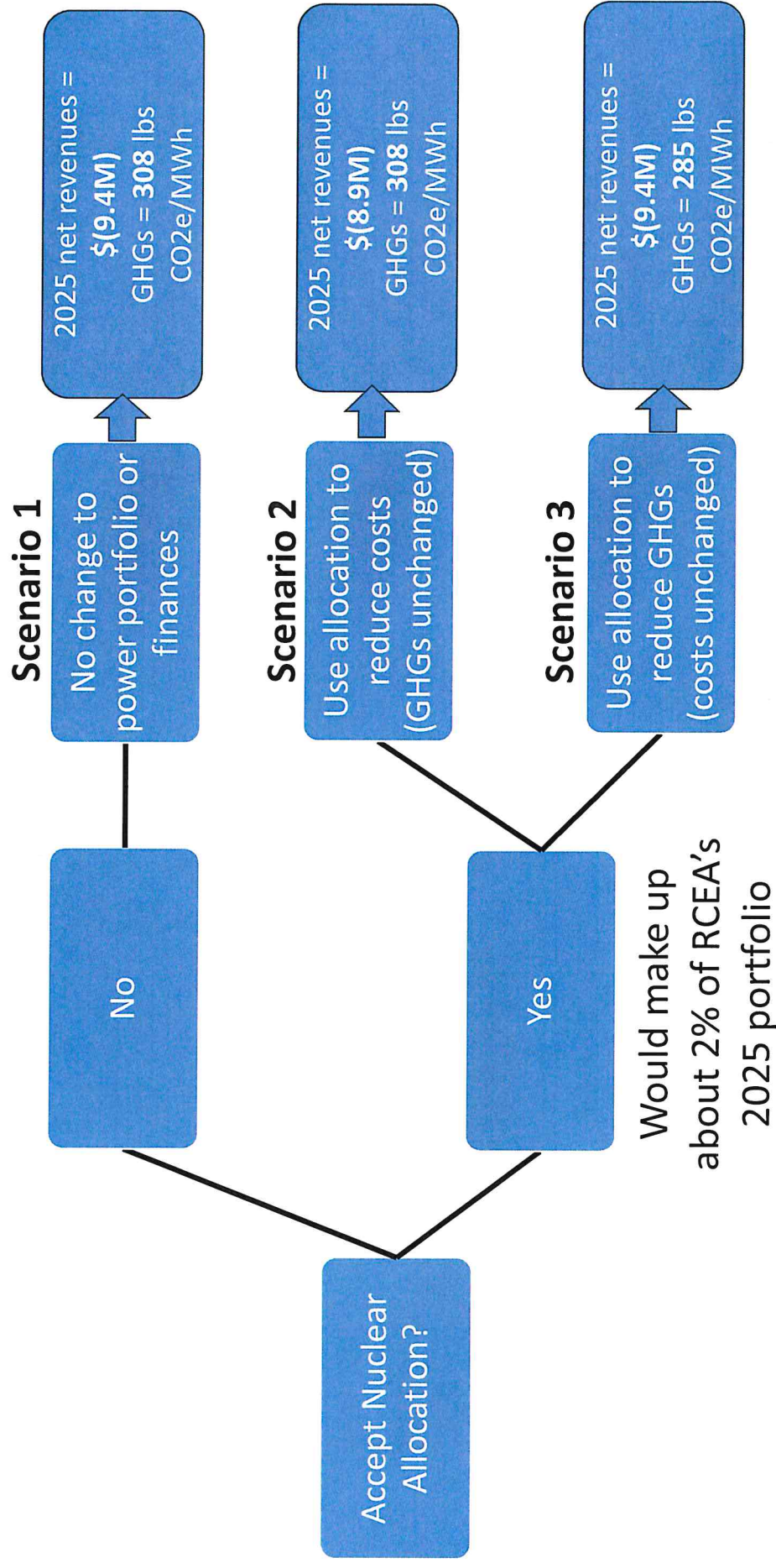
Prohibited Generation Sources

In keeping with community values identified by RCEA in developing its CCE program, neither energy nor resource adequacy (RA) will be procured from the following generation sources:



- Nuclear generation
- Coal generation
- Hydroelectric generation from existing dams on the mainstem Klamath River

Exceptions to this prohibition may be needed for occasional short-term transactions, such as procurement of replacement RA.

Alternatives



How might a nuclear allocation have changed our 2025 Power Content Label sent out to customers in 2026?

Resource	% without nuclear	% with nuclear
Solar	40%	40%
Wind	2%	2%
Biomass & Biowaste	15%	15%
Small Hydro	2%	2%
Geothermal	0%	0%
Large Hydro	11%	11%
Nuclear	0%	2% 
Natural Gas	0%	0%
Coal & Other Fossil Fuels	0%	0%
Unspecified Power	31%	28% 

Note: The numbers shown here are **speculative and very preliminary** – RCEA’s reportable 2025 procurement numbers will not be finalized until mid-2026

Additional considerations

- In Scenario 2: Allocation would have been used as a tool for improving RCEA's financial position
 - Could have sold off an equivalent amount of other carbon-free resources.
 - Could have achieved about \$505,000 savings in 2025 (5.4% reduction in net losses for year)
- In Scenario 3: Allocation would have been used as a tool for reducing RCEA's greenhouse gases (GHGs) by replacing system power
 - The emissions reduction would have been about 7.5%
- Nuclear would have appeared only in RCEA's standard Repower portfolio.
 - The premium REpower+ opt-up portfolio would remain 100% carbon-free renewable resources
- Assuming the State's allocation of Diablo Canyon energy continues until plant closure, staff will revisit this decision with the Board annually.

At its Oct 8, 2024 meeting the RCEA Community Advisory Committee voted in favor of recommending that the RCEA Board of Directors accept the nuclear allocation under Scenario 2, achieving cost savings by selling off an equivalent amount of carbon-free large hydro power. There were 8 votes in favor, 3 opposed, and 1 abstention.

CAC members echoed support the Board expressed in their September 26 meeting for staff to bring forth policy platform recommendations regarding opposition to further extension of the Diablo Canyon plant's operation or development of new nuclear power in CA.