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Mercuria Energy America, a Delaware corporation, is an independent energy marketing and trading company. Mercuria is a long-time regulated participant in the California cap-and-trade program, and we appreciate the opportunity to submit these comments on potential changes to the state's cap-and-trade program.

In the July and October meetings, the Air Resources Board (ARB) outlined potential supply revisions to the cap-and-trade program that ranged from 115 million allowances to 390 million allowances over the 2025-2030 period.

Numerous stakeholders have already outlined in public comments that the 48% scenario would be the preferred supply option, an opinion that Mercuria agrees with. However, the ARB noted getting mixed opinions about the location of these supply reductions.

Mercuria firmly believes the location of these supply revisions can have a significant impact on the stringency of the future program and long-term Greenhouse Gas Revenue Funds, which can have tangible benefits to localized communities and statewide.

In the October meeting, the ARB correctly determined that removing volume from the Allowance Price Containment Reserve (APCR) or the price ceiling would have limited impacts on the stringency of the program, while it would remove price relief if allowances rose in the future.

In short, Mercuria recommends the ARB do the following:

- Align electricity-sector allocations to existing state policies
- Evaluate whether the existing natural gas baseline is appropriate
- Make any additional supply adjustments within the state-owned volumes

Aligning power sector allocations to state policies

The California legislature has passed two pieces of legislation – SB 100 and SB 846 -- that will influence power sector emissions since the ARB allocated volumes post-2020 allowances to electricity entities. In addition, the current 2030 power allocations are significantly above expected emissions.

SB 100, which was passed in 2018, increased the renewable portfolio standard (RPS) to 60% by 2030 from the previous goal of 50%. The legislature also authorized extended operations at the Diablo Canyon nuclear facility to 2030 with the passage of SB 846 in the 2022 session.

Utilities have made numerous public announcements about coal divestments since the post-2020 allocations were set. These generation shifts, which have been spurred by state policies, are not currently accounted for in the existing allocations to electricity producers in the state.

Given the California's near and long-term greenhouse gas (GHG) goals, it is important that the legislative changes be factored into the free allocations. Failure to adjust allocations for these changes will impair California's ability to cut emissions to 30-38 million tonnes by 2030 and carbon neutrality by 2045.

The current allocations would risk missing those goals or worse, not provide an adequate signal to further decarbonize the electric grid.

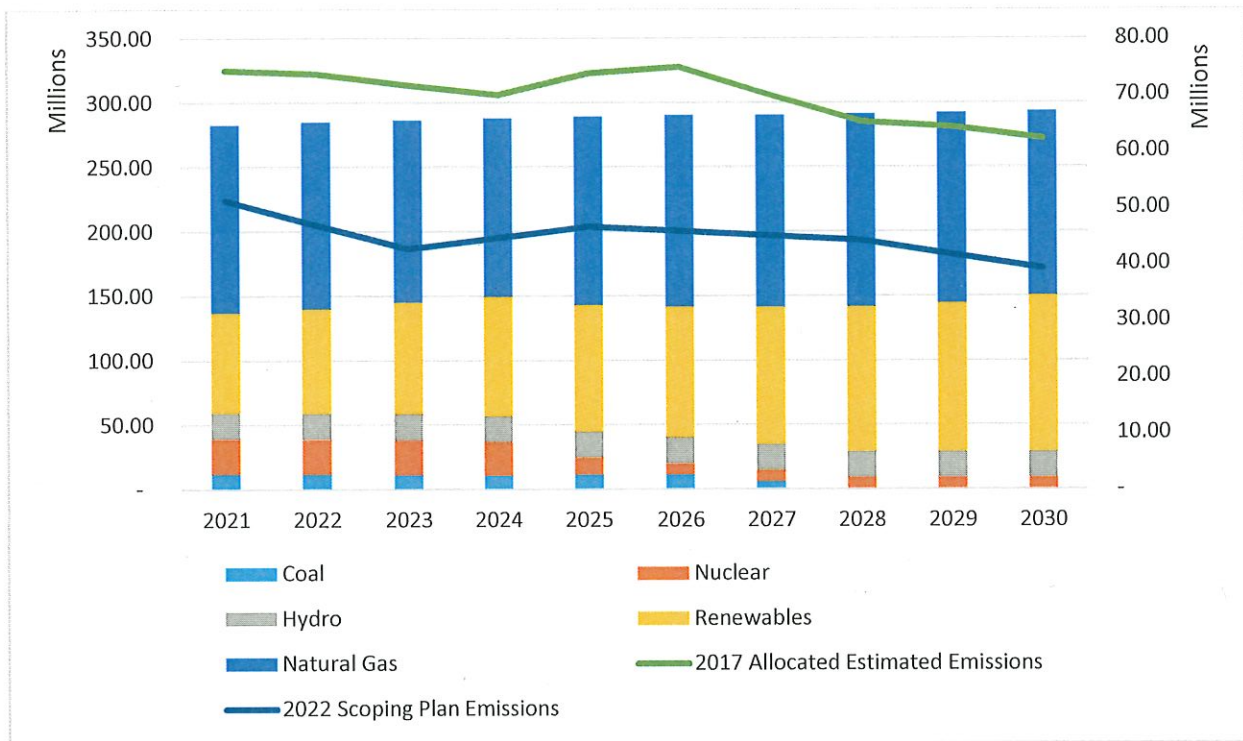


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Figure 1 shows the estimated cumulative MWh by generation source on the left axis and expected emissions that determined the post-2020 allocation levels during the most recent rulemaking in 2017 on the right axis. For perspective, the 2022 Scoping Plan estimated emissions are also included to show more recent modelling envisions much lower emissions over this period due to these new state policies.

Figure 1



The cumulative difference between the expected emissions via allocation methodology and the Scoping Plan modelling is 244 Mt over this decade (2021-2030). Over the 2025-2030 period, the difference is nearly 143 Mt, or around 12% of cap levels in the 48% scenario over the six-year period.

The extension of Diablo Canyon is a notable change from the expectations in Figure 1. Rightfully, the ARB had assumed that plant would shutter in 2024 and 2025 after its Nuclear Regulatory Commission license expired when crafting these post-2020 allocations.

SB 846 has provided state funds to continue to operate that facility, while Diablo Canyon-owner Pacific Gas & Electric has also received more than \$1 billion from the US Department of Energy for this generation source.

Under the current methodology, this legislative change would result an over allocation of more than 40 million allowances through the end of the decade.

Similarly, some publicly-owned utilities are receiving allocations through 2030 for coal assets that they have either already divested or plan to divest before the end of this decade.



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The ARB must conform power sector allocations to existing state policies tying allocations to assets and ownership, to ensure those goals are achieved. Power sector allocations can serve to support this mandate as the first cut in supply revisions, and they can then ensure added stringency within the program.

Evaluate the natural gas baseline

Since their inclusion in the program, natural gas utilities have been allocated allowances based on the 48 million metric tons (Mt) released in 2011, yet state data has shown, the sector has not seen emissions return to those levels.

By using this 48-Mt baseline, natural gas utilities may have received more allowances than warranted over this period, which could reduce their incentive to cut emissions within their sector.

Over the 2013-2020 period, the allocated entities have averaged emissions of 43.3 Mt per year, or around 4.7 mln less than the 2011 baseline. If a 43.3 Mt baseline were used in the post-2020 period, the sector would have seen a 10% reduction in allocations over the 10-year period.

This data suggests the ARB should evaluate whether the 2011 baseline is an appropriate benchmark for allocation to 2030 and beyond, and whether a revision to the baseline would help to incentivize future reductions in the natural gas sector.

Conclusion

The ARB can utilize simple updates to its existing program or methodologies to increase the stringency of the program, while simultaneously provide clear market signals for encourage investment into carbon abatement technologies or strategies.

As we have outlined above, these allocation methodology changes would align the cap-and-trade program to various state policies or enacted legislation that have been installed since the last rulemaking.

California can't afford to have misaligned policies as it seeks to ambitiously cut emissions towards its 2045 carbon neutrality goal.

These changes can ensure the balance between freely allocated allowances and state-owned volumes remain roughly unchanged, and as a result, allow the state an enhanced revenue stream to deploy in this sector of the economy to further cut emissions.

Despite criticism of the program by academics, legislators and others, California has far exceeded the ambitious expectations over the first decade, leading to a bank of allowances in the post-2020 period. The ARB can utilize these surplus allowances to chart a more ambitious future to 2030 and beyond.

As the ARB has said numerous times, the post-2020 period is more ambitious, and it will require utilizing all tools available. Part of this is the ARB sending a clear signal to all sectors that further efforts must be made.



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Mercuria believes the 48% scenario provides the correct balance between attainable near-term goals and a strong signal to investment in carbon reduction strategies.

These supply adjustments should begin with updates to sector allocations to ensure the methodologies align with existing state policies, and any additional reductions can come from state-owned volumes.

Sincerely,

A stylized, handwritten signature in black ink, consisting of several fluid, overlapping strokes.

Adam Raphaely

Managing Director