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September 19, 2016

Rajinder Sahota California Air Resources Board 1001 I Street Sacramento, CA 95184

Re: Comments of the Natural Resources Defense Council (NRDC) on the Proposed Amendments to the Cap-and-Trade Program

Dear Ms. Sahota:

On behalf of the Natural Resources Defense Council, and our more than 72,000 members in California, we appreciate the opportunity to comment on the Proposed Modifications to the California Cap on Greenhouse Gas Emissions and Market Based Compliance Mechanisms Regulation, as released on August 2, 2016, which among other provisions would extend the program beyond 2020, facilitate linkage with Ontario, and demonstrate California's compliance with the federal Clean Power Plan.

I. Introduction

Ten years ago, California passed the Global Warming Solutions Act of 2006 (AB 32), which committed one of the world's largest economies to reducing its climate pollution to 1990 levels by 2020 (at the time, roughly a 30% projected cut compared to business-as-usual). The bill heralded a turning point in recognizing that while the risks of climate change are daunting, the solutions are not. From the outset, AB 32 drew national and international attention as a test case for whether aggressive climate action could be achieved without detriment to a large and globally connected economy.

A decade into implementation, California has passed the test. Emissions are down nearly 10% from their 2004 peak, while jobs and the economy are up. Other indicators show remarkable progress. Renewable energy is outcompeting fossil fuels. The largest manufacturing facility in California makes electric vehicles. More Californians work in the solar industry than for all of the state's utilities. And thanks to California's sustained leadership, the state captures more cleantech venture capital investment than all of Europe and China combined.

But huge challenges remain. Short-lived climate pollutants, like the methane released from the months-long leak at the Aliso Canyon natural gas storage facility, must be curbed. The state's

suite of tools to reduce petroleum dependence must be strengthened and extended. And even as California makes impressive statewide gains, more must be done to ensure low-income communities and communities of color no longer bear the brunt of society's externalized pollution costs.

As the 2030 Target Scoping Plan Update Concept Paper outlines, overcoming these challenges will require a holistic and integrated strategy of which the cap-and-trade program remains a vital part. Due to a series of factors – including the success of California's complementary policies, the economic downturn following the 2008 financial crisis, the significant decline in the emissions intensity of imported power, and enhanced federal climate policies (all of which reduced the "work" of the cap in closing the gap between business-as-usual emissions and the statewide limit) – the cap-and-trade program has thus far served largely in a supporting cast role on the path to achieving AB 32's 2020 target.

But that will likely change on the path to achieving the far steeper reductions by 2030 ordered by Governor Brown last year and now codified in Senate Bill 32 (Pavley). Even under an aggressive complementary policy scenario, the state's PATHWAYS modelling forecasts the cap-and-trade program will need to contribute between 100-200 million metric tons (MMT) of cumulative reductions between 2021-2030 (or about 10-20% of the total projected reductions) for California to reduce statewide emissions 40 percent below 1990 levels during that time.¹ Absent those reductions, which the cap backstops, the state cannot be assured it will hit that mark. Absent the market signal that a strong carbon price would send throughout the economy in support of low-carbon technologies and practices, and their adoption by businesses and consumers, California's path to decarbonization will be more difficult. And absent the significant investments that the cap-and-trade program generates to ensure clean technologies and employers take root in disadvantaged communities, California's climate plan will be less equitable.

We accordingly strongly support ARB moving forward to establish the post-2020 cap-and-trade program. While ARB must continue to carefully evaluate the program and make adjustments as needed as part of the adaptive management plan and through the Scoping Plan, acting now will send the appropriate long-term signals to encourage investments by covered entities to reduce their emissions.

II. Issue Summary

- **Legal authority**: We fully concur in ARB's assessment that the agency has authority to extend the cap-and-trade program beyond 2020.
- <u>Cap setting</u>: To ensure the program provides a strong incentive in support of emissions reductions and investments, we recommend ARB populate the APCR with allowances taken from annual cap budgets that start at or below projected business-as-usual emissions in 2021 not a linear decline from the 2020 cap, as proposed.
- Cost containment:
 - We support staff's proposal to transfer unsold state-owned allowances from the Auction Holding Account into the APCR after a fixed period of time, but recommend ARB shorten the time period from 24 months to 12 months.

¹ ISOR at 310-313.

- <u>Linkage</u>: We support ARB's ongoing evaluation of linkage with Ontario, and support the new provisions regarding 'one-way' linkage to ensure California retains control over the use of its compliance instruments in external emissions trading programs.
- <u>Electricity Sector:</u>
 - We encourage ARB to continue working closely with CAISO to ensure the Energy Imbalance Market's cost optimization model fully accounts for the emissions associated with electricity generated to serve California load [for more detail see comments submitted to CAISO on the "Regional Integration California Greenhouse Gas Compliance" Issue Paper dated August 29, 2016].²
 - We support the proposal to expand the eligibility requirements of the Voluntary Renewable Energy (VRE) program, but recommend staff include a provision to transfer additional allowances into the VRE reserve account to prevent it from becoming depleted.
- **Exempt Emissions:** We support the removal of the qualified export (QE) exemption and natural gas hydrogen fuel cell exemption.
- <u>Global Warming Potentials</u>: We encourage ARB to update the global warming potentials (GWP) of covered greenhouse gases to the IPCC's Fifth Assessment.
- Allowance Allocation:
 - We strongly support ARB's proposal to eliminate transition assistance to industrial sectors starting in 2021.
 - We urge ARB to require consignment by the POUs to maintain a level playing field for electric utilities.
 - We strongly support the prohibition on a volumetric return of auction proceeds to customers and use of allowance value to pay for compliance costs with the MRR and COI fee regulation.
 - We support the inclusion of a deadline for EDUs' use of allowance value, but recommend it be shortened from 10 years to 3 years.
 - We recommend ARB require all EDUs and natural gas suppliers to include a customer outreach plan to accompany any crediting of auction proceeds.
- <u>Clean Power Plan</u>: We support the architecture of ARB's compliance plan to rely on the cap-and-trade program under a state measures approach, and support the conforming changes ARB's proposes to align the cap-and-trade program with CPP requirements (including compliance deadlines, EGU coverage, and a federally-enforceable backstop mechanism) [for more detail see comments on California's proposed compliance plan for the federal Clean Power Plan].

III. Legal Authority

We fully concur in ARB's legal assessment underpinning this rulemaking that ARB has authority to extend the cap-and-trade program beyond 2020 in furtherance of achieving California's 2030 and 2050 greenhouse gas reduction goals. AB 32 requires ARB to not only achieve the statewide limit of returning to 1990 emissions levels by 2020 but to continue and maintain reductions thereafter – and SB 32 *mandates* that ARB use that authority to ensure

² Materials available at:

emissions are reduced to at least 40 percent below 1990 levels by 2030. By imposing an economy-wide limit on emissions, the cap-and-trade program is uniquely situated as a regulatory tool to ensure ARB achieves the 2030 target in SB 32 in the most cost-effective manner. No other provision of law prevents ARB from continuing its role as a backstop to the larger suite of policies that will be developed in the update to the Scoping Plan.³

IV. Cap Setting

Staff has proposed to set annual cap budgets from 2021-2030 that represent a linear decline from the existing cap in 2020 (334.2 MMTCO2e) to a level in 2030 that represents the same proportion of statewide emissions that are projected to be covered under the cap in 2020 (77.5%, or 200.5 MMT based on the 2030 statewide target of 258.6 MMT). To address concerns related to over-allocation and cost containment, however, staff proposes to place into the Allowance Price Containment Reserve (APCR) those allowances that represent the delta between a linear decline from the existing 2020 cap and a linear decline that starts at the significantly lower projected emissions levels for capped sectors in 2020 (322.6 MMT) from ARB's ongoing Scoping Plan economic modeling.

This represents an attempt at a middle ground between the two options staff workshopped in March, which would have either simply continued a linear decline (Option 1) or had the cap "step down" in 2021 to adjust for the significant headroom between the current cap budget in 2020 and projected emissions levels (Option 2). While we appreciate staff's recognition of the concerns regarding over-allocation, the current proposal does not go far enough to correct them.

As ARB has recognized in other contexts, a lax cap will undermine the efficacy of the program in driving the scale and timeliness of investments needed to put California on a path toward deep decarbonization. In comments to EPA on the Clean Power Plan model rule, for example, ARB highlighted the importance of taking corrective action in the event a mass-based cap significantly exceeds covered emissions.⁴ To prevent that scenario, ARB recommends that EPA include a pre-established mechanism in the rule to revisit and adjust mass-based targets for states as needed based on actual emissions in the years leading up to the start of the program in 2022, recognizing that "a lax cap would result in minimal carbon reductions beyond the status quo."⁵

Bringing the cap in 2021 in line with projected emissions represents that same corrective action in California. A step down should accordingly serve as the *floor* of ambition for the start of the post-2020 program. The pre-2020 cap began at forecast business-as-usual emissions levels for the (original) start of the program in 2012, with the allowances that populate the APCR carved out from *within* – not above – those budgets. The post-2020 program will, as proposed, start from an even more lax position.

³ Health & Safety Code § 38562(c) is written in permissive terms to clarify that ARB *could* adopt a cap-and-trade program applicable from 2012 to 2020 under its AB 32 authority; having elected to do so, it does not restrict ARB's authority to continue the program after 2020.

⁴ http://www.arb.ca.gov/cc/powerplants/arbcommentsfedplan-01 21 2016.pdf.

⁵ *Id.* (at 19-20).

We also find no basis for directing allowances equal to the "adjustment" from a linear trajectory into the APCR. Even behind a steep and escalating paywall, access to allowances in the APCR would authorize roughly 175 MMT of additional emissions – or more than half of the entire 2020 budget. The proposal seems to presume that covered entities are owed an enhanced safety valve for merely bringing the cap in line with actual emissions. They do not.

Achieving SB 32's requirement of reducing statewide emissions at least 40 percent below 1990 levels by 2030 will undoubtedly require significant reductions beyond any business-as-usual forecast. But absent correction, the strength of the market signal that the cap-and-trade program provides to assist in achieving that aggressive target will be muted due to the significant oversupply that will carry over into the post-2020 program.⁶ And since the climate impact of greenhouse gases in the atmosphere is cumulative over time, the trajectory of reductions in California is significant – not merely the end point.

The participating states in the Regional Greenhouse Gas Initiative (RGGI), facing a similar situation in the wake of the 2008 recession that dramatically reduced emissions relative to business-as-usual forecasts, reduced their program cap nearly in half to bring it in line with actual emissions.⁷ ARB should likewise tighten California's cap in advance of the post-2020 program to reflect updated emissions trends and forecasts.

V. Cost Containment

We support staff's proposal to include a mechanism in advance of the third compliance period to transfer unsold state-owned allowances into the APCR after a period of time rather than remain in the Auction Holding Account potentially indefinitely. This proposal accomplishes two important objectives: first, it provides a means of backfilling the APCR that does not rely on taking allowances from cap budgets set artificially high after 2020 (as discussed above); and second, it provides more of an incentive to market participants to purchase the allowances on offer at each quarterly auction so as to prevent them from being transferred behind a much more expensive paywall. That incentive cuts against the type of 'wait and see' attitude among market participants that the current rules largely accommodate, and which contributed to the low subscription rates of the previous two auctions. To provide an even stronger incentive, however, we recommend ARB shorten the time period from 24 months (or eight auctions) to 12 months (or four auctions).

Proposed Modification to § 95911. Format for Auction of California GHG Allowances

(g) Transfer of Unsold Allowances to the Allowance Price Containment Reserve (Reserve). Beginning January 1, 2018, current vintage allowances designated by ARB for auction pursuant to section 95911(f)(3) that remain unsold in the Auction Holding Account for more than 24 12 months will be transferred to the Reserve. Current vintage allowances designated by ARB pursuant to this section do not include allowances consigned to auction pursuant to section 95910(d).

⁶ See, e.g., CaliforniaCarbon.info, "2020 baseline emissions forecast for California cap and trade," (finding the allowance market will remain oversupplied by a cumulative total of 120-140 million tons by 2020); California Market Compliance Association's comments on proposed 45-day amendments at <u>https://www.arb.ca.gov/lists/com-attach/10-capandtrade16-UTJdNgdlU2FQCVU2.pdf</u> (estimating oversupply may reach as high as 300 million tons). ⁷ See <u>http://www.rggi.org/docs/PressReleases/PR011314</u> AuctionNotice23.pdf.

VI. Linkage

We support ARB's ongoing evaluation of linkage with Ontario pursuant to the requirements of Senate Bill 1018. Developed pursuant to the Western Climate Initiative's joint design parameters for a regional cap-and-trade market, Ontario's program is substantially similar and comparably stringent to California's program and will support increased sub-national climate action. We also support the new provisions regarding 'one-way' linkage to ensure California retains control over the use of its compliance instruments in external emissions trading programs, such as the recently adopted rule by Washington state, which allows its covered entities to use allowances issued by "an established multisector GHG emission reduction program" like California's up to a certain limit.⁸

VII. Allowance Allocation

a. Transition Assistance to Industrial Sectors

We strongly support ARB's proposal to eliminate transition assistance to industrial sectors for the post-2020 program, and instead only freely allocate allowances based on leakage risk. In 2021, any credible argument for an additional allocation on the basis of 'transition assistance' will long since have vanished. As ARB acknowledges, the total value awarded to industrial sectors in the form of free allowances to date "likely *exceeds* compensation required for emissions leakage protection for most sectors."⁹ That excess may result in windfalls for industrial emitters at the expense of the public programs funded through auction proceeds. While we do not oppose providing assistance to industrial entities commensurate with their identified leakage risk, there is no longer any basis to award additional allowances for transitioning into a program that will be eight years old.

b. Use of Allowance Value

i. Prohibiting volumetric return

We strongly support staff's proposal to prohibit a volumetric return of allowance value for all EDUs starting in the third compliance period, mirroring the prohibition already in effect for natural gas suppliers.¹⁰ While the California Public Utilities' Commission revenue allocation framework eschews volumetric returns in favor of lump-sum Climate Credits for customers of the investor-owned utilities, volumetric rate reductions are occurring with a portion of the allowance value allocated to the POUs.¹¹ Moreover, as we argued in 2013, ARB is well within

https://www.arb.ca.gov/cc/capandtrade/meetings/20160518/staff-leakage-workshop-methodology.pdf (slide 16) (emphasis added).

⁸ <u>http://www.ecy.wa.gov/laws-rules/WAC173442/X1510a.pdf</u> (WAC 173-442-170).

⁹ "Cap-and-Trade Regulation 2016 Amendments: Staff Presentation on a Methodological Framework for Emissions Leakage Designation for 2018 and Beyond," May 18, 2016, available at:

¹⁰ § 95893(d)(3)

¹¹ "Summary of Vintage 2013 Electrical Distribution Utility Allocated Allowance Value Reports," at: <u>http://www.arb.ca.gov/cc/capandtrade/allowanceallocation/edu-v2013-allowance-value-report.pdf</u> (figure 2, p.7).

its legal authority to prohibit a volumetric return without infringing on the CPUC's authority to set customer rates.¹²

ii. Ten year deadline

We support staff's proposal to impose a deadline by which EDUs and natural gas suppliers must use allocated allowance value. Under the allocation framework for the electric and natural gas sectors, utilities receive allowance value for the exclusive benefit of their customers. If that value is not being timely invested in emissions reductions projects or returned to customers to mitigate cost impacts, it is not being used for its intended purpose. Staff's initial proposal of a ten year deadline, however, is too lenient and runs the risk of merely perpetuating the status quo. We propose instead a three year deadline, which still affords a measure of flexibility to accommodate planning and implementation needs but will better ensure allowance value (and its associated benefits) is not simply languishing in utility subaccounts.

Proposed Modification to § 95892. Allocation to Electrical Distribution Utilities for Protection of Electricity Ratepayers

(d)(6) Deadline for Use of Allocated Allowance Value. The proceeds received from the sale of allowances allocated to an EDU must be spent by December 31 of the year *three* ten years after the vintage year of the allowances. To be spent, the proceeds must not remain in any account owned or controlled by the *EDU* natural gas supplier or its corporate associates. If the proceeds have not been spent within *three* ten years, they must be returned to ratepayers in a non-volumetric manner by December 31 of the year *four* eleven years after the vintage year of the allowances.

Proposed Modification to § 95893. Allocation to Natural Gas Suppliers for Protection of Natural Gas Ratepayers

(d)(6) Deadline for Use of Allocated Allowance Value. The proceeds received from the sale of allowances allocated to an EDU must be spent by December 31 of the year *three* ten years after the vintage year of the allowances. To be spent, the proceeds must not remain in any account owned or controlled by the natural gas supplier or its corporate associates. If the proceeds have not been spent within *three* ten years, they must be returned to ratepayers in a non-volumetric manner by December 31 of the year *four* eleven years after the vintage year of the allowances.

iii. MRR and COI fee compliance costs

We also support staff's proposal to explicitly prohibit EDUs and natural gas suppliers from using allowance value to pay for the costs of complying with the Mandatory Reporting Regulation or the Cost of Implementation Fee Regulation. Paying for the administrative costs associated with those regulations is clearly not consistent with the intended uses of allowance value and should be prohibited.

¹² "NRDC and Coalition for Clean Air Comments on ARB's Proposed Amendments to the Cap-and-Trade Program," October 16, 2013.

iv. Customer outreach and education

Finally, we propose ARB add a requirement that all EDUs and natural gas suppliers develop and implement a customer outreach plan to maximize public awareness and understanding of the use of allowance value. This would mirror the requirement already in statute for the electric IOUs, but which is currently absent for the electric POUs and natural gas suppliers.¹³ Based on initial surveys following the April 2014 issuance of the first climate credits on IOU household bills, less than half of customers were even aware they received a credit, and of those, three in four were unaware why they received it.¹⁴ While the state has since embarked on a statewide education campaign as part of Energy Upgrade California, clearly more effective customer outreach will be required to increase awareness and understanding of California's climate credits.

Proposed Modification to § 95892. Allocation to Electrical Distribution Utilities for Protection of Electricity Ratepayers

(d)(3) Auction proceeds and allowance value obtained by an electrical distribution utility shall be used exclusively for the benefit of retail ratepayers of each electrical distribution utility, consistent with the goals of AB 32, and may not be used for the benefit of entities or persons other than such ratepayers. <u>Allocated allowance auction proceeds may be used to reduce greenhouse gas emissions or returned to ratepayers</u>. Any allocated allowance auction proceeds returned to ratepayers must be returned in a non-volumetric manner *and supported by a customer outreach plan for purposes of obtaining the maximum feasible public awareness of the crediting of auctions proceeds*.

(e)(3) How the electrical distribution utility promoted customer awareness and understanding of the disposition of any allocated allowance auction proceeds which were spent during the previous calendar year.

Proposed Modification to § 95893. Allocation to Natural Gas Suppliers for Protection of Natural Gas Ratepayers

(d)(3) Auction proceeds and allowance value obtained by a natural gas supplier shall be used exclusively for the benefit of retail ratepayers of each natural gas supplier, consistent with the goals of AB 32, and may not be used for the benefit of entities or persons other than such ratepayers. Allocated allowance auction proceeds may be used to reduce greenhouse gas emissions or returned to ratepayers. Any revenue allocated allowance auction proceeds returned to ratepayers must be done in a non-volumetric manner and supported by a customer outreach plan for purposes of obtaining the maximum feasible public awareness of the crediting of auctions proceeds.

¹³ Pub. Util. Code sec 748.5(b) "Not later than January 1, 2013, the commission shall require the adoption and implementation of a customer outreach plan for each electrical corporation, including, but not limited to, such measures as notices in bills and through media outlets, for purposes of obtaining the maximum feasible public awareness of the crediting of greenhouse gas allowance revenues."

¹⁴ Opinion Dynamics, "Final Climate Credit Assessment," September 2014, available at: <u>http://www.calmac.org/publications/ME%260 Climate Credit Assessment.pdf</u>

(e)(3) How the natural gas supplier promoted customer awareness and understanding of the disposition of any allocated allowance auction proceeds which were spent during the previous calendar year.

c. Publicly-Owned Utility (POU) Consignment

While acknowledging the importance of prohibiting the volumetric return of allowance value, staff proposes to continue to afford POUs the option – unlike the IOUs – of turning in freely allocated allowances directly for compliance. That in turn operates as an implicit volumetric return by preventing retail electricity rates from reflecting the full price of carbon. And as ARB's 2013 summary report on EDU allowance value reveals, that is what is happening with 84% of the allowances allocated to the POUs.¹⁵

Staff has explicitly acknowledged the importance of consignment in the context of allocation to natural gas suppliers, noting (correctly) that it "incentivizes GHG reductions and creates equity between below- and above-threshold facilities" and that "full price pass-through will more closely align NG supplier allocation with EDU allocation."¹⁶ Yet this rationale is mystifyingly absent as applied to the POUs. At the March 29 workshop, staff attempted to distinguish the disparate consignment requirements for IOUs and POUs on the grounds that most POUs own and operate their own generation, and would accordingly be buying back a significant portion of the allowances consigned to auction (as they hold the compliance obligation). Of course, that is exactly the same situation as California's natural gas suppliers, and in that context the rule still requires consignment – and indeed staff has indicated they intend to *accelerate* the consignment schedule for gas suppliers in a future 15-day rulemaking package.

The POU option also penalizes more efficient users relative to a scenario where, like the IOUs, the full range of allowance value is returned to customers independent of usage. That outcome is regressive, as on average higher income customers tend to consume more electricity. As new research demonstrates, the combination of consignment and Climate Credits provides *net financial benefits* for low-income households of the IOUs.¹⁷ By proposing to continue the POU option, ARB is foreclosing the same opportunity for low-income households in POU service territories.

Accordingly, to truly align with the EDU allocation (not just the IOU allocation), we propose staff phase-in a consignment obligation for POUs alongside gas suppliers, with full consignment achieved by the start of the compliance period staff proposes for 2025-2027:¹⁸

 ¹⁵ "Summary of Vintage 2013 Electrical Distribution Utility Allocated Allowance Value Reports," at: <u>http://www.arb.ca.gov/cc/capandtrade/allowanceallocation/edu-v2013-allowance-value-report.pdf</u> (figure 2, p.7).
¹⁶ http://www.arb.ca.gov/cc/capandtrade/meetings/20160329/caps_allocation_032916.pdf (slide 26).

¹⁷ UCLA Luskin Center, "Protecting the Most Vulnerable: A Financial Analysis of Cap-and-Trade's Impact on Households in Disadvantaged Communities Across California," at

http://innovation.luskin.ucla.edu/sites/default/files/FINAL%20CAP%20AND%20TRADE%20REPORT.pdf ¹⁸ http://www.arb.ca.gov/cc/capandtrade/meetings/022416/arb.cpp.feb2016.pdf (at 4).

Proposed POU Consignment Schedule

Year	2021	2022	2023	2024	2025
Percent Consigned	20	40	60	80	100

At a minimum, the onus is on staff to justify disparate treatment for the POUs when for all other sectors ARB has recognized clearly the importance of consignment to preserve the carbon price in both wholesale and retail energy prices and encourage GHG reductions, reward more efficient users, maintain equity across sectors that compete for the same end uses, and increase liquidity in the market.

d. Natural Gas Supplier Consignment

For all the reasons stated above and in previous comments,¹⁹ we strongly support staff's proposal at the March 29 workshop to accelerate the consignment schedule for natural gas suppliers after 2020. With the current minimum consignment level at only 30%, most of the carbon price in retail gas rates is muted and the monetized allowance value that is proposed to be returned to IOU households in climate credits (~\$12-15, once a year) will not be enough to drive meaningful additional reductions or to substantially raise awareness. As staff notes, partial consignment also creates disparities with non-covered customers of natural gas suppliers that face a carbon cost that is only a fraction of the cost faced by covered entities.²⁰ We accordingly support requiring full consignment starting in 2021 in a subsequent 15-day rulemaking, which would resolve these inequities and incentivize more reductions. As staff previously identified, reductions in natural gas use in response to a price signal alone may be able to achieve more than half of the gas sector's emission reductions under the cap.²¹

VIII. Miscellaneous

a. Voluntary Renewable Energy (VRE) Program

We support the proposal to expand the eligibility requirements of the Voluntary Renewable Energy (VRE) program, which provides a mechanism to ensure that overall emissions reductions are still achieved by voluntary renewable electricity generation by retiring allowances taken "off the top" of the cap. As staff notes, to be eligible for allowance retirement currently, renewable generation must come from either a generator that is RPS-certified by the California Energy Commission (CEC) or meet the CEC's guidelines for California's Solar Initiative (CSI), for which participants must also document that the generator received a CSI incentive.²² Because several EDUs have exhausted their CSI funds, however, new solar generation projects cannot demonstrate that they received a CSI incentive and therefore are ineligible for the VRE program. Partly as a result, requests for VRE retirement have been much lower than anticipated.

¹⁹ See e.g. "NRDC Comments on the July 18 Workshop on Proposed Amendments to the Cap-and-Trade Program" (August 2, 2013).

²⁰ ISOR at p.45.

 ²¹ ARB, "Suppliers of Natural Gas: Background and Options," slide 14 (June 3, 2013), available at: http://www.arb.ca.gov/cc/capandtrade/meetings/060313/natural_gas_suppliers_workshop_presentation.pdf.
²² ISOR at 53-54.

We agree it is appropriate then to allow, as proposed, solar systems that meet EDU installation requirements and which are similar to the CSI requirements to be eligible for VRE participation. But as it seems likely that participation in the VRE program will increase under the expanded guidelines, we recommend ARB include a provision to periodically assess the VRE reserve account and transfer additional allowances into it as needed to prevent it from becoming depleted.²³

b. Eliminating Qualified Export and Natural Gas Fuel Cell Exemptions

We support the elimination of the qualified export (QE) exemption. As staff's analysis shows, the QE exemption has operated as a loophole that needs to be closed.²⁴ We also support eliminating the exemption for emissions from natural gas hydrogen fuel cells in advance of the third compliance period. Consistent with staff's analysis and our position on requiring full consignment for natural gas suppliers, removing this exemption will maintain a level playing field for natural gas emissions sources and reduction technologies.

c. Global Warming Potentials

Staff proposes to base the post-2020 program on global warming potentials (GWPs) for covered greenhouse gases from the IPCC's Fourth Assessment. While we support staff's proposal to update the GWPs relative to the Second Assessment, on which the pre-2020 cap was set, we recommend staff employ the most recent Fifth Assessment values. At the March 29, 2016 workshop on cap setting and allocation, staff remarked they would consider updating to the Fifth Assessment if and when it is in more general use and common practice in other jurisdictions. Then, as now, we find this explanation puzzling, as we can think of no other example of when California has waited on the actions of other jurisdictions before incorporating the most up to date climate science in its climate programs. California's entire climate program is predicated on establishing common practice, not waiting for it to materialize. While we appreciate the need to coordinate any changes in GWP values with California's linked partner jurisdictions, we encourage staff to revisit this decision and move to the most recent GWPs contained in the Fifth Assessment.

IX. Conclusion

For the past decade, California has led the world on climate action through the implementation of AB 32, which has put the state on track to meet and exceed the goal of reducing statewide emissions to 1990 levels by 2020. In the process, California has shown that – far from hindering economic growth – smart climate policies create jobs, support a productive economy, and clean the air. But the perils of a rapidly changing climate require much more aggressive action. By extending and building on the policy framework developed pursuant to AB 32, including a

²³ Up until a ceiling is reached; e.g., the same percentage of allowances that were transferred to the VRE reserve account out of the pre-2020 cap.

²⁴ ISOR at 54 (noting that over the first compliance period there was a 50 percent increase in QE adjustments while imported electricity emissions decreased over the same period).

strengthened cap-and-trade program, ARB can set a course to achieve California's 2030 and 2050 reduction targets and expand the benefits of a cleaner, lower carbon economy.

Thank you for considering these comments.

Sincerely,

Alex Jackson Legal Director, California Climate Project NRDC