State of California Environmental Protection Agency AIR RESOURCES BOARD

AMENDMENTS TO CALIFORNIA'S CAP-AND-TRADE PROGRAM

FINAL STATEMENT OF REASONS

May 2013

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State of California California Environmental Protection Agency AIR RESOURCES BOARD

Final Statement of Reasons for Rulemaking, Including Summary of Public Comments and Agency Responses

PUBLIC HEARING TO CONSIDER PROPOSED AMENDMENTS TO THE CALIFORNIA CAP ON GREENHOUSE GAS EMISSIONS AND MARKET-BASED COMPLIANCE MECHANISMS TO ALLOW FOR USE OF COMPLIANCE INSTRUMENTS ISSUED BY LINKED JURISDICTIONS

> Public Hearing Date: April 19, 2013 Agenda Item No.: 13-4-1

I. GENERAL

A. Action Taken in This Rulemaking

In this rulemaking, the Air Resources Board (ARB or the Board) is adopting amendments to the California Cap-and-Trade Regulation (Regulation) to allow for the linkage of California's Cap-and-Trade Program with the Canadian Province of Québec's Cap-and-Trade Program. The amendments were developed pursuant to the requirements of the California Global Warming Solutions Act of 2006, also known as Assembly Bill 32 (AB 32). The amendments are codified at Subarticle 12, sections 95802, 95814, 95830, 95831, 95832, 95833, 95834, 95856, 95870, 95910, 95911, 95912, 95913, 95920, 95921, 95942, 95943, 96010, and 96022, of Title 17, California Code of Regulations (CCR).

The rulemaking was initiated by the May 9, 2012, publication of two notices for a public hearing scheduled on June 28, 2012. A Staff Report: Initial Statement of Reasons, entitled "Proposed Amendments to the California Cap on Greenhouse Gas Emissions and Market-Based Compliance Mechanisms to Allow for the Use of Compliance Instruments Issued by Linked Jurisdictions" (Staff Report or ISOR) was also made available for public review and comment starting on May 9, 2012, and published in the California Notice Register on May 11, 2012. The notices reflected two sets of proposed amendments. The first set of proposed amendments, addressed in a previous FSOR (2012 FSOR), related to program implementation and were adopted by the Board at a June 28, 2012 hearing. Those implementation amendments took effect September 1, 2012. The second set of proposed amendments (linkage amendments), addressed in this FSOR, relate to the establishment of a joint market program between California and Québec's programs. The linkage amendments would allow for the mutual acceptance of California and Québec issued compliance instruments by each jurisdiction. During the week of June 28th, SB 1018 was passed by the California Legislature and signed by the Governor. SB 1018 added Government Code section 12894 which imposed

additional requirements on ARB prior to any linkage with any other state, province or country. Section 12894(f) requires state agencies to notify the Governor prior to any proposed linkage so the Governor can make certain findings. These findings include that the proposed linked jurisdiction's program is equivalent to or stricter than California's program, that California is able to enforce its laws to the extent permissible by the California and US Constitutions, that the linked jurisdiction's enforcement provisions are equivalent to or stricter than California's, and that the linkage does not impose any significant liability on California or ARB related to the proposed linkage. Consequently, at its June 28, 2012, public hearing, the Board deferred action on the regulatory amendments related to linkage and directed the Executive Officer to formally request that the Governor make the required findings and provide those findings to the Legislature.¹

Concurrent with the 45-day comment period, staff released a Notice of Public Availability of Modified Text and Availability of Additional Documents and Information to add certain Québec program documents to the public record. On January 8, 2013, ARB staff released the second Notice of Public Availability of Modified Text and Availability of Additional Documents and Information. The public notice provided background and support for ARB's subsequent request that the Governor make certain findings as a prerequisite to linking the two programs. On March 22, 2013, ARB staff released the third Notice of Public Availability of Modified Text and Availability of Additional Documents and Information. Each of these notices had a 15-day comment period

During the 45-day public comment period and the three 15-day public comment periods, the public submitted comments on the staff proposal. In addition, oral comments were submitted on the linkage proposal at the June 28, 2012, and the April 19, 2013, public hearings. The regulatory amendments for linkage were part of other regulatory amendments to the Regulation that the Board considered at the June public hearing, even though no formal action was taken at that time.. Therefore, all of the written and oral comments submitted prior to, and at the June public hearing, are summarized in the 2012 FSOR that was completed in July 2012.² However, as action was deferred on the linkage regulatory amendments, the responses to the linkage-related comments identify that no action was taken on those proposed amendments. This FSOR will address all of the linkage related comments, including comments submitted during the April 19[,] 2013 Board hearing.

Β. **Fiscal Impacts**

The Executive Officer has determined that the proposed regulatory action could create costs or savings, as defined in Government Code sections 11346.5(a)(5) and 11346.5(a)(6), to State agencies or in federal funding to the State. The proposed regulatory action could create costs and could impose a mandate on some State and local agencies, but would not create costs or impose a mandate on school districts.

¹ Air Resources Board Resolution 12-28, June 28, 2012. ² Air Resources Board, Amendments to California's Cap-and-Trade Program, Final Statement of Reasons, July 2012.

Eight California public universities, the California Department of Water Resources (DWR), several municipal utilities and one county correctional facility would have a compliance obligation under the proposed regulation. These entities would be required to surrender allowances or offsets equal to the amount of their GHG emissions during the compliance period as was already required under the original regulation.

Because the regulatory requirements apply equally to all covered entities and unique requirements are not imposed on local agencies, the Executive Officer has determined that the proposed regulatory action imposes no costs on local agencies that are required to be reimbursed by the State pursuant to part 7 (commencing with section 17500), division 4, title 2 of the Government Code, and does not impose a mandate on local agencies or school districts that is required to be reimbursed pursuant to section 6 of article XIII B of the California Constitution.

The Executive Officer has also determined that pursuant to Government Code Section 11346.5(a)(5), the regulatory action might affect small businesses. Because very few small businesses have enough emissions to be regulated directly under the Cap-and-Trade Program, most foreseeable small business impacts will result from changes in energy expenditures. An analysis on how implementation of the program could affect expenditures that small businesses make on electricity and natural gas, and how such shifts could affect their profitability, demonstrated that most sectors could experience, at most, less than a one percent change in the share of revenue spent on energy and are not likely to face competitiveness issues relative to out-of-state businesses. A detailed description of these impacts is included in Chapter V of the Staff Report.

C. Consideration of Alternatives to the Linkage Amendments

There are no reasonable alternatives to the linkage amendments. Although some commenters suggested delaying linkage, staff believes these alternatives do not adequately expand the Cap-and-Trade Program as required by AB 32. The alternatives to restrict certain offsets from Québec or allow no offsets from Québec to be used for compliance in the California Cap-and-Trade Program were found to be too limiting in providing the full cost containment benefits for California's regulated entities. These two alternatives would not support the establishment of a truly broad and liquid market for all entities.

II. SUMMARY OF COMMENTS MADE DURING THE 45-DAY AND FIRST 15-DAY COMMENT PERIOD AND AGENCY RESPONSES

Chapter II contains all comments submitted during the 45-day and first 15-day comment period and the subsequent Board hearing that were directed at the proposed linkage regulation or to the procedures followed by ARB in proposing the linkage regulation, together with ARB's responses. The 45-day comment period commenced on May 9, 2012, and ended on June 27, 2012, with additional comments submitted at the June 28, 2012, Board hearing on the proposed regulation. The first 15-day comment period was concurrent to the 45-day comment period and ran from June 11 to June 27, 2012.

We received 38 letters on the proposed regulation during the 45-day and first 15-day comment period, of which 17 directly concerned linkage. 16 commenters gave oral testimony during the June 28, 2012, Board hearing. Of these 16, 8 commenters discussed linkage. Commenters included representatives from the electricity sector, environmental non-governmental organizations, and trade groups. To facilitate ease of use, comments are categorized into one of 9 sections below, and are grouped for response wherever possible.

Table II-1 below lists commenters that submitted linkage comments during the 45-day and 15-day comment period up to and at the Board Hearing, identifies the date and form of their comments, and shows the abbreviation assigned to each.

A. LIST OF COMMENTERS

Table II-1: Comments Received During the 45-Day and first 15-Day Comment		
Period, as well at the Board hearing on June 28, 2012		

Abbreviation	Commenter
ADDOLO	Shelly Sullivan, AB 32 Implementation Group
AB32IG	Written Testimony: 06/27/12
	Charlotte Skidmore, Association of Home Appliance
AHAM	Manufacturers
	Written Testimony: 06/27/12
CALCHAMBER	Brenda Coleman, California Chamber of Commerce
	Oral Testimony: 06/28/12
CERP	Kyle Danish, Coalition for Emissions Reduction Policy
	Written Testimony: 06/27/12
CHEVRON	Stephen Burns, Chevron Corporation
	Written Testimony: 06/27/12
EDF1	Erica Morehouse, Environmental Defense Fund
	Written Testimony: 06/27/12 Erica Morehouse, Environmental Defense Fund; Michelle
	Passero, The Nature Conservancy; Alex Jackson, Natural
EDF2	Resources Defense Council; Jennifer Martin, Center for
	Resources Solutions
	Written Testimony: 06/27/12
	Erica Morehouse, Environmental Defense Fund
EDF3	Oral Testimony: 06/28/12
	Amber Riesenhuber, Independent Energy Producers
IEP	Association
	Written Testimony: 06/27/12
NCPA	Susie Berlin, Northern California Power Agency
NCFA	Written Testimony: 06/27/12
PEB	Sean Lane, PE-Berkeley/Olympus Power
	Written Testimony: 06/27/12
PFT1	Paul Mason, Pacific Forest Trust
	Written Testimony: 06/27/12
PFT2	Paul Mason, Pacific Forest Trust
	Oral Testimony: 06/28/12
PGE	Judi Mosley, Pacific Gas & Electric
	Written Testimony: Written Testimony: 06/18/12
SCE	Nancy Chung Allred, Southern California Edison
	Written Testimony: 6/22/12
SEMPRA2	Tamara Rasberry, Sempra Energy Utility
	Oral Testimony: 06/28/12
	Norman Pedersen, Southern California Public Power
SCPPA	Authority Written Testimony: 06/18/2012
SCDDAO	Written Testimony: 06/18/2012
SCPPA2	Norman Pedersen, Southern California Public Power

	Authority Oral Testimony: 06/28/2012
SOLARTURBINES	Craig Anderson, Solar Turbines Oral Testimony: 06/28/2012
TWS1	Ann Chan, The Wilderness Society Written Testimony: 06/27/12
TWS2	Ann Chan, The Wilderness Society Oral Testimony: 06/28/12
UCS	Barbara Haya, Union of Concerned Scientists Written Testimony: 06/27/12
VALERO	Patrick Covert, Valero Written Testimony: 06/27/12
WSPA1	Catherine Reheis Boyd, Western States Petroleum Association Written Testimony: 06/27/12
WSPA2	Mike Wang, Western States Petroleum Association Oral Testimony: 06/28/12

B. HARMONIZATION

General

B-1. Comment: PG&E appreciates ARB's efforts to ensure that linkage occurs in a manner that does not adversely affect covered entities in California. On April 13, 2012, PG&E submitted comments on the draft amendments, which provided a number of other recommendations to refine the regulation in this regard. (See Attachment A, pp. 5–7.) PG&E recognizes that there is insufficient time to make all of these changes in time to allow the first auction to occur this year. However, PG&E urges ARB to carefully review these suggestions and make these changes in the next set of amendments. (PGE)

Response: Thank you for your constructive suggestions. To the extent those comments were also provided in the formal comment period, they are addressed in this FSOR. As adopted by the Board, linkage would not occur until January 1, 2014. Some of the specific comments are related to the implementation amendments considered on June 28, 2012 and those were addressed in the 2012 FSOR for amendments to the Regulation.

Allocations

B-2. Comment: Without ensuring equivalency between how allocations are administered there could be market impacts if California facilities are purchasing too few or too many offsets to meet compliance obligations. This uncertainty could affect the market value of allowances by either artificially inflating or deflating value based on demand. (VALERO)

Response: Each linked jurisdiction has discretion on how to allocate its allowances to its regulated entities. This is one area where staff does not believe there needs to be complete harmonization for two programs to be linked in a regional market program. Since Québec and California have different industries and regulated entities, allowance allocation will necessarily be different.

As to the comment that facilities might not purchase the right amount of offsets, staff disagrees. Most likely, covered entities will purchase 8% of their compliance obligation in offsets. Offsets are a low cost way to comply with the program. ARB staff will monitor the market and propose any adjustments to the Regulation, as needed, to ensure efficiency.

Definitions

B-3. Comment: Prior to linking with any jurisdiction, including Québec province, California must ensure that all definitions in the corresponding cap and trade regulations and offset protocols are harmonized. For example, although several entities may be involved in the implementation of a carbon offset project for ozone depleting

substances, it is the entity that has taken the legal responsibility for end-of-life management that must be given ownership of the carbon offset credits. The California regulation defines an "offset project operator" as the entity with legal authority to implement an offset project. However, it appears the Québec cap and trade regulation does not utilize the same definition. Therefore, further clarification of "legal authority" is needed in the regulation and AHAM requests the definition for "offset project operator" be changed as follows:

Offset Project Operator means the entity with the legal authority to implement an offset project. For the purposes of this definition, legal authority is defined as the entity that has taken legal responsibility for end of life management regarding ozone depleting substances or GHG emissions. (AHAM)

Response: Staff does not believe this definition needs to be harmonized to allow for linkage, and disagrees that the definition needs more clarification. Because some offset projects do not involve "end of life management", including such language would confuse non-ODS offset project operators. In addition, ozone depleting substances are a form of greenhouse gas emissions, negating the need for the distinction in the proposed definition.

C. OFFSETS

Harmonize Offset Protocols

C-1. Comment: In addition to allowing the use of offsets, a linked program should facilitate the availability of offsets to avoid increasing demand for the limited number of offsets that will be generated pursuant to the California program. This is particularly important given that the full cost containment potential of offsets will not be realized unless each covered entity is able to, and does, acquire offsets up to the eight percent limit, and that some studies (for example by Thompson Reuters Point Carbon) have indicated that there is likely to be a shortage of offsets in the California program compared to the demand from California covered entities only.

The California and Québec regulations approve the following divergent sets of offset protocols:

California	Québec
 Livestock methane destruction 	Livestock methane destruction
 Destruction of ozone depleting substances 	Destruction of ozone depleting substances
Forestry and urban forestry	Landfill methane destruction

It is unclear why California has not approved a landfill methane destruction protocol and why Québec has not approved forestry and urban forestry protocols. Nor is it clear whether the currently-approved California and Québec offset protocols will together produce sufficient offsets to meet the joint demand from the two jurisdictions. To

increase the supply of offsets, SCPPA urges California to adopt an offset protocol similar to Québec's landfill methane destruction protocol, Québec to adopt protocols similar to California's two forestry protocols, and both jurisdictions to put a high priority on investigating and adopting additional protocols.

In addition, to avoid asymmetrical demand for Québec offsets and differential pricing due to differences in the risk profiles of Québec and California offsets, California should adopt Québec's rule regarding the replacement of invalid offsets: Invalid offsets should be replaced by the entity that generated them, not the entity that purchased or surrendered them as in the CA Regulation. Failing that, invalid offsets should be replaced from an offset buffer account maintained by the regulator. This approach will provide greater certainty in the offset market than the approach in the CA Regulation, and therefore will strengthen the offset program as a whole. (SCPPA)

Response: Staff recognizes stakeholder concerns regarding offset supply. The Board must adopt all offset protocols used in the compliance program.

The California and Québec Cap-and-Trade Regulations both allow an entity to fulfill its compliance obligation with up to eight percent in offsets. California will explore, in conjunction with WCI partner jurisdictions, additional opportunities for emissions reductions from offsets in order to ensure a sufficient offset supply is available to contain costs. Pursuant to Resolution 13-7, staff will provide a Board update on the market program at least annually. Staff will also provide the Board with a report prior to the actual revision to existing or adoption of new offset protocols or linkage to another jurisdiction at least six months prior to that change taking effect in a linked jurisdiction. This will provide stakeholders and the Board an opportunity to discuss and evaluate the proposed changes to a linked jurisdiction's program. Staff is committed to a transparent review process of the linked jurisdiction's programs and will work with stakeholders in providing recommendations, as needed, to the Board.

As to offset liability, staff does not agree that buyer liability associated with the invalidation of ARB offset credits should be eliminated or needs to be consistent with the Québec program. Both jurisdictions ensure environmental integrity of their programs and retain enforcement authority in cases of malfeasance. Staff also believes it has established a rigorous offset program with multiple levels of review and that the risk of invalidation is low.

ARB staff held a public workshop in early 2013 to present a proposal to develop two additional offset protocols for mine methane capture and rice cultivation projects. The details surrounding any new offset project types for which ARB adopts an offset protocol will be considered under that specific rulemaking, and modification will be made to the Cap-and-Trade Regulation as needed. Finally, California did not approve a landfill protocol because analysis showed few additional reductions above those required by California's landfill regulation. Québec is not proposing a forest or urban forest offset protocol at this time. **C-2. Comment:** The California Air Resources Board has proposed amendments to its cap-and-trade regulation to allow for the use of compliance instruments issued by linked jurisdictions to facilitate a market based system. The Air Resources Board has evaluated the Québec cap-and trade regulation and proposes to allow for the interchange of compliance instruments between the California and Québec programs. However, recently Québec released its Climate Action Plan in June 2012, which could lead to the regulation of ozone depleting substances including refrigerants and foam blowing agents in a manner which would prevent any offset credits from being issued or traded in Québec province despite meeting the requirements in California as outlined in the "Compliance Offset Protocol Ozone Depleting Substances Projects" adopted by the Air Resources Board.

Offset projects located in the US, its territories, Canada, and Mexico that otherwise meet the requirements of the California regulation and the California ODS protocol could not be used in California and its linked jurisdictions to meet compliance obligations because of failure to meet the definition of additionality as defined in the California regulation:

"Additionality means in the context of offset credits, greenhouse gas emission reductions or removals that exceed any greenhouse gas reduction or removals otherwise required by law, regulation or legally binding mandate, and that exceed any greenhouse gas reductions or removals that would otherwise occur in a conservative business-as-usual scenario."

If Québec mandates refrigerator foam recovery or refrigerant recovery beyond present regulations then projects located in Québec and elsewhere would not have qualifying additionality.

Therefore, regarding linkage with Québec province or any trading partner, AHAM requests the regulation be modified with the following sentence in Subarticle 2: Purpose and Definitions:

The purpose of this article is to reduce emissions of greenhouse gases associated with entities identified in this article through the establishment, administration, and enforcement of the California Greenhouse Gas Cap-and-Trade Program by applying an aggregate greenhouse gas allowance budget on covered entities and providing a trading mechanism for compliance instruments. In order to comply with the purpose of this article, any jurisdictions linked to the California Cap and Trade program must provide for the trading of compliance instruments, including offsets, as outlined in the protocols approved and adopted by the Air Resources Board accompanying this regulation. (AHAM)

Response: While it is crucial for linked jurisdictions to have consistent offset regulations, identical offset protocols are not necessary. The linked jurisdictions

must agree on the calculations methods and additionality requirements of each other's protocols. Just as an offset project developer registered in California will have to use a California-approved compliance offset protocol, offset project developers registered in Québec will need to use Québec-approved compliance offset protocols to develop offset projects under Québec's program. Once approved in one jurisdiction, however, offsets will be fungible in the other jurisdiction. Hence, there is no need for the change in definition. Furthermore, ARB's ODS protocol is only applicable in the United States and California will not be directly issuing any offsets in Canada under this protocol.

C-3. Comment: In order to allow for the interchange of compliance instruments, including offset credits, between California and any linked jurisdiction; offset projects that meet the requirements of the offset protocols approved and adopted by the Air Resources Board must not be excluded if the offset project is within the boundaries of the United States or its territories, Canada or Mexico and implemented by an Offset Project Operator.

Compliance Offset Protocols from linked jurisdictions to the California cap and trade program can not prohibit Offset Project Operators meeting the requirements of the California regulation from being the entity with the legal authority to implement an offset project, being the sole owner, or owning GHG emission reduction credits from an offset project in the linked jurisdiction. It appears the Québec cap and trade regulation would require the carbon offset project to be domiciled in Québec and the project "promoter" to be the sole owner of the carbon offset credits without recognizing the legal authority of other parties.

AHAM requests the regulation change Section 95972(c) "Requirements for Compliance Offset Protocols" to the following:

Requirements for Compliance Offset Protocols Including Linked Jurisdictions Geographic Applicability: A Compliance Offset Protocol must specify where the protocol is applicable and cannot exclude any linked jurisdictions. The geographic boundary must be within the US or its territories, Canada or Mexico. Entities meeting the requirements of the California Cap and Trade regulation and its approved and adopted Compliance Offset Protocols qualify as Offset Project Operators in linked jurisdictions. (AHAM)

Response: Staff declines to make this change as it appears that the commenter is asking for the Board to change the regulation in a way that would force linked jurisdictions to allow offset projects on their territory, regardless of whether they have approved the associated project protocol. This change would violate the sovereignty of linked jurisdictions. In addition, WCI has already agreed that all reductions issued offset credits must be additional to those achieved under existing regulations.

Offset Liability Issue

C-4. (multiple comments): Québec's offset regulations were published in early June and ARB added them to the rulemaking docket on June 11. We appreciate that ARB has made such documents available for review. As ARB noted, it appears that most of Québec's offset regulations are the same or very similar to California's approach.

However, one area in which the offset regulations for the two jurisdictions differ is in their approach to liability for invalidated offset credits. California has adopted a "buyer liability" approach wherein the entity that surrenders an offset credit for compliance must replace it with another valid compliance instrument if the credit is invalidated. In contrast, Québec proposes that invalidated offset credits be remediated by canceling an equal quantity of offset credits held in an "environmental integrity account." Every offset project would contribute a small percentage, approximately 6% of its total issued offsets, into the environmental integrity account-thereby providing a form of advance insurance to protect the integrity of Québec's emission trading system. In addition, Québec proposes to grant the Minister of Sustainable Development, Environment, and Parks discretionary authority to require an offset project developer (or "offset promoter" in Québec's regulatory terminology) to replace invalidated credits with valid compliance instruments. These discretionary replacements and cancelations from the environmental integrity account will together cover any losses arising from offset project reversals or fraudulent credits. CERP and many other organizations recommended that ARB adopt such a buffer account as an alternative to the buyer liability approach.

To be sure, challenges and inefficiencies may arise if Québec and California adopt divergent approaches to assuring the integrity of offset credits across the WCI. Because Québec proposes to employ an approach to offsets invalidation that does not create buyer liability, covered entities throughout the WCI region will likely gravitate to offsets issued by Québec. Conversely, offset credits issued by California may be comparatively less attractive to buyers in light of their uncertain risk for invalidation liability. If different systems of invalidation liability persist, the emergence of a fragmented market with differential pricing of offset credits is very likely—distorting the efficiency and effectiveness of the broader WCI market.

Despite this potential for market discrepancies, CERP also believes the operation of two systems for insuring offset integrity could also provide a valuable "test run" of alternate models. Assuming Québec proceeds to adopt an environmental integrity account, we recommend that ARB use this opportunity to monitor and assess the performance of this approach. Ultimately, CERP believes that over time it will be important to harmonize the offset invalidity approaches. Thus, CERP urges ARB to use the first few years of market operation to assess the buffer account employed by Québec, and after gaining assurances of its performance, to consider adopting a similar approach in California. (CERP)

Comment: In addition, to avoid asymmetrical demand for Québec offsets and differential pricing due to differences in the risk profiles of Québec and California offsets,

California should adopt Québec's rule regarding the replacement of invalid offsets: Invalid offsets should be replaced by the entity that generated them, not the entity that purchased or surrendered them as in the CA Regulation. Failing that, invalid offsets should be replaced from an offset buffer account maintained by the regulator. This approach will provide greater certainty in the offset market than the approach in the CA Regulation, and therefore will strengthen the offset program as a whole. (SCPPA)

Response: Staff does not agree that buyer liability associated with the invalidation of ARB offset credits should be eliminated or needs to be consistent with the Québec program. Both jurisdictions ensure environmental integrity of their respective programs and retain enforcement authority in cases of malfeasance. Staff also believes it has established a rigorous offset program with multiple levels of review and that the risk of invalidation is low.

Evaluation of New Protocols

C-5. (multiple comments): On behalf of its 90,000 California members, The Wilderness Society (TWS) is writing to provide input on the proposed amendments to the cap-and-trade regulation to allow for the use of compliance instruments from linked jurisdictions. TWS commends ARB and California for continued leadership in developing sustainable policies for reducing greenhouse gas emissions. Climate change presents serious threats to the economic wellbeing, public health, natural resources and environment in California. The cap-and-trade program is an important part of achieving California's greenhouse gas emissions reductions, and coordinating and integrating California's efforts with other greenhouse gas reduction programs is another critical step in fully addressing climate change.

TWS appreciates the work and public consultation that has already occurred with respect to developing the proposed amendments to allow for the use of compliance instruments from linked jurisdictions and supports California's effort to link with Québec. Pursuant to the May 9, 2012 ARB Staff Report: Initial Statement of Reasons, TWS understands that Québec's cap-and-trade regulation does not yet include provisions for generating compliance offsets; that any future compliance offset program in Québec is expected to be consistent with the criteria included in the WCI Offset System Essential Elements Final Recommendations Paper for ensuring that offsets are real, quantifiable, permanent, enforceable, additional and verifiable; Québec's offset program may include projects that occur in Mexico; and Québec is not currently developing a forest offset protocol.

TWS seeks further clarification regarding the process for evaluating: any protocols which may be adopted by jurisdictions after linking has occurred; any modifications to protocols which are adopted after linking has occurred; and any changes to a linked cap-and-trade program that substantially alters compliance instruments traded within such program (e.g. subsequent unilateral linking to a third jurisdiction which includes the acceptance of offsets generated pursuant to different protocols, different offset types, and/or offsets from new geographic locations that may have different policies and

programs, such as UNFCCC Nationally Appropriate Mitigation Strategies, that are relevant to the evaluation of whether offsets are real, quantifiable, permanent, enforceable, additional and verifiable). As noted above, TWS supports continued integration of the California program with greenhouse gas reduction programs in other jurisdictions and supports cap-and-trade programs with the flexibility to amend features like offset protocols, to reflect evolving scientific standards and methodologies. (TWS1)

Comment: The Wilderness Society appreciates your continued leadership on climate change that supports linkage to other jurisdictions and underscores the timeliness of this effort at the end of the week that has seen over 1,000 heat records broken across the United States in catastrophic wildfires across the west that have impacted many lives and the public lands that the Wilderness Society seeks to protect.

The staff presentation noted the existence of three draft offset protocols and a geographic restriction on these potential offsets to Canada and California. TWS has submitted written comments seeking additional clarifications that echo the comments of Breathe California and the Pacific Forest Trust about additional clarification that's needed regarding a process for evaluating any protocols after linking or any modifications to protocols or modifications to link jurisdictions' programs that could significantly change the types of compliance instruments available, for instance, by expanding the geographic scope of available offsets. (TWS2)

Response: Staff will continue to monitor and coordinate closely with any jurisdiction to which the California market program is linked. In resolution 13-7, the Board directed the Executive Officer to provide the Board with a report prior to the actual revision to existing or adoption of new offset protocols or linkage to another jurisdiction at least six months prior to that change taking effect in a linked jurisdiction. This will provide stakeholders and the Board an opportunity to discuss and evaluate the proposed changes to a linked jurisdiction's program. Staff is committed to a transparent review process of the linked jurisdiction's programs and will work with stakeholders in providing recommendations, as needed, to the Board.

C-6. Comment: Thank you again for the opportunity to submit comments on regulation for linking California's and Québec's cap-and-trade programs. We focus these comments on CARB's process for ensuring that Québec's offsets protocols, and the offsets protocols of any jurisdiction with which California shall link in the future, meet the requirements of AB 32 that offsets credits be real, permanent, quantifiable, verifiable, and enforceable, additional to what would have otherwise occurred, and represent a no lesser reduction in greenhouse gas emissions than a California compliance instrument. Ensuring the quality of offsets programs. Since credits are fungible across linked programs, ensuring the quality of the offsets program of all linked jurisdictions is essential to the integrity of the entire set of linked programs.

We urge CARB to make clear the criteria it will use to assess whether the offsets protocols of a linked jurisdiction meet AB 32 requirements. We also urge CARB to make its assessments publicly available. (UCS)

Response: As California and Québec develop a linked Cap-and-Trade System, the quality of offsets will be an important topic. Offset protocols will be developed in conjunction with each WCI jurisdiction, with each jurisdiction agreeing to its final form. Additionally, public participation will be a key part of this process with opportunities for public review and comment. In resolution 13-7, the Board directed the Executive Officer to provide the Board with a report prior to the actual revision to existing or adoption of new offset protocols at least six months prior to the changes taking effect in a linked jurisdiction. This will provide stakeholders and the Board an opportunity to discuss and evaluate the changes to a linked jurisdiction's program. Staff is committed to a transparent review process of the linked jurisdiction's programs and will work with stakeholders in providing recommendations, as needed, to the Board.

With regard to the comment about linked offset protocols meeting AB 32 requirements, each jurisdiction is responsible for compliance with its own laws. While Québec might have different offset protocols, they nevertheless conform to AB 32's requirements of additionality, verifiability, etc.

C-7. Comment: Second, we urge CARB to establish procedures that would discourage a linked jurisdiction from making substantial changes to its own cap-and-trade program that weakens the program so it no longer meets California's requirements. CARB should clarify that if a jurisdiction makes substantial changes to its program, such as adopting a new protocol or substantially modifying an existing protocol, CARB will evaluate that change. If CARB finds that the program no longer meets CARB requirements, CARB will disallow the additional use of compliance instruments from that jurisdiction until its program is found once again to meet CARB's standards. (UCS)

Response: In resolution 13-7, the Board directed the Executive Officer to provide the Board with a report prior to the actual revision to existing or adoption of new offset protocols at least six months prior to the changes taking effect in a linked jurisdiction. This will provide stakeholders and the Board an opportunity to discuss and evaluate the changes to a linked jurisdiction's program and identify potential areas of concern well in advance of a linked jurisdiction taking action. ARB staff and Québec staff are committed to working closely together to resolve any potential issues and would strive to avoid actions such as de-linking. Should ARB staff find that de-linking is necessary, the staff would need to propose regulatory action. Although staff cannot pre-suppose Board action, previously issued Québec compliance instruments, are expected to continue to be eligible for use in the California program as long as there are no integrity issues with the compliance instruments.

D. OPPOSED

Delay Linkage

D-1. (multiple comments): California's cap-and-trade program should not be linked to cap-and-trade programs in other jurisdictions, such as Québec, until issues associated with linkage have been fully vetted, some practical experience with the respective cap-and-trade programs has been gained, and there is evidence that linkage can help to contain the costs of the linked programs.

In theory, a larger market for allowances would be a more liquid market and having a larger market would make available more lower-cost opportunities to reduce greenhouse gas ("GHG") emissions. The call to link with Québec would be more persuasive if these theories were supported by empirical evidence, relating to the particular circumstances of the California and Québec programs, that linkage will indeed produce the intended benefits. SCPPA encourages the ARB to seek such evidence and disseminate it to stakeholders. (SCPPA1)

Comment: A California-Québec linked system does not achieve the basic goal of linkage—to develop a broader more cost-effective cap and trade market. The ARB's Initial Statement of Reasons (ISOR) states that this linkage is a first step, however, it is also the only step that California can make in the foreseeable future. Other WCI partners (U.S. states and Canadian provinces equally) have backed away from implementing cap-and-trade programs. (CHEVRON)

Comment: The ARB wishes to link California's cap-and-trade program with Québec's in 2012, before either program has become operational. Linking will unavoidably result in making California's program—which is already complex and rife with uncertainties as to how it will operate in practice—even more complicated and less predictable, particularly given that the linked jurisdiction is outside the United States. Linking at this early stage increases the number of issues that may arise with the new programs, raising the risk that significant problems will occur that would necessitate delinking or major revisions to the programs.

For these reasons, the ARB should consider delaying linking until the California program and the Québec program have started operating, initial problems have been resolved, and the programs have demonstrated that they are stable and effective.

SCPPA is not alone in holding this view. The California Senate Budget Subcommittee No. 2 recently recommended that a provision be included in the 2012 California budget trailer bills prohibiting the ARB from linking until November 30, 2013, unless linking is approved by the California Legislature in a future statute. (SCPPA1)

Comment: SCE has consistently supported a national cap-and-trade program, or in the alternative, a broad cap-and-trade program with linkage to other jurisdictions. A broader program will create more efficient markets that will benefit all Californians that bear the

impact of a carbon price on their consumer products. The Western Climate Initiative ("WCI") recently released an economic analysis assessing a linked program between California and Québec. While SCE continues to support a wide-ranging, robustly-designed cap-and-trade market, this report raises concerns that linkage with Québec may fail to create such a market. Indeed, the relative size of Québec to California is a red flag that leads SCE to question whether this partnership could truly achieve the primary goal of linkage—a wide-ranging market that will result in lower compliance costs due to more efficient distribution of emissions reductions.

Because Québec alone does not offer California the opportunity to develop a comprehensive and robust cap-and-trade market, the ARB must consider including other jurisdictions in a linked trading environment. Other WCI jurisdictions no longer have public support for linked cap-and-trade programs. Unfortunately, a California-Québec system is insufficient to provide the necessary benefits for efficient emissions reductions. The ARB should not enter into a linking agreement with Québec until linkage with other jurisdictions is a realistic option. SCE recommends that ARB develop of a set of criteria to assess this and future linkages to ensure that the overall policy, economic, and environmental impacts of such partnerships are in line with California's cap-and-trade goals. (SCE1)

Comment: ARB's original concept of linking California's CTR in a combined, multistate market would have furthered the goals identified through WCI. At the time, a number of US states were actively contemplating adopting cap-and-trade regulations and, if they had continued on that path, the potential regional market would have been much larger. However, as of today, that opportunity is limited to Québec as the only remaining member of WCI with a C/T regulation.

ARB's proposal to link with the Canadian Province of Québec would create a combined carbon market relying only on a highly specialized market infrastructure reflecting the two jurisdictions. This specialized market structure may well adversely impact linkage to other markets in the future if they also require specialized requirements.

<u>Recommendation</u>: Linkage is premature until ARB defines a broader, simpler and more cost effective program. WSPA has always supported linkage to a broad market with consistent and flexible requirements for all participants. (WSPA1)

Comment: Neither California's nor Québec's cap-and-trade programs have been implemented. With California's "adaptive management" approach, it is highly likely that the California program itself may undergo modifications as the program develops and matures. Rather than linking the programs when it's not clear whether, or how, either one of them will work in practice, and when it's highly likely that each program will be a moving target, it seems prudent to allow each program to develop on a standalone basis and have an opportunity to demonstrate success before attempting to link them. ARB should consider the possibility that the Québec program may prove to be the best option when considering the long-term viability of a cap-and-

trade program. In which case, the ARB program may require modification prior to linkage.

It is also worth noting that the relative size of the Québec cap-and-trade market may not significantly impact the California market. ARB should consider whether linkage should also be deferred to incorporate other cap-and-trade programs to provide a more robust trading market. (VALERO)

Comment: In our comments on linkage, we urge the Board to consider delaying linkage with Québec until the California and Québec program start operating, until the inevitable start-up problems are resolved, and the program show they are stable and effective. (SCPPA2)

Comment: Québec may not be ready to link with California. Recently, in an annual report, Michael Samson, the Canadian province's acting Auditor General, said Québec's greenhouse gas reporting data has been erratic to the point where it won't be clear whether it has achieved the reduction target set out in its 2006–2012 Climate Action Plan. Samson said the Province too often relies on reporting that is "anecdotal" and cannot be verified, and said new policies are needed." While California's program has gone to extremes and at a high cost to the state and industry to get a very accurate verified emissions inventory, yet Canada's own Auditor General is placing doubt on the program in Québec. Wouldn't it be more prudent and in the best interests of California employers and consumers for California's regulatory agency (CARB) and elected officials to delay linking to a program that has not yet been verified? How can a ton of carbon in California be equal to a ton in Québec, when Québec does not even know how many tons are really there? Further, how can the price for that ton be legitimate, when the market will not know how many emissions there are and how many emission reductions are needed? Again, beyond the question of prudence, finalizing linkage with Québec under these circumstances would violate CARB's own public notice requirements and the WCI's pre-linkage review protocols. See C/T Reg. § 95941; WCI Program Design at 22. (AB32IG)

Response: California Health and Safety Code section 38564 requires the Board to "facilitate the development of integrated and cost-effective regional, national, and international greenhouse gas reduction programs." Thus, the Legislature has directed ARB to pursue integration of greenhouse gas reduction programs where possible. In this case, linking with Québec has several advantages. The reduction of greenhouse gas emissions that can be achieved collectively by the two programs is larger than what can be achieved through a California-only program. Broadening the scope of the market will also provide greater flexibility to California businesses by encompassing a wider range of emission reduction opportunities and greater market liquidity, and may have a positive impact on the California economy.

Additionally, California has had two successful carbon allowance auctions, and a robust secondary market has developed. The California program is working as anticipated.

Since the programs are designed to link, coordination, whether linked or not, would be essential for eventual linkage. Thus, staff will continue to coordinate with Québec as we implement the linked program. Pursuant to Resolution 13-7, the Executive Officer will present a report to the Board on readiness to link in 2013. With a start date of January 1,2014, staff feels that there is sufficient time to finalize procedures for how to harmonize implementation processes.

Delaying linking has been considered as an alternative. The benefits of a broader market for California entities would not be seen if linking California and Québec's Cap-and-Trade Programs was deferred. ARB would also be seen as nonresponsive to AB 32 requirements to pursue sub-national collaborative efforts to achieve greater GHG emissions reductions than California could achieve on its own.

Under this alternative, it is also unclear when any future program linkage would occur. While the WCI emissions trading group consists of several Canadian provinces that have been active in the development of the requirements for a regional WCI market program, at this time only Québec has established a Capand-Trade Program.

While deferring linkage may allow for a broader market than one with just linkage to Québec, it is important to take this first step now and develop a regional program to which other jurisdictions can link. As described in Appendix B, significant time and effort have been spent to develop and enable a regional Cap-and-Trade Program. The successful linkage of the California and Québec Cap-and-Trade Programs will be a clear signal that California is taking the next step to work with other sub-national jurisdictions to address climate change and increase GHG emission reductions through cost-effective methods for its covered entities.

Furthermore, pursuant to SB 1018, the Governor found that Québec's program is similar to or identical to California's in all material respects, linkage does not change California's ability to enforce AB 32, Québec's regulations provide for equivalent enforcement of its Cap-and-Trade Program, and that linking will most likely not lead to any significant liability for California. The Governor's findings were supported by a separate review by the Attorney General.

The comments that relate to the audit of the Québec emissions program are not related to the mandatory reporting of GHG's that will be the basis of the data used in their Cap-and-Trade Program. The report is focused on Québec's last action plan on climate change for the period of 2006-2012 and the way Québec evaluates, quantifies and follows the results of the different programs put in place since 2006 (programs in energy efficiency, public transportation, biotechnologies,

etc.). Québec has made adjustments to it's latest action plan to address some of the findings from the audit report.

Staff will be proposing amendments to the existing Cap-and-Trade Regulation to implement Board direction in the Fall of 2013. All changes will be coordinated with Québec to ensure the programs remain harmonized on the market requirements that underlay joint implementation of the joint market program.

Finalize California Regulation Before Linking

D-2. (multiple comments): Prior to linking with another cap-and-trade program, outstanding issues with the California program should be addressed. Specifically, priority should be given to resolving electricity issues, including resource shuffling, the position of publicly-owned utilities that are interconnected with the California Independent System Operator, and the treatment of electricity imports. Electricity issues were specifically noted in ARB Resolution 11-32 approving the cap-and-trade regulation in October 2011. These issues affect emissions reports due this year as well as important decisions which must be made by September 1, 2012, regarding the allocation of allowances between a utility's accounts. These are not issues that can be delayed until next year. (SCPPA1)

Comment: The ARB must lay the foundation for the success of California's program *before* linking to Québec or any other jurisdiction. Linking California's yet-untested capand-trade program to Québec's program is diverting limited ARB resources from the critical task of successfully launching the California cap-and-trade market. SCE commends the ARB for its plan to conduct a practice auction in advance of the first live auction scheduled for November 2012, as a mock auction is a crucial step in discovering flaws in the compliance instrument tracking and auction systems. Still, SCE is concerned that a single test auction will adequately test neither the baseline functionality and reliability of these systems and processes, nor the ARB's ability to impose its regulatory control on these systems. Moreover, the limited scope of the one planned practice auction excludes allowances consignment and bid guarantee submissions and is not fully integrated with the ARB's compliance instrument tracking system.

SCE urges the ARB to dedicate additional resources or hire contractors to run a minimum of *three* fully integrated practice auctions over the next three months in order to fully develop and test its systems and processes, and to repair any weaknesses that are discovered. Potentially billions of dollars are at stake in the first auction; it is essential that ARB increase cap-and-trade implementation staffing to ensure that all systems and processes are fully tested and functional.

Inadequate testing of these new processes and systems could be disastrous and the possible consequences far outweigh any potential short-term savings. Additionally, SCE respectfully requests a more detailed schedule outlining the necessary

implementation and testing activities to ensure that compliance entities have enough detail to properly plan key readiness activities heading into November.

SCE has been closely involved in a cap-and-trade implementation working group with other market participants and has previously offered assistance (in conjunction with other electric utilities) to the ARB in developing milestones and a roadmap for implementing the cap-and-trade program. These activities include, but are not limited to:

- Designing, deploying, and testing a compliance instrument tracking system;
- Allocating time for program participants—compliance entities and regulators alike —to familiarize themselves with the ARB's systems, operations and processes, as well as to build their own systems and interfaces to the ARB's system;
- Designing, deploying, and testing an auction platform with market participants;
- Undertaking market simulation efforts to expose, and address market flaws that open the program to manipulation or gaming; and
- Opening an organized, ongoing forum to field stakeholder questions and concerns about ARB's implementation efforts, and incorporating stakeholder feedback.

SCE strongly encourages ARB to focus additional resources on these critical market readiness tasks. In a few short months, billions of dollars will flow through the auction and tracking systems, making it far too risky to rely on a less than comprehensive implementation process. It will do no good to attempt linkage to Québec, or to any other jurisdiction, if California's program is not successful. Multiple practice auctions with full integration of the ARB systems, processes, and controls are necessary for a successful initial auction on November 14, 2012. (SCE1)

Comment: California (both the ARB and possible market participants) needs to "learn to walk before they run". There are great benefits in gaining experience with California Cap and Trade Program prior to taking on tasks associated with linkage with other programs. We should take the time to understand what is going well and not going well before expanding the universe of trading further. (WSPA1)

Comment:

- The California program has not begun, is untested, and systems are still being
 put in place for an auction in November and compliance obligations in 2013.
 California should not link with Québec until California's own cap-and-trade
 system has had opportunity to function independently. Given the magnitude and
 complexity of California's own program, adding an unnecessary additional layer
 of complexity by coordinating with a foreign jurisdiction at the outset would be
 imprudent.
- Other cap-and-trade systems, such as the European Union's ETS, have encountered implementation problems in their initial period. California also is likely to experience unforeseen difficulties in implementing its program, and thus

should proceed incrementally. Linking with foreign jurisdictions only will make the system more complicated for the State and for stakeholders.

- Stakeholders and regulated parties are expressing serious concerns about holding and purchase limits, allowance allocation and the availability of offsets to minimize the costs of allowances. CARB may wish to amend the regulation in the future to adjust to market problems, yet not have freedom to act unilaterally if the program is linked with Québec.
- Current and future litigation about important elements of the program could also upset timing and execution, and resolution will be complicated if California must include foreign governments in negotiations. Involving another jurisdiction in our program could seriously limit flexibility to make needed adjustments in the program. (AB32IG)

Comment: First, Solar very much appreciates the time and effort ARB staff has spent over the last two years understanding our very unique business. Thank you, Mr. Cliff, in particular. And we also very much appreciate the personal visits by Member Roberts and Chair Nichols to our facility.

Our concern today is that the linkage with Québec will do very little to reduce the leakage risk which is critical to our facility under the Cap and Trade Program. Solar has to make long-term decisions, business decisions to continue and create jobs in California. We are actively planning and taking actions to meet our business commitments for 2015 and 2020, including the construction of new test facilities.

Solar is a very unique business. It's the only one in our entire source category. Under the current leakage designations, our facility will either need to procure tens of thousands of allowances or reduce our engine testing by more than 50 percent. Because the testing is required by our customers to meet safety criteria, it is doubtful that we will be able to reduce anywhere close to that amount.

We are being asked to perform business planning, assuming that we will be able to support more than half of our production activity by participating in a market that is yet to be tested at a cost that is yet to be determined. This scenario presents real risk to our business. Therefore, while we recognize the need for ARB to work through the pros and cons of linkage with Québec,we request the Board prioritize the leakage risk categories and the methodologies for developing them for immediate review so that unique businesses like Solar can plan accordingly right now. Thank you. (SOLARTURBINES)

Response: Staff believes that the California Cap-and-Trade Program has been operational for a sufficiently long enough period to evaluate its success. Board action in October, 2011 already finalized the provisions of California's Regulation. The provisions became effective on January 1, 2012. Staff has been working diligently to implement the approved regulation. Since these comments were

entered into the record, ARB has conducted workshops, webinars, and beta testing of systems with stakeholders. Staff also held a practice auction with training for stakeholders and two subsequent quarterly auctions. Thus, California's market is now operational and fully functional.

This rulemaking is only considering amendments to the already approved regulation. It does not address Holding Limits, Purchase Limits, Allowance Allocation and other issues, which these comments raise. Staff will be proposing broader regulatory amendments to address stakeholder concerns about the Regulation for Board consideration in 2013. Staff has worked with its WCI partner jurisdictions for six years to ensure successful linkage. In proposing linkage with Québec, staff has spent several months in discussions with Québec staff to review and harmonize implementation requirements in the regulatory text to allow for stakeholders to provide comment on the drafting of the amendments. Staff will continue to coordinate with Québec staff to ensure harmonization in market areas for a successfully linked program.

D-3. Comment: Finally, the linking process has imposed a considerable administrative burden on ARB staff. We are concerned that this burden has resulted in a diversion of limited resources away from key priorities such as auction preparation and modeling, offset protocol development, accreditation of third-party offset registries and fixing program flaws identified by industry and other groups such as Legislative Analyst's Office. Indeed, we understand that, contrary to prior statements made to us by staff, ARB will not have an opportunity to run another rulemaking before the start of the program.

On balance, while Chevron remains steadfastly supportive of true linkage to broaden markets for cost-effective market efficiencies, it is premature to embark on a costly linkage until California's program design is completed and fully tested and additional partners or a cost-effective and efficient broader cap-and-trade market can be established. (CHEVRON)

Response: The Cap-and-Trade Program successfully launched with the first Auction in November 2012, and compliance obligations with the program began on January 1, 2013. This experience has allowed enough time to both review California's program and recommend linking to Québec. ARB has also established the Emissions Market Assessment Committee, which held its first public workshop in June, 2012, to help identify program design features that may be improved through future regulatory amendments. To date, ARB has held two quarterly auctions and allocated allowances for the first compliance year. Staff also held a workshop in March 2013 to start the process to develop two new offset protocols that will be proposed for Board consideration later this year. Last year, staff implemented significant parts of the compliance offset program by accrediting offset verification bodies and approving offset registries to help administer parts of the program. Currently, there are several compliance offset projects and early action offset projects listed.

D-4. Comment: Valero has previously requested in prior comments that ARB fully develop the cap-and-trade program elements before modifying or changing the regulation. With respect to linkage with Québec, ARB posted their revised regulation for comment on May 9, 2012, while Québec was still developing revisions to their regulation. This makes it very difficult to fully assess impacts when one regulation is unavailable for review. In fact, the English translation of the revised Québec regulatory changes was not issued for review until June 11, 2012. Complicating matters was the fact that a full English translation of the entire regulation was not provided making a comprehensive review within the timeframe allowed difficult. (VALERO)

Response: The Québec regulations were described in detail in the ISOR that was released on May 9, 2012. The English translations posted on June 11, 2012 are consistent with what was described in the ISOR. Furthermore, final Québec regulations were noticed in January, 2013. The final regulations are consistent with the ISOR description. Staff believes there was sufficient time to review all substantive information related to the linkage rulemaking prior to Board consideration on April 19, 2013. As noted earlier, there were three 15-day comment periods with one ending in April 2013. This provided ample opportunity to review all of the Québec documents and to submit additional comments.

Linkage Raises Costs for California

D-5. (multiple comments): SCPPA understands the ARB's view that not all of the provisions of the linked programs need to be identical in order for linking to be successful. However, certain features of the two programs, discussed in sections V.A to V.C below, should be reviewed and harmonized to ensure that linking Québec's program to California's will mitigate rather than exacerbate allowance prices.

The ARB should be careful to ensure that Québec's cap-and-trade program will not contain features that would counter productively result in an increase in the cost of allowances, thereby negating the principal benefit—cost containment—that can be obtained through linkage. A key part of this is ensuring that Québec's program is not so short of opportunities to reduce GHG emissions that covered entities in Québec would rely on California disproportionately to generate emissions reductions, potentially causing allowance prices to be higher than they would be if California were not linked to Québec's program.

As a related issue, California should be careful to ensure that the cap set by Québec is not more stringent than California's cap. Linking to jurisdictions with more stringent caps would tighten the market for allowances in the linked jurisdictions, driving up allowance prices. Some studies (for example the Barclays study in February 2012) have indicated that allowance prices may increase due to linking because Québec is expected to be a net buyer of allowances. SCPPA requests the release of data and analyses to support statements made by ARB staff that the California and Québec caps are equally stringent and that linking will have no discernible effect on prices. (SCPPA1)

Comment: As noted by CARB at a July 27, 2009 workshop, a purpose to link is to reduce overall greenhouse gas emission abatement costs by allowing emitters to choose lower cost reductions in one program instead of higher cost reductions in the other program. But a recent study by the WCI suggests that Québec's greenhouse gas reductions are much more expensive than California's partly due to the large amount of hydroelectric power in the Province. Assuming that three-fourths of allowable offsets are available for the market, the study finds that in 2013 a Québec-only program will see prices of \$37/mt and that a California-only program would yield \$17/mt. The analysis projected prices of \$19/metric tonne (mt) in 2013 in a joint Québec/California program scenario. It appears that overall lower abatement costs for the linked California/Québec program would be achieved by the decision to link with Québec. However it also means a higher cost for California facilities when compared to a California-only program. In CARB's initial statement of reasons (ISOR) for the linking regulation, CARB even goes as far as saying that increasing the price of allowances is good for California business, because it allows them to invest in more expensive (but now "cost-effective") emission reductions that they can sell to Québec. This logic has two huge flaws:

 In California, it takes years to get emission reduction projects from concept to permit to construction to operation. Facilities in California would have to have projects well underway right now in order to have excess emissions to sell to Québec within the 2020 timeframe. Does CARB know of such a scheduled project?
 California's cap-and-trade program is 6 times as large as Québec (ISOR – page 85) making California's need for reductions and offsets much greater than Québec's. However, according to the WCI study, since Québec's price of carbon is over twice as large as California, linking with Québec will only make the cost of offsets higher as Québec industry will have twice the incentive to go after the limited number of offsets, thereby increasing the cost of offsets. Thus from a California facility standpoint, linking with Québec with a small cap-and-trade program and a higher carbon price is a lose/lose proposition—higher cost for offsets and higher cost for emission reductions. (AB32IG)

Comment: We also expressed concern about the potentially adverse impact Linkage could have on California allowance prices. A WCI study projected a potentially negative impact. The Board, as we just heard, will now defer the linkage issue in light of the passage of SB 118. SCPPA urges the Board to take its comments on linkage into account when it gets to the point on whether to link or not. (SCPPA2)

Comment: At this stage, when realistically there are no other viable WCI partners to enable a broader, more liquid, efficient market, it is unreasonable to take on a partner that will increase the costs of the market to California. The economics study done by the Western Climate Initiative (WCI) shows that the linkage and administrative design

rules proposed in the regulation will have significant negative impacts on the California economy. The estimated impact will be an increase in allowance prices of \$2.00 in 2013 rising to \$4.00 in 2020. This is a significant increase which will increase the competitive disadvantages faced by California's business sector, electrical generators, and ultimately residents. (CHEVRON)

Response: Staff provided a detailed economic analysis of the proposed linkage in Chapter V of the ISOR. The economic advantages of linking with other jurisdictions are analogous to the benefits of including multiple sectors under a broad California Cap-and-Trade Program. Expanding the number of sources that are able to trade allowances will reduce the overall cost of achieving the desired level of emission reductions and improve the efficiency of the emissions trading market. In these ways, linking benefits each jurisdiction – the direct result of lower costs of abatement and expanded reduction opportunities.

While the particular effect of linking on the allowance price will depend on factors such as the relative size, stringency, cost of reductions, and availability of offsets in the California and Québec markets, the analysis indicates that the impact of linking with Québec could cause the allowance price in California to remain unchanged or increase slightly. Among the potential impacts that staff analyzed, is a small increase in revenues flowing into the California economy as a result of regulated entities in Québec seeking to reduce their cost of complying with the Québec program by purchasing California allowances. Fully accounting for the potential in-flow of revenue from Québec resulted in positive impacts to California. Additionally, linking with Québec could lead to greater criteria pollutant and greenhouse gas emissions reductions in California. Overall, staff finds no significant adverse impacts on California businesses or consumers as a whole as a result of the proposed regulation compared with impacts previously presented in the October 2010 analysis of the Regulation.

As to the question regarding a "scheduled" project, California facilities have had knowledge of the development of California's Cap-and-Trade Regulation since 2009. Facilities would need to consider such emissions reduction projects to comply with the California Cap-and-Trade Program. Linking to Québec, does not require California facilities to develop and implement emissions reduction projects. California entities are not required to sell allowances to Québec entities in the linked program as suggested by the commenter.

For a detailed analysis of the economic impacts of linkage, please see the *Staff Report: Initial Statement of Reasons*, which can be found online at http://www.arb.ca.gov/regact/2012/capandtrade12/capandtrade12.htm.

D-6. Comment: The ARB staff has indicated that it was not considered crucial to harmonize the prices of allowances in California's and Québec's cost containment reserves, as each jurisdiction is independently establishing a reserve and entities will only be able to access the reserve in their own jurisdiction. However, reserve prices

function as a soft cap on the price of allowances. Thus, differences between the reserve prices in each jurisdiction are likely to affect the unified allowance market. If the administratively established prices for allowances in Québec's cost containment reserve escalate more rapidly than the administratively established prices for allowances in California's allowance price containment reserve, Québec could put pressure on prices in the unified allowance market, forcing more reliance by California covered entities on the California allowance price containment reserve than would occur otherwise. This could occur despite the fact that entities registered in Québec will be unable to access California's reserve directly. Thus, the rate of escalation of the prices for reserve allowances should be harmonized.

Section 95913(e)(3) of the CA Regulation and section 58 of Québec's regulation set the same initial prices for allowances in the allowance reserves (although in different currencies): \$40 per allowance for allowances from the first tier, \$45 per allowance for allowances from the second tier, and \$50 per allowance for allowances from the third tier. The rate of escalation of allowance prices is set at five percent annually plus the rate of inflation. However, the currencies will fluctuate, and the rates of inflation will differ in California and Québec. If currency and inflation fluctuations cause Québec reserve allowances to become more expensive than California's, there may be less demand for allowances from Québec's reserve and greater demand for California allowances which are likely to remain capped at the California reserve prices (at least until the California reserve becomes depleted).

SCPPA suggests that the prices of allowances from the California and Québec reserves be harmonized by providing that the prices be the lower of the prices that would otherwise apply under the California and Québec regulations. (SCPPA1)

Response: As described in the staff report, staff does not agree that the Reserve prices need to be harmonized. We will monitor this issue however, and consider potential future Regulatory amendments, if necessary.

D-7. Comment: As noted above, one of the key purposes of linking to other cap-and-trade programs is to reduce the cost of compliance. However, one of the changes in the CA Regulation that was included to facilitate linking may instead increase the floor price of allowances at auction ("auction reserve price").

Section 95911(c)(1) of the CA Regulation sets the auction reserve price at \$10 per metric ton for allowances auctioned in 2012. In subsequent years, the auction reserve price will be the higher of the prices established under the Québec and California programs. The Québec and California prices may differ due to differences in inflation rates and currency fluctuations.

Rather than choosing the higher of the two prices, which may result in increasing the floor price above what it would be in the absence of linking, the auction reserve price should be the lower of the two prices. Section 95911(c)(3)(E) of the CA Regulation should be revised as follows:

(E) The auction administrator will use the announced exchange rate to convert to a common currency the Auction Reserve Prices previously calculated separately in U.S. and Canadian dollars. The auction administrator will set the Auction Reserve Price equal to the lowerhigher of the two values.

See also the comments on the level of the auction reserve price in SCPPA's submission on the non-linking changes to the CA Regulation proposed on May 11, 2012. (SCPPA1)

Response: It is true that choosing the higher of the two prices may result in slightly increasing the floor price above what it would be in the absence of linking. However, such an action also ensures that no linked jurisdiction would be selling its allowances below its designated floor price as the result of currency exchange rate fluctuations. This latter benefit outweighs the cost of slightly higher floor prices. The overall benefits of linking are explained in the ISOR.

Linkage is Too Complicated

D-8. (multiple comments): In addition to being premature, the proposed method of linking is needlessly complicated. A joint auction between jurisdictions is not a requirement for linkage and in this case will only serve to complicate and increase the potential costs of the California program. California could take a simpler approach by accepting the allowances from a larger and already mature climate change program - the European Union Emissions Trading System (EU ETS), which would represent a truly broad and efficient market. California could recognize the allowances of the EU without the lengthy, restrictive process required by a joint auction. (CHEVRON)

Comment: Simpler approaches to linkage and market administration would better serve the state and the goals of AB 32. It is preferable to develop this program in a way that helps create a well functioning market with reasonable administrative rules that is able to continually expand through additional linkages. This can be done without complex matching rules and without a coordinated auction by meeting only two criteria: 1. each system has a robust mechanism to ensure that a ton is a ton; 2. Accepting allowances and offsets from the other program (even with the inclusion of limitation on such use by individual emitters). We believe this best fulfills the promise of AB 32. (CHEVRON)

Comment: WSPA has supported market-based approaches in the past and we continue to do so.

We understood that linkage was intended to reinforce the Cap and Trade Program as the market-based approach chosen by the ARB. So it's somewhat disappointing that many of our comments that we submitted in March and again in April appeared not to have been included in the recent staff proposals. For example, the proposed linkage provisions are neither simple nor supportive of the cap and trade effort. Instead, it makes things harder. It's simply not linkage to a broader market and not a way to make compliance easier and less costly. So it's good that additional work on linkage is contemplated. (WSPA2)

Response: There are significant administrative and transaction savings that will come from joint auctions. A joint auction will ensure that the auction aspects of Québec's and California's programs are identical. The quarterly auction is one feature that staff from both jurisdictions agreed must be identical for linkage to work.

Regarding the suggestion that the ARB accept allowances from the European Union Emissions Trading System (EUAs), the regulation adopted in 2010 includes a framework for California to link its program to other emissions trading systems of similar scope and rigor. Each program will undergo a case-by-case analysis by staff as part of a formal rulemaking process that would include a request to the Governor's office to make specific findings under SB 1018, and the Board will need to approve regulatory amendments reflecting the linkage with a particular program before it can take effect. Simply put, California cannot simply accept European Union Allowances without linkage, which requires a comprehensive stakeholder and rulemaking process.

Québec and California Programs Are Not Sufficiently Similar

D-9. (multiple comments): In ARB staffs Initial Statement of Reasons ("ISOR") dated May 9, 2012, ARB comments that "(I)inking the two programs would result in equitable treatment for covered entities in both jurisdictions". However, ARB goes on to comment that "the regulations in Québec are not as detailed as those in California in some respects, however staff's evaluation is that the end result of each regulation will be substantially similar. Staff believes that the minor differences identified between the two programs will not adversely impact the environmental integrity of a linked cap-and-trade program".

Valero believes the differences between the two programs are more than minor. The California program is significantly more onerous than the Québec program and opens the door for inconsistencies in how the regulation is administered. This could ultimately affect California program participants by requiring compliance with more prescriptive requirements and allow Québec more flexibility in how regulated parties are treated. There are also substantive differences between the two programs that clearly show the programs are not "substantially similar". For example, there are inconsistencies in the refining units that are regulated under the two programs and it is not clear what the limitations are regarding emission credit trading from specific sources.

The California cap-and-trade regulation places significantly more constraints on regulated parties through the inclusion of hundreds of more defined terms which ultimately establishes the basis and intent of what and how California intends to regulate entities. For example, the California regulation has 288 defined terms while the Québec regulation has 15. The Québec program does not include a definition for "offset verification" where the California regulation does, which highlights the differences in the Québec program and the ability to demonstrate that the two programs will ensure equitable treatment of regulated entities. It seems improbable that consistency between the two programs is possible when the fundamental element to define regulatory scope, i.e. definitions, is so blatantly different. (VALERO)

Comment: The additional liquidity and market power mitigation that could come from partnering with western states is a strong rationale for the Western Climate Initiative. But only Québec is ready to join and is very small compared to California. The small size of Québec would not significantly enhance liquidity or reduce concerns about market power.

In the proposed linkage regulation, [II Summary of Proposed Action] CARB states that, "California will only consider linking our cap-and-trade program with other programs of similar scope and stringency—that is programs of equal rigor in their environmental integrity." It is clear that this test has not been met. California will be regulating more than 300 industries while Québec only has 80 regulated industries. Québec does not compete with, nor does Québec engage in a significant amount of trading with California. As of 2011, the population of Québec is 7,903,001 and the major industries of Québec are farming, lumbering, mining, and fur trapping. California has a population of 37,691,912 and, prior to the recession, used to be the nation's leading industrial state, claiming the number one position in almost every general manufacturing category: number of establishments, number of employees, total payroll, value added by manufacture, value of shipments, and new capital spending.

Imposing a cap-and-trade compliance obligation on Québec does not protect any California industry from competitive pressures. The leakage prevention value of linking with Québec is nil. (AB32IG)

Response: Staff disagrees that the differences between the two programs are substantial. We understand there may appear to be some differences as each jurisdiction is required to comply with different rulemaking requirements. For example, the ARB regulation is required to be very prescriptive while Québec is not bound to the same level of detail in its rulemaking process. The ISOR contains a chapter that details the similarity of the programs. There may also be some differences if one jurisdiction does not have an emissions source that exists in the other, or has chosen to directly regulate a source, such as high GWP refrigerants in California, while Québec has included those in its Capand-Trade Program.

However, both programs do ensure an equivalent outcome. To ensure the programs remain coordinated and continue to provide equivalent outcomes, the "linking agreement" will include details on the forum and process for ongoing discussions between California and Québec.

While linkage does have the benefit of addressing leakage, that is not the only reason to have a regional market program. The reduction of greenhouse gas emissions that can be achieved collectively by the two programs is larger than what can be achieved through a California-only program. Broadening the scope of the market will also provide greater flexibility to California businesses by encompassing a wider range of emissions reduction opportunities and greater market liquidity, and may have a positive impact on the California economy.

Insufficient Time to Review Québec Program

D-10. (multiple comments):

- CARB's regulations preclude California from linking with Québec until CARB and the public—have had the opportunity to review proposed linkage regulations from Québec. Québec only just issued draft linkage amendments within the last two-and-a-half weeks, and the 60-day comment period on those proposed amendments has only just begun. A preliminary review of these proposed amendments, moreover, suggests that they are even less developed than CARB's proposed amendments.
- Approving linkage under these circumstances would not only be imprudent, it would violate CARB's own regulations, see C/T Reg. § 95941, requiring opportunity for full public notice of and comment on linkage with an external jurisdiction. CARB cannot fulfill this obligation if the full picture of the linkage relationship is not available to the public. Linkage would also violate the WCI's Program Design, which requires that each partner jurisdiction have full opportunity to review a linking jurisdiction's program prior to linkage. See WCI Program Design at 22. Recognizing these crucial transparency problems, the California Legislature has proposed legislation requiring independent review of any linkage regulations by the Attorney General and Governor (AB 1478). This underscores the need for CARB to proceed cautiously before any finalization takes place.
- In addition, California's proposed linkage regulations have key gaps enforcement mechanisms, specification of which precise Québec compliance instruments California will accept, whether allowance reserves will be pooled or separate—which can only be assessed with full documentation of the proposed linkage from both California and Québec.
- CARB should not deny the public the notice and comment provided for in the regulation and otherwise should make sure that CARB and the public are fully

aware and understanding of the full nature of the linkage relationship before committing to link with Québec. (AB32IG)

Comment: I'm a policy advocate for the Chamber. However, today, I'm also speaking on behalf of the AB 32 Implementation Group. IG is a business and taxpayer coalition working for AB 32 policies that will achieve the goals of AB 32, while protecting the economy and jobs.

We are pleased to hear that the Board will be taking action pursuant to the budget trailer bill language directive of 1478 as it relates to linkage. The IG submitted extensive comments which we hope you will take into consideration. Several of these comments have been expressed by several of the other speakers already.

However, briefly, we are opposed to the linkage today because of the following reasons:

There has not been sufficient opportunity to review and comment on the Québec regulation. There are no sufficient benefits, rather, to linkage and there remain a myriad of unanswered questions and potential problems with California's yet to be started market. Québec's auditor in general has found serious flaws with the integrity of the systems to measure carbon emissions to the point of calling the measurements arbitrary. And finally, linkage with Québec without first assuring the market functions properly and market manipulation protections actually work poses new and unnecessary risk and complications.

We hope that CARB will move toward making reasonable rational changes to the leakage regulation to make it more cost effective, beneficial, and administratively workable. We look forward to working with CARB going forward. And thank you so much for the opportunity today. (CALCHAMBER)

Comment: In the ISOR, ARB states that "(t)he decision to propose linkage of the California and Québec cap-and-trade programs followed extensive discussions between California staff and Québec staff on the harmonization of regulatory provisions. In these discussions, staff considered which items must be identical, which need to be consistent, and which could be different in a linked program. Staff of the jurisdictions each concluded that the remaining differences would not adversely affect the efficiency or equity in a regional program". ARB should have fully engaged regulated parties in better reviewing and defining what regulatory program elements should be equivalent between the two programs. In addition, the involvement of the Western Climate Initiative ("WCI"), which Valero has previously commented on the lack of transparency in the WCI process, makes the linking process between jurisdictions a "below the radar" activity in which stakeholders have neither knowledge in, nor input to, the process. (VALERO)

Response: There has been sufficient time to review the Québec program. In 2012, staff held two public workshops on the proposed linkage amendments. The first public workshop was held on February 3, 2012. In addition, on March

30, 2012, staff released draft regulatory amendments describing the proposed changes needed to link with Québec. Staff accepted public comments on the draft proposed amendments until April 13, 2012. In the interim, staff held another public workshop on April 9, 2012 to discuss the proposed amendments. Staff also published the ISOR on May 9, 2012, which described both programs. The ISOR also provided staff's rationale for proposing linkage. Stakeholders had 45 days to comment on the ISOR and proposed amendments. In addition, the Board heard testimony at the June 28, 2012 and April 19, 2013 public hearings. In early 2013, two additional 15-day comment periods were provided for additional stakeholder input on minor modifications to the regulatory text. Throughout the amendment development process, staff has informally met with stakeholders numerous times to discuss both specific components of the proposed amendments and general concepts. The Board did not formally consider the linkage amendments until April 19, 2013.

The comments that relate to the audit of the Québec emissions program are not related to the mandatory reporting of GHG's that will be the basis of the data used in their Cap-and-Trade Program. The report is focused on Québec's last action plan on climate change for the period of 2006-2012 and the way Québec evaluates, quantifies and follows the results of the different programs put in place since 2006 (programs in energy efficiency, public transportation, biotechnologies, etc.). Québec has made adjustments to its latest action plan to address some of the findings from the audit report.

Leakage is not proposed for amendment as part of this rulemaking but may be part of a proposed rulemaking in 2013. Staff will be holding separate discussions and workshops to address stakeholder concerns related to leakage.

Linking Propagates Flawed Market Policies

D-11. (multiple comments): Québec has followed the WCI design and California regulations closely in preparing its own program. As a result, the Québec program contains a number of market design flaws that are identical to those of California. A prime example is the holding limit which will remove from the California market a quantity of allowances in excess of the entire amount of GHG allowances contained in the Québec program.

<u>Recommendation</u>: WSPA recommends simpler linkage approaches that would not require detailed market harmonization and that would facilitate linkage with Québec and other programs as well. (WSPA1)

Comment: Chevron is concerned that linking will be used by ARB or otherwise requires ARB to keep or even introduce market design flaws in California. Indeed, in this rulemaking, staff has explained that its amendment to the holding limits applicable to future vintage years results from "WCI discussions". This amounts to the prioritization of a future hypothetical market's interests over the current need to promote

efficiency and liquidity in the California market. Chevron has already communicated its serious concerns that the current market design does not adequately mitigate the risk of market power and market abuse. Specifically, Chevron has introduced documents in the record describing how experiences in other markets demonstrate that frequent auctions are the best policy tool to address market power and that the current holding limit (without an exception for large compliance entities) will result in a liquidity crunch. Chevron is disappointed with the lack of attention to these materials and best interests of the California market. As the current leader in Cap-and-Trade development in the WCI, California should set the standard for sound market practices rather than accommodate the flawed market policies of other members.

Not only are flawed market policies such as the holding limit problematic for the participants in both jurisdictions, these overly restrictive policies will lead to higher costs. Holding limits decrease liquidity by creating a barrier to entry for the voluntary market participants (e.g., market makers, investors) and restricting the availability of allowances on the market. Illiquid markets do not benefit the overall environmental goals of the program. High costs will chill other markets' interest in linking with California. Chevron also objects to the change to the holding limit in the new program amendments, which would effectively create separate holding limits for each vintage year, creating additional structural obstacles to the satisfaction of Chevron's compliance obligation.

Because changes to the joint market will require changes to both Québec and California policies, linkage to Québec will result in unreasonable new hurdles to modify flawed market policies. We propose that simpler approaches using minimum criteria rather than a combined market are better for all. Linkage can be pursued using the minimum harmonization criteria necessary for all parties to have confidence that the reductions represent real reductions and that reductions will be made to the same level in each partner's market (i.e., the caps are equivalent). (CHEVRON)

Response: The decision to propose linkage of the California and Québec Capand-Trade Programs followed extensive discussions between California staff and Québec staff on the harmonization of regulatory provisions, in addition to a full public process with California stakeholders. In these discussions, staff considered which items must be identical, which need to be consistent, and which could be different in a linked program. Staff of the jurisdictions each concluded that the remaining differences would not adversely affect the efficiency or equity in a regional program. Thus, the current linkage approach is the result of in-depth economic and policy analysis, and was judged to be the best way forward.

As the programs are implemented, staff in each jurisdiction will monitor their respective programs and discuss areas of stakeholder concern or areas that may be modified through future regulatory amendments to enhance market efficiency and cost containment. Both jurisdictions are committed to continuing to work closely with each other and their respective stakeholders to ensure a successful regional market program.

The comments that relate to the audit of the Québec emissions program are not related to the mandatory reporting of GHG's that will be the basis of the data used in their Cap-and-Trade Program. The report is focused on Québec's last action plan on climate change for the period of 2006-2012 and the way Québec evaluates, quantifies and follows the results of the different programs put in place since 2006 (programs in energy efficiency, public transportation, biotechnologies, etc.). Québec has made adjustments to its latest action plan to address some of the findings from the audit report.

E. SUPPORT

E-1. Comment: When the California Legislature passed and Governor Arnold Schwarzenegger signed the Global Warming Solutions Act of 2006 (AB 32), it tasked the Air Resources Board with developing a suite of actions that were and still are urgently needed to protect the health and welfare of California citizens in the face of impending global climate change. Since 2006, the science on climate change has only become clearer—GHG emissions threaten our way of life and increasing atmospheric concentrations of anthropogenic CO2 and other GHGs are already showing signs of having adverse impacts, including here in California.

Since EDF and NRDC originally co-sponsored AB 32 in 2006, we have worked diligently to assist with implementation of the bill and have provided detailed comments throughout the development of the cap-and-trade regulation. EDF and NRDC's comments and participation in this process are rooted in the belief that reducing GHG emissions is of paramount importance to public health and welfare and can be achieved in a manner that will help our economy prosper.

Linking California's program has the potential to be just one of many elements of the overall AB 32 program that allows California to achieve its GHG emissions reduction targets cost-effectively. We applaud CARB on its tremendous efforts to-date in developing a state-of-the-art blueprint to reduce GHG emissions under the AB 32 Scoping Plan that will benefit Californians for generations to come. In this same vein, if CARB determines that Québec's program meets California's stringent standards, and if authorities in Québec make the corresponding determination about California's program, linking via mutual recognition could provide additional flexibility and cost-saving opportunities for regulated entities in both California and Québec, thus improving the overall effectiveness of each jurisdiction's cap-and-trade program.

EDF and NRDC recognize that if after making such a determination, California is going to effectively offer the benefits of linking to its stakeholders, certain (though not all) elements of the California and Québec programs will need to be harmonized. EDF and NRDC agree with CARB that joint auctions, a shared compliance instrument tracking system, and equivalent holding limits are among the programmatic elements that should be harmonized to allow California entities better access to the market of fungible compliance instruments and will enhance the integrity of both programs. WCI, Inc.—

which was created as a not-for-profit organization in November, 2011—will also allow WCI participants to avoid duplicative efforts and achieve cost-savings by carrying out logistical, administrative tasks for all participants that would have been completed by an independent contractor if WCI, Inc. did not exist. Of course, California will retain its full suite of enforcement tools, ensuring that it can exert full authority over regulated entities doing business in California. (EDF1)

Response: Thank you for your support.

E-2. (multiple comments): EDF and NRDC also want to commend CARB for its participation in the WCI. By joining WCI, California recognized that climate change is a global challenge and that emissions must be reduced quickly and effectively worldwide in order to avoid the most devastating impacts of climate change. As a state, California can best work towards this goal by designing and implementing a strong program that demonstrates to other global actors that reductions are achievable. The WCI coalesced as a group of likeminded states and provinces, brought together by their shared sense of the urgent need to reduce GHG emissions. The WCI provided a platform for these states and provinces to share information and discuss best practices for reducing emissions. Because of WCI's role as an information portal, California and Québec ended up on parallel tracks with cap-and-trade programs that are similar enough that linking the programs is possible and could result in many benefits to each jurisdiction.

CARB has provided a key resource to California stakeholders by publishing relevant information about regulated entities under the California program such as name, location, historical emissions and economic sector; we recommend that the same is provided for sources within Québec's program. Overall, EDF and NRDC see tremendous benefits and potential in assessing the possibility of linking with Québec and future jurisdictions that meet the stringency of California's program. (EDF1)

Comment: Finally, we appreciate CARB's commitment to transparency by publishing relevant information about regulated entities under the California program such as name, location, historical emissions and economic sector. We recommend that the same information be provided for entities within Québec in an easy to access location.

We look forward to working with CARB as it moves forward with linking to Québec and as implementation of the cap-and-trade program continues. (EDF2)

Response: Thank you for your support. ARB cannot ensure what information about regulated Québec entities will be publicly available. However, Québec has expressed and shown a strong desire for transparency in the administration of its programs.

E-3. Comment: Showing that two different governments with two different economies can work together and put a price on carbon and reduce greenhouse gas emissions would be a transformative step for North America and a step that could really launch a

regional effort to join the international movement that's desperately needed to address the threat of climate change and to create a prosperous and green economy.

And California has been vigilant in designing the most rigorous Cap-and-Trade Program so far, as we heard today in the staff report, and this is going to work with other measures targeted in the AB 32 2020 goal to make sure that's possible.

And because Québec and California have been working together through the WCI process and sharing information and best practices, they've really been on parallel tracks to create Cap-and-Trade Programs that include the central components of good design, which are mandatory reporting rules and the stringent cap and scientifically rigorous offsets and effective enforcement measures. And this makes Québec an excellent partner for California to link with at this time.

And the main thing with other jurisdictions that meet California's rigorous environmental standards can provide both economic and environmental benefits, including increasing market liquidity and broaden the emission reductions that are possible and also expanding the demand for emission reduction technology, many of which are made here in California.

And linking with Québec in particular can bring capital flows into California to increase investments in on-site emissions which can create local jobs and local emissions reductions.

For all of these reasons, Environmental Defense Fund supports the current proposal to accept compliance from linked jurisdictions and to link Québec as well, and also the other proposals to strengthen the Cap-and-Trade Program through "Know Your Customer" provisions and others. We've submitted comments on that. (EDF3)

Response: Thank you for your support.

E-4. Comment: And we just wanted to say for the record that we support ARB's linkage with Québec. And we support this to provide a successful market model. (SEMPRA2)

Response: Thank you for your support.

F. MONITORING

Market Performance Monitoring

F-1. Comment: As noted above, linking increases the complexity of the cap-and-trade program. Issues with one or both programs may arise. If so, prompt action will be required to identify and address the issues to avoid negative impacts on the markets, including related markets such as the electricity market. For this reason, the CA Regulation must contain procedures for tracking the performance of each program and

for monitoring and reporting on California's and Québec's markets. The flows of compliance instruments between the two jurisdictions and the trading activities of covered entities and (separately) non-covered entities should be monitored. (SCPPA1)

Response: ARB takes market monitoring seriously, and staff will track allowance flows and the trading activities of covered and non-covered entities. The same is true of market performance, which will be continually assessed. The data in the market program will be subject to close review by ARB and the market monitor. At least annually, staff will provide a Board update on the market program. Staff does not believe additional text on procedures for program monitoring need to be written into the linkage regulation as those are part of ARB's usual due diligence in monitoring the performance of any of its programs.

F-2. Comment: Market Simulation And Monitoring Must Include Both Jurisdictions

Market Simulation Should be Expedited and Should Include Analysis of Québec's Market and Ancillary Markets.

NCPA supports the creation of the Market Simulation Group (MSG) and encourages the simulation efforts of that group to be undertaken expeditiously, as it would be helpful to identify potential market problems in advance of CARB's first auction. The MSG should include a detailed analysis of ancillary markets that directly impact the cost of allowances in its review and analysis. Such an analysis should include the electricity market, for example, especially during the first compliance period when the electricity sector includes such a large percentage of the compliance entities participating in the market. Furthermore, the Proposed Revisions-or at a minimum guidance and direction from the Executive Officer-should include direction regarding the scope of market simulation that will include the Québec markets. As recently as the June 7, 2012 MSG Stakeholder meeting, it was not clear to what extent inputs from Québec's program would be included in the market simulations to be conducted by the MSG. While California's allowances comprise a far greater percentage of the allowance market, a realistic simulation of the entire auction cannot be conducted absent an analysis of the entire market. Direction and clarification regarding the receipt and use of information regarding the Québec market must be provided as soon as possible.

Market Monitoring Should Include Québec's Market and Related Ancillary Markets

Ongoing market monitoring is a key element in the overall program design of California's Cap-and-Trade Program. Linking with Québec—or any other partner should not diminish the integrity of that monitoring. As California modifies its own program and makes accommodations to allow for linking with the Québec program, the role of the market monitor becomes even more important. Since linking will still essentially entail two separate jurisdictional programs, it is imperative that the market monitor also track the direct impacts of the Québec markets, and the implications of such transactions on California's market and market participants (particularly covered entities). This is especially important when one considers the fact that although the two programs adhere to a common set of principles, they are still unique in several material respects. For example, California entities are required to make an annual surrender of compliance, where the Québec regulation does not include a similar requirement. Nuances such as these that create slightly different obligations for compliance entities between the two jurisdictions must be closely monitored and tracked. (NCPA)

Response: Staff agrees in general with this comment. Staff from both jurisdictions and the market monitor will closely monitor the joint market program to understand and respond to any potential issues. The MSG work will be reviewed by ARB staff and discussed with stakeholders and staff from Québec. Any potential changes to the market program will be harmonized and coordinated with Québec once the programs are linked.

G. GENERAL

Linkage Review Criteria

G-1. (multiple comments): In the coming months, we also urge CARB to clearly identify the criteria it will use to evaluate the stringency of other programs whose compliance instruments it will consider recognizing. These criteria should include, at a minimum, core programmatic elements such as: the stringency of the cap, the reliability of mandatory reporting requirements, the stringency of offset protocols, limits on borrowing, and the adequacy of penalty and enforcement mechanisms. By developing these criteria through a public process, CARB can ensure that California stakeholders have confidence that linking, or mutual recognition of compliance instruments, will be in the best interests of California and further the goals of AB 32. (EDF1)

Comment: Develop criteria and/or a methodology for evaluating other jurisdictions' programs to assess whether or not they are of similar enough structure and rigor to warrant linking with California's program. (PFT1)

Comment: We're generally supportive of linking with Québec and linking with other jurisdictions as those opportunities arise. But we think that it would serve the Board well to establish a process and criteria for evaluating these other jurisdictions as they want to link with California. So it's not a new free-standing evaluation each time, but there are some guide posts to measure against. Staff has done that in the case. But as additional opportunities arise in the future, I think having some consistency to how different opportunities are evaluated would be very beneficial.

Additionally, as these other jurisdictions are adopting offset protocols, I think it would be very useful for ARB to again have a guidance document, a process for independently evaluating those offset protocols that are adopted in other jurisdictions to make absolutely sure that they meet the criteria of AB 32 and any other applicable California standards, rather than just letting them come into the system because another

jurisdiction has approved them. I think it behooves to the Board to retain a little more oversight over the compliance instruments that we use in our system.

So those are areas that I think—I'm not sure what the best mechanism is at this point in terms of 15-day changes or additional language in the resolution or guidance documents from the staff. But those are two areas that I think would be very beneficial to further clarify with additional linkages in the future. (PFT2)

Response: The ISOR provides a clear scope of the level and type of review conducted by staff prior to proposing linkage with Québec. Staff notes that the WCI partner jurisdictions have already agreed on high level recommendations for the design of each jurisdictions program to allow for comparable criteria. Each potential future linkage will include the same review and stakeholder process used in this rulemaking prior to Board action to formally link with another program.

Staff will coordinate closely within the WCI process in the development of any future protocols. As part of that process, stakeholders will be provided the opportunity to comment on any proposed protocols developed jointly by the jurisdictions and prior to the subsequent adoption of any new protocol by a linked jurisdiction. Resolution 13-7 directs the Executive Officer and ARB staff to update the Board regarding any changes to a linked jurisdiction's program at least six months before the change becomes effective. This will enable stakeholder input and staff recommendations, as needed.

Effect of Linkage on ARB's Authority

G-2. Comment: The ARB must consider how international linkage may affect the appropriate regulator for the allowance trading market. Because the ARB is conducting an auction with international and interstate participants, it may need to consider the intrusion upon, and potential dilution of, its regulatory authority over the primary market auction. If allowances and offsets are eventually considered commodities by federal regulators, then many (or in some cases, all) GHG transactions could fall within the reach of the federal Commodities Exchange Act's ("CEA's") statutory provisions, the Commodities Futures Trading Commission ("CFTC") (the jurisdiction of the agency charged with enforcing the CEA), or the California Commodities laws embodied in California Corporations Code Sections 29500, et seq. If some compliance instrumentrelated products are deemed securities, the ARB could be exempt from the issuer requirements of federal and state securities laws. However, because it will be offering allowances issued by Québec in its auction, it could be considered a broker-dealer with respect to those allowances and could be subject to federal, state, and international trade laws, such as the North American Free Trade Agreement ("NAFTA"), governing broker-dealers, as well as antifraud and price manipulation laws for commodities and securities. (SCE1)

Response: ARB has considered how international linkage may affect the appropriate regulator for the allowance trading market. ARB staff is in contact and building relationships with the regulators mentioned by the commenter, and will continue work with them to establish clear delineations of authority over this market.

H. DE-LINKING

H-1. (multiple comments): Also, the CA Regulation should contain provision for delinking in specified circumstances. However, to provide certainty to the market, the delinking provisions must explicitly allow California entities to continue using Québec allowances (which will not be identifiable as such by market participants) that have already been issued for compliance after delinking. (SCPPA1)

Comment: SCE previously identified "de-linking" as an issue for consideration when developing the linkage rules and recommended that the ARB clearly outline the process for addressing changes to either cap-and-trade program that could potentially affect linkage. For example, SCE asked how a covered entity would manage its allowance holdings from a linked jurisdiction in the case of delinking. For example, in order to incorporate the risk of linkage failure (and consequently losing allowance value), market participants in California might trade allowances from Québec at a discount to California allowances. In that case, the two systems would never truly be linked and the allowances would not be truly fungible. In the ISOR, the ARB staff briefly addressed this issue and noted that regulatory action would be needed for de-linking. ARB staff also correctly noted that although staff "cannot pre-suppose Board action," they "expect that previously-issued Québec compliance instruments would continue to be eligible for use in the California program." While this statement is encouraging, it will not provide sufficient certainty to market participants. Further, in such a situation, the California GHG compliance market would be oversupplied and the State would not achieve the reductions envisioned under the cap-and-trade program. Instead, well-developed rulemaking language must be included in the regulation in order to reduce the likelihood of market participants discounting the price of allowances to account for the risk of delinking.

Similarly, Section 95920(d) adjusts holding limits to account for linkage with Québec. If linkage does occur, SCE supports this modification to allow covered entities necessary flexibility. It is unclear, however, what would happen to entities whose holdings reach the new holding limit if California and Québec were to de-link. Would these entities be forced to divest the allowances that exceed the previous California-only holding limits? (SCE1)

Comment: Issues and uncertainties relating to the proposed C/T program continue to cloud the near-term (and perhaps longer-term) future. Until such time as policies, procedures, and requirements etc., become finalized, uncertainties about how the C/T program will function will continue to grow. For example, questions such as what

happens to allowance values if either program is delayed/changed/stopped due to legal issues continue to remain unresolved.

Additionally, Québec's proposed linkage regulation is still uncertain and is not anticipated to be adopted until fall of 2012. The Initial Statement of Reasons (ISOR) identifies several differences between the California and Québec programs, such as the offset programs, GHG measurement accuracy and missing data substitution procedures.

In light of these regulatory uncertainties, it is vital for ARB to provide assurance and certainty for businesses to encourage the establishment of a working market.

<u>Recommendation</u>: WSPA recommends that ARB's linkage program should clearly define contingency plans to address stranded costs if linkage with the C/T program in other regions is unsuccessful. (WSPA1)

Comment: The Regulation Should Include a Fail-Safe Provision for Delinking Finally, NCPA continues to urge CARB to review the potential inclusion of a provision that would allow for an expedited end to linking with any currently active partner jurisdiction in the event that certain triggers occur. The entities responsible for market surveillance and monitoring could outline a list of factors that, in a "perfect storm" situation, would result in irreparable harm to the California program. The factors would be well defined and clearly articulated at the onset of linking, so that all affected stakeholders—covered entities, third party marketers, government agencies, and interested parties—would be apprised in advance of what circumstances may lead to delinking. In the event of such an occurrence, the Executive Director would have the ability to immediately temporarily suspend the linked portion of the program to avoid harm to California markets and compliance entities, until such time as the full Board could review the situation and take any necessary actions. (NCPA)

Comment: PG&E appreciates that, as indicated in the Initial Statement of Reasons, ARB is committed to working closely with Québec staff to resolve any potential issues so as to ensure that delinking is not necessary. However, if such efforts fail, staff would have to propose regulatory action to the Board with no certainty that Québec compliance instruments would continue to be eligible for use in California. Given that compliant entities do not know the issuing jurisdiction of allowances in their holdings, this would create great uncertainty in the markets. PG&E recommends that ARB establish the continuing fungibility of Québec-issued instruments before the fact so as to avoid the possibility of such uncertainty. (PGE)

Response: Any process to de-link would require a regulatory action and staff cannot presuppose what the Board would choose to do under specific conditions. Any proposals to de-link would try to minimize adverse impacts to the market programs. If there are no integrity issues with the compliance instruments, staff anticipates that any Québec compliance instruments held by California entities would remain valid for compliance.

I. TRANSPARENCY

I-1. Comment: Linking with other jurisdictions appears to lead the ARB to rely on private entities, in particular WCI, Inc., and indeed to delegate some authority regarding the operation of the cap-and- trade program to that entity. This causes concern because WCI, Inc., unlike the ARB itself, does not operate in a publicly-accountable manner. SCPPA recognizes that as a private Delaware corporation WCI, Inc., is not subject to the "sunshine laws" that apply to public entities in California. However, SCPPA requests the ARB to ask WCI, Inc., to consider operating as if those laws did apply to it—for example, by providing notice of its meetings at which cap-and-trade operational issues will be decided and by allowing public attendance and input at those meetings. Information on the method by which WCI, Inc., will resolve disputes regarding the operation of the cap-and-trade program should also be provided.

Furthermore, the voting power of each participating jurisdiction on the WCI board should be commensurate with that jurisdiction's share of the total emissions covered by the linked cap-and-trade programs. Others share these concerns regarding WCI, Inc. The California Senate Budget Subcommittee No. 2 recommended on May 23, 2012, that provisions be included in the 2012 budget trailer bills to restrict California funding and staffing of WCI, Inc. (SCPPA1)

Response: The decision to form WCI, Inc. followed a comprehensive assessment of options to efficiently provide the support systems needed to facilitate linkage with states and jurisdictions. The establishment of WCI, Inc. is consistent with the model chosen by the Regional Greenhouse Gas Initiative (RGGI) in which several eastern states are participating in a regional Cap-and-Trade Program.

The benefits of participating in WCI, Inc. include reduced administrative costs through cost sharing with other jurisdictions and enhanced security and effectiveness of program infrastructure across programs, including the tracking system, auction operation, and market monitoring.

As with other voluntary agreements that ARB establishes with local air districts, states, federal government, and contractors, ARB's participation in WCI, Inc., does not confer any decision-making authority, oversight, or enforcement to WCI, Inc. WCI, Inc. is a contractor with the State of California for specific ministerial services related to the Cap-and-Trade program. Decisions concerning ARB's Cap-and-Trade Regulation are made by ARB at the direction of the Board, not WCI, Inc. Furthermore, WCI, Inc. board meetings are noticed and the public is welcome to attend. All contracts and associated budgets undertaken by WCI, Inc. are also made publicly available.

J. CHANGES TO AUCTIONS AND RESERVE SALES RELATED TO LINKAGE

J-1. Comment: The ARB Should Carefully Consider the Effect on the Developing Allowance Market of the Revised Auction Format Provisions in Sections 95911 and 95912

In Sections 95911 and 95912 of the new Proposed Regulation Order for Linkage, the ARB has substantially revised the format for the auction of California allowances. Below, SCE provides its comments on the amended language.

1. Section 95911(c)(3): To Avoid Penalizing Compliance Entities in Jurisdictions with Weaker Currencies, the ARB Should Set the Auction Reserve Price in One Currency Only

Section 95911(c) of the Proposed Regulation Order for Linkage contains new language setting the Auction Reserve Price and accounting for linked jurisdictions. Section 95911(c)(3), which links the price floors of the two jurisdictions, could dramatically affect floor prices and consequently the allowance market. The revised Section 95911(c)(3) provides:

(A) The Auction Reserve Price in U.S. dollars shall be the U.S. dollar Auction Reserve Price for the **previous calendar year** increased annually by 5 percent plus the rate of inflation as measured by the most recently available twelve months of the Consumer Price Index for All Urban Consumers.

(B) [...]

(C) The auction administrator shall set the exchange rate as the most recently available noon daily buying rate for U.S. and Canadian Dollars as published by the Bank of Canada, and shall announce the exchange rate prior to the opening of the auction window.

(D) The Auction Reserve Price in Canadian dollars shall be the Canadian Dollar Auction Reserve Price for the **previous calendar year** increased annually by 5 percent [...]
(E) The auction administrator will use the announced exchange rate to convert to a common currency the Auction Reserve Price previously calculated separately in U.S. and Canadian dollars. The auction administrator will set the Auction Reserve Price **equal to the higher of the two values**.

This method could penalize unnecessarily the jurisdiction with the weaker currency. For example, if one of the two currencies were to continually weaken, the weaker currency's price floor in the native denomination will be much higher than it would have been. Such weakening is not theoretical; the U.S. dollar has systematically weakened compared to the Canadian dollar over the past ten years. If such a trend continues, the compliance entities in the jurisdiction with the weaker currency would face much higher compliance costs simply because they would be subjected to a much higher floor price.

Moreover, the price floor could increase significantly with linked price floors than in a California-only market. The ARB is relying on the concept of purchasing power parity, a theoretical relationship between inflation rates and currency exchange rates, with no

guarantee that such a relationship would hold in practice. Even a 10% variance in allowance prices away from the price floor (without adjustments for the currency exchange) could result in a sizeable increase in compliance costs. If a theoretical relationship between inflation and exchange rates were to hold, there would be no need to mandate currency update in the regulation.

SCE suggests that the ARB modify Section 95911(c)(3)(E) to set the Auction Reserve Price in one currency only, and adjust the floor price by 5% plus inflation when applying it to the joint auction. When one currency appreciates more than a second, the first currency will have more purchasing power, with or without price floors. As with other commodities, the ARB should allow each buyer and seller to assume foreign currency risk. SCE opposes linking price floors, which would create, rather than prevent, market distortions. (SCE1)

Response: The method of setting the auction reserve price was selected following discussions within the WCI. WCI partner jurisdictions agreed to the mechanism to accommodate jurisdictions that had assured their stakeholders that their auction reserve price would not decline. Many stakeholders in all jurisdictions are concerned that oversupply of allowances will result in prices so low that GHG reductions may be limited.

Most ARB economic impact assessment results suggest that one should expect auction settlement prices well above the auction reserve price. If these assessments are correct, then any distortion would be minimal.

Finally, staff will continue to monitor the program and will propose changes to the existing requirements, as necessary.

J-2. Comment: California Participants Should Not Be Subject To Devaluation Of The U.S. Dollar

Some of the most extensive revisions to the California regulation must address auction protocols and the need to reconcile the use of two different currencies in a single auction. One such amendment is section 95911(c)(3) regarding calculation of the Auction Reserve Price. NCPA remains concerned that the provisions of section 95911(c)(3)(D) that provide for the Auction Reserve Price to be based on the higher of the two values could result in the potential devaluation of the U.S. dollar vis-à-vis the Canadian dollar. Before finalizing the proposed amendments, CARB Staff should look closely at the potential impacts and unintended market consequences that could result and explore options and alternatives that may address such consequences in a fair and non-discriminatory manner. (NCPA)

Response: Though it seems unlikely that the U.S. dollar would devaluate because of small differences in the Auction Reserve Price of a California-Québec allowance auction, staff will look closely at this possibility. To date, staff has not identified this to be an issue.

III. SUMMARY OF COMMENTS MADE DURING THE SECOND 15-DAY COMMENT PERIOD AND AGENCY RESPONSES

Chapter III contains all comments submitted during the second 15-day comment period that were directed at the proposed regulation or to the procedures followed by ARB in proposing the regulation, together with ARB's responses. The 15-day comment period commenced on January 8, 2013, and ended on January 23, 2013.

We received 13 letters on the proposed regulation during the second 15-day comment period, all of which directly concerned linkage. Commenters included representatives from the electricity sector, environmental NGOs, and trade groups. To facilitate ease of use, comments are categorized into one of 10 sections below, and are grouped for response wherever possible.

Table III-1 below lists commenters that submitted linkage comments during the second 15-day comment period and identifies the date and form of their comments. Table III-1 also shows the abbreviation assigned to each commenter.

A. LIST OF COMMENTERS

Abbreviation	Commenter
AB32IG	Shelly Sullivan, AB 32 Implementation Group
	Written Testimony: 1/23/2013
CALPINE	Kassandra Gough, Calpine Corporation
	Written Testimony: 1/23/2013
CBD	Brian Nowicki, Center for Biological Diversity
	Written Testimony: 1/23/2013
CHEVRON	Stephen Burns, Chevron Corporation
	Written Testimony: 1/23/2013
EDF	Erica Morehouse, Environmental Defense Fund; Michelle
	Passero, The Nature Conservancy; Jennifer Martin, Center
	for Resources Solutions
	Written Testimony: 1/23/13
IETA	Robin Fraser, International Emissions Trading Association
	Written Testimony: 1/23/2013
PGE	Judi Mosley, Pacific Gas & Electric
	Written Testimony: Written Testimony: 1/23/2013
NRDC	Alex Jackson, Natural Resources Defense Council
	Written Testimony: 1/23/2013
SCE	Nancy Chung Allred, Southern California Edison
	Written Testimony: 1/23/2013
SCPPA	Lily Mitchell, Southern California Public Power Authority
	Written Testimony: 1/23/2013
SEMPRA	Tamara Rasberry, Sempra Energy Utility
	Written Testimony: 1/23/2013
UCS	Barbara Haya, Union of Concerned Scientists
	Written Testimony: 1/23/2013
WSPA	Catherine Reheis Boyd, Western States Petroleum
	Association
	Written Testimony: 1/23/2013

Table III-1: Comments Received During the Second 15-Day Comment Period

B. HARMONIZATION

Establish Protocol to Evaluate Changes in Linked Program

B-1. (multiple comments): The ARB and any linked jurisdictions must maintain consistent rules and enforcement to provide a truly united WCI cap-and-trade program. To do so, the ARB and any linked jurisdictions should provide guidance as to how they will reconcile inevitable regulatory discrepancies between jurisdictions. There is no common authority to which both California and Québec have to answer, making the success of the programs reliant on mutual agreement of rules and enforcement. One linked jurisdiction could change its program in a manner unacceptable to the other jurisdiction; the other jurisdiction will have no power to object. Given that California is committing to accepting any compliance instrument issued by linked jurisdictions, California's program will be either directly or indirectly affected by any program changes made by Québec, and vice versa. Therefore, as a prerequisite to linking, jurisdictions should create a process for the resolution of conflicts. A mutually-agreed upon process for rectifying discrepancies will allow the WCI to move forward with its regional market even if confronted with discrepancies that may conflict with one jurisdiction's standards.

Already there are some differences between the regulations in how offsets are treated and how auction purchase limits are applied. Québec has not yet approved forestry and urban forestry offset protocols, but has approved a landfill methane destruction protocol not approved by the ARB. In addition, Québec handles offset invalidation quite differently from California; it plans to retire credits from a collective Environmental Integrity Account while California assigns buyer liability in the case of invalidation.

Also, in California, only electric distribution utilities can buy up to 40% of a single auction, while in Québec, purchase limits are set at 40% for a larger group of entities – including firms involved in mining and quarrying, electric power generation, steam and airconditioning supply, and manufacturing. While the existing discrepancies between the regulations are not critical, it is possible that a jurisdiction would make changes to its program that are in conflict with the standards of a linked jurisdiction. Without a process for resolution, such a change could be so in conflict with a jurisdiction's standards that it causes the programs to de-link and pursue their goals individually.

Given that there will likely be additional policy and thus regulatory differences across linked jurisdictions, the ARB should ensure that all linked jurisdictions have a shared understanding of market rules, enforcement procedures, and how discrepancies between programs will be addressed or resolved. SCE suggests that the ARB work with Québec and the WCI to establish a process for how it will reconcile regulatory asymmetries with other jurisdictions when they arise. (SCE)

Comment: Whether in the form of Board-issued guidance or in the regulation itself, we urge CARB to establish procedures prior to linking which include the following terms: (a) CARB shall only approve linkage with an external greenhouse gas emissions trading scheme (GHG ETS) if it finds that the scheme includes the following provisions:

(1) procedures for consultation with ARB prior to any amendments of the Linked External GHG ETS that may significantly change compliance instruments offered by the Linked External GHG ETS, including, but not limited to: the adoption of new offset protocols; expansion of the geographic scope from which offset projects are accepted; expansion of project types accepted pursuant to a protocol; linking to a third-party jurisdiction, other than California, which introduces compliance instruments issued by such third-party jurisdiction into the compliance instruments available for use in the Linked External GHG ETS; changes to the types of entities with compliance obligations; or changes to any reserve price;

(2) procedures for resolving any negative findings made by ARB;

(3) provisions such that if any resolution of negative findings regarding subsequent amendments to a Linked External GHG ETS should fail, and linkage is rescinded, any compliance instruments from California that were: (i) available to meet compliance obligations in such Linked External GHG ETS, and (ii) were either surrendered or held prior to the date linkage was rescinded, will continue to be valid compliance instruments for meeting compliance obligations in such Linked External GHG ETS.

(b) Upon consultation described in Section (a), ARB shall, within XX days, evaluate the proposed amendments to the Linked External GHG ETS. ARB

(1) shall assess whether following the enactment of the proposed amendments all greenhouse gas emissions reduction compliance instruments accepted by the Linked External GHG ETS, including any offset credits, will meet the requirements of Division 25.5, Part 4, Section 38562(d)(1)-(3) of the Health and Safety Code;

(2) shall assess whether following the enactment of the proposed amendments the Linked External GHG ETS has adequate reporting, verification and enforcement procedures to ensure compliance with those requirements;

(3) shall assess whether following the enactment of the proposed amendments the Linked External GHG ETS remains as stringent as California's program;

(4) shall take into account public comments received on the amendments to the Linked External GHG ETS;

(5) may, in its discretion, consult any relevant ARB guidance documents, including but not limited to guidance documents describing procedures for evaluating new offset protocols.

(c) If ARB finds that the proposed amendments would, in its judgment, not satisfy the findings described in (b), ARB must begin consultation with the relevant Linked External GHG ETS in order to attempt to resolve such negative findings.

(d) After completion of the evaluation and resolution of any negative findings described above and public notice and opportunity for public comment, the Board may approve proposed amendments to the Linked External GHG ETS. The Board's decision to approve any proposed amendment shall be accompanied by a specific finding that all compliance instruments accepted by the Linked External GHG ETS, including any offset credits, will meet the requirements of Division 25.5, Part 4, Section 38562(d)(1)-(3) of the Health and Safety Code.

(e) If the Board fails to approve any enacted amendments made to a Linked External GHG ETS pursuant to Section (c), then approval of the linkage to such Linked External GHG ETS will automatically be rescinded. If a Linked External GHG ETS has its linkage rescinded pursuant to this paragraph, only compliance instruments from such Linked External GHG ETS that were: (i) available to meet compliance obligations in California, and (ii) were either surrendered or held prior to the date linkage was rescinded, will continue to be valid compliance instruments for meeting compliance obligations in California. (UCS)

Comment: Linkage, especially with foreign jurisdictions, creates additional complexity that could threaten the success of California's cap-and-trade program. These added complexities, which include legal concerns, establishing consistent rules and enforcement procedures, and currency and language barriers, can pose significant challenges to an equitable market between the linked jurisdictions. SCE recommends that the ARB develop a set of criteria for assessing any potential linkages to ensure that the economic and environmental impacts of such partnerships are in line with California's cap-and-trade goals. (SCE)

Comment: Prior to formalizing linkage, however, we recommend ARB include in the protocol recommended above a process for reconciling differences that may emerge in the stringency or approach to enforcement between linked jurisdictions. (NRDC)

Comment: But there are also challenges. California's carbon market is in its nascent stage, and will require diligent monitoring and oversight to ensure a smooth start. While we strongly support the design of the California and Québec programs, each developed under the rubric of the Western Climate Initiative (WCI), ARB must retain its capacity to promptly address potential contingencies that impact the California market. Accordingly, before California links its cap-and-trade program to that of another jurisdiction, including Québec, we recommend ARB develop a protocol to outline a process and shared set expectations regarding subsequent modifications to the operation or design of a linked partner's cap-and-trade system. (NRDC)

Comment: These comments focus on establishing a process for ensuring that any changes made to a linked cap-and-trade program meet CARB quality and stringency standards. Linked cap-and-trade programs merge multiple regulatory regimes into an interconnected program. Since credits are fungible across fully linked jurisdictions, any changes made to one linked program affect the stringency of all linked programs. Over time, linked jurisdictions may wish to make changes to their programs, such as adopting new offsets protocols, modifying existing protocols, changing procedures for overseeing their offsets program, linking with other carbon trading programs in full or in part, and modifying other key facets of their cap-and-trade programs. We believe it is important to establish clear procedures prior to linkage for ensuring that any such changes by a linked jurisdiction are agreed by CARB prior to being made. Without explicitly establishing such procedures, CARB may be in the position of assessing whether an unanticipated change results in weakened equivalency of credits to the California

program, and if so, how to administer a remedy currently limited to unilaterally suspending or terminating the linkage relationship. (UCS)

Response: Pursuant to SB 1018, the Governor found that Québec's program is similar to or identical to California's in all material respects, linkage does not change California's ability to enforce AB 32, Québec's regulations provide for equivalent enforcement of its Cap-and-Trade Program, and that linking will most likely not lead to any significant liability for California. The Governor's findings were supported by a separate review by the Attorney General. Post-linkage, ARB will continue work with Québec staff to ensure the programs remain harmonized. The process for this will be documented in an agreement between the two jurisdictions. Resolution 13-7 directs the Executive Officer and ARB staff to update the Board regarding any changes to a linked jurisdiction's program at least six months before the change becomes effective. This will enable stakeholder input and staff recommendations, as needed. Staff is committed to a transparent review process of the linked jurisdiction's programs and will work with stakeholders in providing recommendations, as needed, to the Board.

With respect to the comment about differences in purchase limits, that is incorrect. The California and Québec Cap-and-Trade Programs have the same purchase limits.

Establish Evaluation Criteria for Environmental Integrity of Linked Jurisdictions

B-2. (multiple comments): Before linking with another jurisdiction, ARB must ensure the proposed linkage will not undermine the environmental integrity of California's program. As both Québec and California's cap-and-trade programs adhere to shared WCI design principles – including the stringency of the cap, mandatory emissions reporting and verification requirements, criteria on offsets quality, limits on borrowing, and adequacy of penalty and enforcement mechanisms – we find linking with Québec would not infringe on the integrity or environmental performance of California's program. As the record reflects, recent amendments to Québec's program would bring the programs in even closer alignment.

But ARB must also ensure that the environmental integrity of California's program is maintained over time. Although we are encouraged by the strong working relationship between ARB and their Québec counterparts, ARB should not trust in this relationship alone as a means of approaching ongoing implementation issues that may affect the linked programs. We therefore recommend ARB develop a protocol with Québec and any future trading partners, in advance of linking, to review and assess subsequent changes in the design or operation of a linked partner's cap-and-trade system, including the approval of new offset protocols. The protocol would provide additional clarity and certainty to market participants and stakeholders on how ARB will approach ongoing harmonization issues and, as a last resort, a process for de-linking. At a minimum, ARB should provide public notice and opportunity to comment on any substantive changes to

a linked jurisdiction's cap-and-trade program and bring those changes to the Board for review and consideration. (NRDC)

Comment: Further, California must ensure that any changes made within a linked jurisdiction do not threaten the environmental integrity or overall benefits that California seeks to achieve through linkage. (EDF)

Response: Environmental integrity is of utmost importance to ARB; without it, the legitimacy of the Cap-and-Trade Program would be naught. As such, staff will continue to monitor developments in the joint market program to ensure the two programs retain their respective environmental integrity. Additionally, each potential future linkage will include the same review and stakeholder process used in this rulemaking prior to Board action to formally link with another program. Resolution 13-7 dictates that at least annually, staff will provide a Board update on the market program at least six months before the change becomes effective in the linked jurisdiction's program. This will enable stakeholder input and staff recommendations, as needed. Staff is committed to a transparent review process of the linked jurisdiction's programs and will work with stakeholders in providing recommendations, as needed, to the Board.

Market Stress Situations

B-3. Comment: In September 2012, the Emissions Market Assessment Committee (EMAC) advised ARB to resolve five issues prior to linkage. Those included:

- Coordinating legal and regulatory frameworks;
- Consistency in transparency about market mechanisms;
- Consistency of definitions and market rules for the use of compliance instruments;
- Consistency in the enforcement of market rules; and
- Ability to respond quickly to unforeseen contingencies.

ARB and Québec have made significant strides in several of these areas over the last year, but significant progress towards developing a joint response to unforeseen contingencies is needed before successful linkage can occur. As the EMAC suggested during its September workshop, the integration of multiple jurisdictions introduces challenges in assessing the cause of market stress or failure and implementing regulatory remedies. A process for coordinating between jurisdictions to recognize and effectively address market stress conditions, including the increased potential for market manipulation under a linked auction, should be established in Québec and California regulation prior to a joint auction. Linkage should not preclude California from making necessary adjustments to its program in market stress situations. (PGE)

Response: Resolution 13-7 directed the Executive Officer to document the process for California and Québec to coordinate the implementation in a formal agreement. Staff from both jurisdictions will be monitoring the market in

coordination with the same market monitor. Staff will also coordinate in all market operations, including under "stress situations". Furthermore, pursuant to SB 1018, the Governor found that Québec's program is similar to or identical to California's in all material respects, linkage does not change California's ability to enforce AB 32, Québec's regulations provide for equivalent enforcement of its Cap-and-Trade Program, and that linking will most likely not lead to any significant liability for California. The Governor's findings were supported by a separate review by the Attorney General.

Price Harmonization

B-4. Comment: The ARB staff has indicated that it was not considered crucial to harmonize the prices of allowances in California's and Québec's cost containment reserves, as each jurisdiction is independently establishing a reserve and entities will only be able to access the reserve in their own jurisdiction. However, reserve prices function as a soft cap on the price of allowances. Thus, differences between the reserve prices in each jurisdiction are likely to affect the unified allowance market. If the administratively established prices for allowances in Québec's cost containment reserve escalate more rapidly than the administratively established prices for allowances in California's allowance price containment reserve, Québec could put pressure on prices in the unified allowance market, forcing more reliance by California covered entities on the California allowance price containment reserve than would occur otherwise. This could occur despite the fact that entities registered in Québec will be unable to access California's reserve directly. Thus, the rate of escalation of the prices for reserve allowances should be harmonized.

Section 95913(e)(3) of the CA Regulation and section 58 of Québec's regulation set the same initial prices for allowances in the allowance reserves (although in different currencies): \$40 per allowance for allowances from the first tier, \$45 per allowance for allowances from the second tier, and \$50 per allowance for allowances from the third tier. The rate of escalation of allowance prices is set at five percent annually plus the rate of inflation. However, the currencies will fluctuate, and the rates of inflation will differ in California and Québec. If currency and inflation fluctuations cause Québec reserve allowances to become more expensive than California's, there may be less demand for allowances from Québec's reserve and greater demand for California allowances that are likely to remain capped at the California reserve prices (at least until the California reserve becomes depleted).

SCPPA suggests that the prices of allowances from the California and Québec reserves be harmonized by providing that the prices be the lower of the prices that would otherwise apply under the California and Québec regulations. This approach would be consistent with the calculation of the auction reserve price in section 95911(c)(3) with the change suggested in section III below. (SCPPA)

Response: Because both Allowance Price Containment Reserves are available only to covered entities, price differences will likely be minimal. As described in

the staff report, staff does not agree that the Reserve prices need to be harmonized. We will monitor this issue however, and consider potential future Regulatory amendments if necessary.

Public Information Sharing

B-5. (multiple comments): IETA is aware that ARB is holding a Public Information Sharing workshop on 25 January 2013 that will provide a proposal for how ARB plans to address information sharing. It will be integral that ARB and Québec adhere to the same public information-sharing policies if the two programs are to be linked. Disclosed information from either jurisdiction can affect the entire market, and thus disclosure policies must mirror one another. (IETA)

B-6. Comment: ARB is in the process of determining what auction information will be shared publicly, with a workshop on that topic scheduled for January 25, 2013. While there is some description of information sharing in the respective regulations, both jurisdictions need to be aligned on what information will be shared, for all types of data. PG&E recommends in particular that section 95921(e) be clarified to state that the section applies both to accounts registered to entities in California and in any linked jurisdictions. (PGE)

Response: Staff agrees that public information sharing policies may have an impact on the market aspect of linked Cap-and-Trade Programs. ARB and Québec will endeavor to release market-related information at the same time and in the same manner and level of detail.

Definitions

B-7. Comment: In order to properly consider the effect of holidays on the definition of "business days," the ARB should change Section 95910(a)(2) of the Proposed Modified Regulation Order to read: "auctions shall be conducted on the twelfth business day that is a business day in both California or a and jurisdictions…" (SCE)

Response: Linkage with another jurisdiction under the proposed amendment would necessarily mean that our auction would occur simultaneously. Staff sees no reason for the change in regulation.

B-8. Comment: The linking amendments frequently use the cumbersome phrase "External Greenhouse Gas Emissions Trading System to which California has linked its Cap-and-Trade Program pursuant to subarticle 12." There are also some inconsistencies in the way this concept is described – for example, some sections used the term "approved External GHG ETS" instead. The linking provisions would be shorter and easier to read, with improved clarity and consistency, if the following two new defined terms were included in the definitions section of the CA Regulation, section 95802(a):

"Linked Program" means an External Greenhouse Gas Emissions Trading System to which California has linked its Cap-and-Trade Program pursuant to subarticle 12.

"Linked Jurisdiction" means a jurisdiction operating a Linked Program. (SCPPA)

Response: Staff disagrees with this comment. Precise wording of the regulation prevents confusion because the interpretation is clearly defined.

C. OFFSETS

Harmonize Offset Protocols

C-1. (multiple comments): Over the course of 2012, the Center for Biological Diversity submitted to ARB a series of comments raising concerns about the offset component of the proposed regulation. Our core concern is that the linking rule would commit California to the constraints of WCI agreements that have not been formally adopted in a regulatory framework by California but would require California to accept offset credits from other jurisdictions with lower environmental standards than the protocols adopted by ARB. This is of particular concern with respect to forest offset projects, which, if not developed pursuant to environmentally rigorous standards, can impair forest ecosystems, wildlife habitat, and water quality.

The Québec program does not currently include a forest protocol. However, if Québec adopts a forest protocol in the future, or enters a partnership with another jurisdiction that has a forest protocol that allows for forest degradation, California would already be committed in advance to accepting offset credits generated under that protocol. California's cap-and-trade program should not contribute financial incentives that would drive forest ecosystem degradation in other states and provinces. California must ensure that our greenhouse gas reduction efforts do not rely on projects that result in ecosystem degradation to forests inside or outside the state.

We have recommended in our previous comment letters that the regulation be amended to clearly identify and separately consider any commitments to WCI agreements, include provisions that encourage offset projects to provide environmental co-benefits and prohibit projects that result in negative environmental impacts, and include a way for California to refuse to honor offset credits generated by projects with negative environmental impacts. The proposed regulation does not address these concerns. We therefore once again urge the Air Resources Board to consider these issues thoroughly before proceeding with the commitments inherent in the adoption of this regulation. (CBD)

Comment: As an example of why such procedures are needed, of particular concern are changes a linked jurisdiction might make to its carbon offsets program. The Kyoto Protocol's carbon offsets program, called the Clean Development Mechanism (CDM), has been widely criticized for crediting non-additional activities (activities that were already going forward regardless of the offsets program). CARB would protect the

stringency and effectiveness of its cap-and-trade program, and the stability of the program, if it were to assess the level of additionality of protocols used by all linked jurisdictions prior to their adoption or revision, and periodically for existing protocols, based on the same criteria it uses to assess its own protocols. An additionality assessment would be used to ensure and demonstrate that the offsets program as a whole is unlikely to generate substantially more credits than the reductions/sequestration enabled by the program.

California and Québec are both participating in the Western Climate Initiative (WCI), which published procedures for approving offsets protocols (see WCI Final Offset Protocol Review and Recommendation Process). However, these procedures do not explicitly require a participating jurisdiction to assure its protocols are accepted by all linked WCI partners prior to adoption or revision. Further, the criteria defined by the WCI for assessing additionality is also relatively vague (see WCI Offset System Essential Elements Final Recommendations Paper and the WCI Detailed Design). These documents define additionality operationally, as an agreed performance benchmark, which does not assure that reductions are "in addition to.... any other greenhouse gas emission reduction that otherwise would occur" as required under AB 32. WCI procedures and criteria do not at this time assure that the offsets programs of participating jurisdictions will meet California standards, nor that California may reject protocols and protocol revisions that fail to meet its standards. While we expect that the California and Québec regulatory agencies will work collaboratively to implement linkage, explicit safeguards are needed to ensure that the linking framework protects environmental integrity and the stability of the program. (UCS)

Response: Staff will continue to monitor and coordinate closely with any jurisdiction to which the California market program is linked. Pursuant to Resolution 13-7, At least annually, staff will provide a Board update on the market program. Resolution 13-7 also directs the Executive Officer and ARB staff to update the Board regarding any changes to a linked jurisdiction's program at least six months before the change becomes effective. This will provide stakeholders and the Board an opportunity to discuss and evaluate the proposed changes to a linked jurisdiction's program. Staff is committed to a transparent review process of the linked jurisdiction's programs and will work with stakeholders in providing recommendations, as needed, to the Board.

Any offsets allowed for compliance use in the California program must meet the AB 32 offset criteria. This requires any offsets issued by a linked jurisdiction to meet the same offset criteria. The WCI design documents and California's Capand-Trade Regulation have similar descriptions for offset criteria.

Linkage Should Result in an Increased Offset Supply

C-2. (multiple comments): The use of high quality offsets is an effective cost containment tool and an essential component of a successful cap-and-trade program. However, as stated in PG&E's February 17 and April 13, 2012 comments, without

adequate supply and adjustment to the implementation of the quantitative usage limit, the cost containment objectives of providing offsets will not be realized. Québec's capand-trade regulation, which includes three existing offset project protocols, limits the volume of offsets that could be generated in Canada and provided for sale to California entities under a linked program, making linkage less advantageous for California. If Québec is a net buyer of AB 32 offset credits, the already low predicted supply of AB 32 offsets for covered entities in California entities will be even lower, reducing the value of this critical cost containment feature.

For example, Québec's protocols limit offset credit volume by restricting project development to Québec (Covered Manure Storage Facilities - CH4 Destruction, Landfill Sites - CH4 Destruction), whereas the AB 32 protocols can be used to develop projects in most US states. Similarly, "promoters" in Québec (the rough equivalent of Offset Project Operators) must be emitters or people domiciled in Québec, or have an establishment in Québec, whereas ARB's protocols have no such geographic restriction.

In addition, future protocols, such as those based on forestry, could be precluded from adoption in Québec's system due to the regulatory requirement that GHG reductions be irreversible. Some projects, by nature, may be reversible due to unforeseen events such as forest fires, etc. The ARB's forestry protocol effectively manages this potential by adding the concepts of intentional and unintentional reversal. To avoid precluding the adoption of certain future protocols, Québec should eliminate the term "irreversible" in the offset rules, or alternatively develop "buffer pools" to insure against risk of reversals.

Finally, if Québec cannot generate sufficient offset credits and becomes a net buyer, fewer offset credits will be available for California entities to fully utilize their 8% quantitative usage limit. Therefore, PG&E also supports changing the ARB's quantitative usage limit described in Section 95854 to include a new Section 95854(c) that would allow an entity to bank any unexhausted portion of its limit from one compliance period for use in subsequent compliance periods. This language change will improve the potential for successful linkage with Québec. (PGE)

Comment: In addition to allowing the use of offsets from the linked jurisdiction, offset supply should be increased as part of the linking arrangements, to address the increased demand for offsets. This is particularly important given that the full cost containment potential of offsets will not be realized unless each covered entity is able to, and does, acquire offsets up to the eight percent limit, and that several studies (for example by Thompson Reuters Point Carbon) have indicated that there is likely to be a shortage of offsets in the California program compared to the demand from California covered entities. This shortage will be exacerbated by linking to Québec, which will have a strong demand for compliance instruments (including offsets) due to its stringent cap, broad coverage and high penalties.

The California and Québec regulations approve the following divergent sets of offset

protocols:

California

- Livestock methane destruction
- Destruction of ozone depleting substances
- Forestry and urban forestry

Québec

- Livestock methane destruction
- Destruction of ozone depleting substances
- Landfill methane destruction

It is unclear why California has not approved a landfill methane destruction protocol for small landfills and why Québec has not approved forestry and urban forestry protocols. Nor is it clear whether the currently-approved California and Québec offset protocols will together produce sufficient offsets to meet the joint demand from the two jurisdictions. To increase the supply of offsets, SCPPA urges California to adopt an offset protocol similar to Québec's landfill methane destruction protocol, Québec to adopt protocols similar to California's two forestry protocols, and both jurisdictions to put a high priority on investigating and adopting additional protocols. (SCPPA)

Response: Staff recognizes stakeholder concerns regarding offset supply. The Board must adopt all offset protocols used in the compliance program.

The California and Québec Cap-and-Trade Regulations both allow an entity to fulfill its compliance obligation with up to eight percent in offsets. California will explore, in conjunction with WCI partner jurisdictions, additional opportunities for emissions reductions from offsets in order to ensure a sufficient offset supply is available to contain costs. Pursuant to Resolution 13-7, staff will provide a Board update on the market program at least annually. Resolution 13-7 also directs the Executive Officer and ARB staff to update the Board regarding any changes to a linked jurisdiction's program at least six months before the change becomes effective. This will provide stakeholders and the Board an opportunity to discuss and evaluate the proposed changes to a linked jurisdiction's program. Staff is committed to a transparent review process of the linked jurisdiction's programs and will work with stakeholders in providing recommendations, as needed, to the Board.

As to offset liability, staff does not agree that buyer liability associated with the invalidation of ARB offset credits should be eliminated or needs to be consistent with the Québec program. Both jurisdictions ensure environmental integrity of their programs and retain enforcement authority in cases of malfeasance. Staff also believes it has established a rigorous offset program with multiple levels of review and that the risk of invalidation is low.

ARB staff held a public workshop in early 2013 to present a proposal to develop two additional offset protocols for mine methane capture and rice cultivation

projects. The details surrounding any new offset project types for which ARB adopts an offset protocol will be considered under that specific rulemaking, and modification will be made to the Cap-and-Trade Regulation as needed.

Finally, California did not approve a landfill protocol because analysis showed few additional reductions above California's landfill regulation. Québec is not proposing a forest or urban forest offset protocol at this time.

Liability Issue

C-3. (multiple comments): To avoid asymmetrical demand for Québec offsets and differential pricing due to differences in the risk profiles of Québec and California offsets, California should adopt Québec's rule regarding the replacement of invalid offsets: Invalid offsets should be replaced by the entity that generated them, not the entity that purchased or surrendered them as in the CA Regulation. Failing that, invalid offsets should be replaced from an offset buffer account maintained by the regulator. This approach will provide greater certainty in the offset market than the approach in the CA Regulation, and therefore will strengthen the offset program as a whole. The linking rulemaking offers a good opportunity to adopt provisions in the linked program that are superior to those in the CA Regulation. (SCPPA)

Comment: ARB has harmonized compliance instruments with Québec with one notable exception - Québec and California have different rules for offset compliance. California assigns liability for invalid offsets on the buyer of the offset. If California invalidates an offset, the buyer must replace it with another valid compliance instrument (with the exception of the forestry protocol). On the other hand, Québec has an environmental integrity pool into which each offset project contributes a small percentage. If Québec invalidates an offset, the environmental integrity is maintained by retiring a valid offset from the environmental integrity pool.

This difference is particularly problematic for California investor-owned electric utilities (IOUs) because of the decision by the California Public Utilities Commission, D.12-04-046, to prohibit IOUs from buying offsets where the buyer has liability for invalid offsets.6 As a result, IOUs can buy Québec offsets, but not California offsets (except forestry offsets where there is an integrity pool). It is unclear of the impact of this circumstance on the market, but it may cause unforeseen market impacts. California should further harmonize its offset program by adopting an optional Québec integrity pool concept that can be approved for all adopted Compliance Offset Protocols. The integrity pool concept is consistent with the approach used in the regulation for the forestry protocol, so that only minor changes are required to allow for an optional integrity pool approach to offsets and put California on a more equal footing with Québec from the perspective of offset risks. (SEMPRA)

Response: Staff does not agree that buyer liability associated with the invalidation of ARB offset credits should be eliminated or needs to be consistent with the Québec program. Both jurisdictions ensure environmental integrity of their respective programs and retain enforcement authority in cases of

malfeasance. Staff also believes it has established a rigorous offset program with multiple levels of review and that the risk of invalidation is low.

D. OPPOSED

Delay Linkage

D-1. (multiple comments): <u>No broad linkage on the horizon</u> – While we understand that ARB considers this linkage a first step, it is also the only step that California can make in the foreseeable future. Other WCI partners (U.S. states and Canadian provinces equally) have backed away from implementing cap-and-trade programs. (CHEVRON)

Comment: The additional liquidity and market power mitigation that could come from partnering with western states is a strong rationale for the Western Climate Initiative. But only Québec is ready to join and is very small compared to California. The small size of Québec would not significantly enhance liquidity or reduce concerns about market power. (AB32IG)

Comment: Although CARB conducted the first cap-and-trade auction in November of 2012, the regulation remains incomplete and much work remains to be completed. California should not link with Québec until California's own cap-and-trade regulation is complete and has functioned independently for a sufficient period of time. Given the magnitude and complexity of California's own program, adding an unnecessary additional layer of complexity by coordinating with a foreign jurisdiction at this time would be imprudent.

- Other cap-and-trade systems, such as the European Union's ETS, have encountered implementation problems in their initial period. California also is likely to experience unforeseen difficulties in implementing its program, and thus should proceed incrementally. Linking with foreign jurisdictions only will make the system more complicated for the State and for stakeholders.
- Stakeholders and regulated parties are expressing serious concerns about holding and purchase limits, allowance allocation and the availability of offsets to minimize the costs of allowances. CARB may wish to amend the regulation in the future to adjust to market problems, yet not have freedom to act unilaterally if the program is linked with Québec.
- Current and future litigation about important elements of the program could also upset timing and execution, and resolution will be complicated if California must include foreign governments in negotiations. Involving another jurisdiction in our program could seriously limit flexibility to make needed adjustments in the program. (AB32IG)

Comment: As ARB considers linkage to other programs, it is critical to begin with a state program that is efficient, transparent, effective, and well-designed.

Over the past five years and in particular in 2011 and 2012, WSPA along with other stakeholders have submitted a series of fairly specific comments on the overall policy aspects of linking with other jurisdictions and on the details of the program to link with other jurisdictions (Québec in particular). Despite these suggestions, there appears to be no apparent movement by ARB to make linking more cost-effective and more administratively effective (for example see WSPA and industry comments on holding limit).

It is imperative that the ARB reverse what appears to be its "full speed ahead" approach and make reasonable and rational changes such that linkage with other programs is more cost-effective and more administratively workable. It is clear that ARB is aware that several issues remain undefined but still believes that linkage can proceed. Conversely, WSPA believes that the number and impact of unresolved issues are so great as to make it infeasible, if not impossible, to initiate linkage in a broadly-based, efficient and transparent trading program.

ARB should consider the possibility that elements of the Québec program may prove superior to those in California when considering the long-term viability of a cap-and-trade program. In such case, the ARB program may require modification prior to linkage.

In summary, it is incumbent on ARB to design the program and linkage elements correctly, because otherwise "linkage" will be simply an illusion. (WSPA)

Comment: Québec may not be ready to link with California. Recently, in an annual report, Michael Samson, the Canadian province's acting Auditor General, said Québec's greenhouse gas reporting data has been erratic to the point where it won't be clear whether it has achieved the reduction target set out in its 2006-2012 Climate Action Plan. Samson said the Province too often relies on reporting that is "anecdotal" and cannot be verified, and said new policies are needed." While California's program has gone to extremes and at a high cost to the state and industry to get a very accurate verified emissions inventory, yet Canada's own Auditor General is placing doubt on the program in Québec. Wouldn't it be more prudent and in the best interests of California employers and consumers for California's regulatory agency (CARB) and elected officials to delay linking to a program that has not yet been verified? How can a ton of carbon in California be equal to a ton in Québec, when Québec does not even know how many tons are really there? Further, how can the price for that ton be legitimate, when the market will not know how many emissions there are and how many emission reductions are needed? Again, beyond the question of prudence, finalizing linkage with Québec under these circumstances would violate CARB's own public notice requirements and the WCI's pre-linkage review protocols. See C/T Reg. § 95941; WCI Program Design at 22. (AB32IG)

Comment: While SCE supports a broad cap-and-trade program, the ARB must consider the potential for legal challenges based on linkage to other jurisdictions and plan accordingly. One of the "Findings" required of the Governor by SB 1018 states that

AB 32 must be enforceable in any linked jurisdictions to the full extent allowed under the law and the Constitution. Given the barriers to enforcing a California law outside of California posed by the dormant commerce clause of the U.S. Constitution, it is unlikely that the ARB could fully enforce its cap-and-trade regulations in a linked jurisdiction. Moreover, although SB 1018 requires that the linked jurisdictions must have program requirements equivalent to or stricter than California, other jurisdictions are free to modify their regulations at any time. In addition, changing political climates could cause some participants to drop out of the program entirely, resulting in forced severing of the linkage.

Adding to the uncertainty for California market participants is the continued threat of legal challenges. The ARB has defended against a number of legal challenges to its AB 32 programs, including the cap-and-trade program. These lawsuits have reduced market certainty for compliance entities and other market participants. A successful legal challenge to a linked program (whether on commerce clause, compact clause, foreign affairs, or other constitutional or legal grounds identified by program observers) would exacerbate participants' concerns and multiply the potential economic damage. SCE again strongly urges the ARB to delay linkage until the markets are more mature and the program has proven to be stable. (SCE)

Response: Health and Safety Code section 38564 requires the Board to "facilitate the development of integrated and cost-effective regional, national, and international greenhouse gas reduction programs." Thus, the legislature has directed ARB to pursue integration of greenhouse gas reduction programs where possible. In this case, linking with Québec has several advantages. The reduction of greenhouse gas emissions that can be achieved collectively by the two programs is larger than what can be achieved through a California-only program. Broadening the scope of the market will also provide greater flexibility to California businesses by encompassing a wider range of emissions reduction opportunities and greater market liquidity, and may have a positive impact on the California economy.

Additionally, California has had two successful carbon allowance auctions, and a robust secondary market has developed. The California program is working as anticipated.

Since the programs are designed to link, coordination, whether linked or not, would be essential for eventual linkage. Thus, Staff will continue to coordinate with Québec as we implement the linked program. Pursuant to Resolution 13-7, the Executive Officer will present a report to the Board on Québec's readiness to link later this year. With a start date of January 1, 2014, Staff feels that there is sufficient time to finalize procedures and gain the experience necessary for linking.

Delaying linking has been considered as an alternative. The benefits of a broader market for California entities would not be seen if there were a deferral in

linking California and Québec's Cap-and-Trade Programs. ARB would also be seen as nonresponsive to AB 32 requirements to pursue sub-national collaborative efforts to achieve greater GHG emissions reductions than California could achieve on its own. Regardless of the threat of litigation against both programs, ARB is committed to moving ahead with linkage.

Under the "delay" alternative, it is also unclear when any future program linkage would occur. While the WCI emissions trading group consists of several Canadian provinces that have been active in the development of the requirements for a regional WCI market program, at this time only Québec has established a Cap-and-Trade Program.

While deferring linkage may allow for a broader market than one with just linkage to Québec, it is important to take this first step now and develop a regional program to which other jurisdictions can link. As described in Appendix B, significant time and effort have been spent to develop and enable a regional Cap-and-Trade Program. The successful linkage of the California and Québec Cap-and-Trade Programs will be a clear signal that California is taking the next step to work with other sub-national jurisdictions to address climate change and increase GHG emission reductions through cost-effective methods for its covered entities.

Furthermore, pursuant to SB 1018, the Governor found that Québec's program is similar to or identical to California's in all material respects, linkage does not change California's ability to enforce AB 32, Québec's regulations provide for equivalent enforcement of its Cap-and-Trade Program, and that linking will most likely not lead to any significant liability for California. The Governor's findings were supported by a separate review by the Attorney General.

The comments that relate to the audit of the Québec emissions program are not related to the mandatory reporting of GHG's that will be the basis of the data used in their Cap-and-Trade Program. The report is focused on Québec's last action plan on climate change for the period of 2006-2012 and the way Québec evaluates, quantifies and follows the results of the different programs put in place since 2006 (programs in energy efficiency, public transportation, biotechnologies, etc.). Québec has made adjustments to its latest action plan to address some of the findings from the audit report.

Staff will be proposing some amendments to the existing Cap-and-Trade Regulation to implement Board direction. All changes will be coordinated with Québec to ensure the programs remain harmonized on the market requirements that underlay joint implementation of the joint market program.

Linkage Raises Costs for California

D-2. (multiple comments): Increasing costs for California - The economics study done by the Western Climate Initiative (WCI) shows a significant increase in allowance price, which will increase the competitive disadvantages faced by California's business sector, electrical generators, and ultimately residents. (CHEVRON)

Comment: As noted by CARB at a July 27, 2009 workshop, a purpose to link is to reduce overall greenhouse gas emission abatement costs by allowing emitters to choose lower cost reductions in one program instead of higher cost reductions in the other program. But a recent study by the WCI suggests that Québec's greenhouse gas reductions are much more expensive than California's partly due to the large amount of hydroelectric power in the Province. Assuming that three-fourths of allowable offsets are available for the market, the study finds that in 2013 a Québec-only program will see prices of \$37/mt and that a California-only program would yield \$17/mt. The analysis projected prices of \$19/metric tonne (mt) in 2013 in a joint Québec/California program scenario. It appears that overall lower abatement costs for the linked California/Québec program would be achieved by the decision to link with Québec. However it also means a higher cost for California facilities when compared to a California-only program. In CARB's initial statement of reasons (ISOR) for the linking regulation, CARB even goes as far as saying that increasing the price of allowances is good for California business, because it allows them to invest in more expensive (but now "cost-effective") emission reductions that they can sell to Québec. This logic has two huge flaws:

1) In California, it takes years to get emission reduction projects from concept to permit to construction to operation. Facilities in California would have to have projects well underway right now in order to have excess emissions to sell to Québec within the 2020 timeframe. Does CARB know of such a scheduled project?

2) California's cap-and-trade program is 6 times as large as Québec (ISOR – page 85) making California's need for reductions and offsets much greater than Québec's. However, according to the WCI study, since Québec's price of carbon is over twice as large as California, linking with Québec will only make the cost of offsets higher as Québec industry will have twice the incentive to go after the limited number of offsets, thereby increasing the cost of offsets. Thus from a California facility standpoint, linking with Québec with a small cap-and-trade program and a higher carbon price is a lose/lose proposition – higher cost for offsets and higher cost for emission reductions. (AB32IG)

Comment: In the proposed linkage regulation, [II Summary of Proposed Action] CARB states that, "California will only consider linking our cap-and-trade program with other programs of similar scope and stringency – that is programs of equal rigor in their environmental integrity." It is clear that this test has not been met. California will be regulating more than 300 industries while Québec only has 80 regulated industries. Québec does not compete with, nor does Québec engage in a significant amount of

trading with California. As of 2011, the population of Québec is 7,903,001 and the major industries of Québec are farming, lumbering, mining, and fur trapping. California has a population of 37,691,912 and, prior to the recession, used to be the nation's leading industrial state, claiming the number one position in almost every general manufacturing category: number of establishments, number of employees, total payroll, value added by manufacture, value of shipments, and new capital spending.

Imposing a cap-and-trade compliance obligation on Québec does not protect any California industry from competitive pressures. The leakage prevention value of linking with Québec is nil. (AB32IG)

Response: Staff provided a detailed economic analysis of the proposed linkage in Chapter V of the ISOR. The economic advantages of linking with other jurisdictions are analogous to the benefits of including multiple sectors under a broad California Cap-and-Trade Program. Expanding the number of sources that are able to trade allowances will reduce the overall cost of achieving the desired level of emission reductions and improve the efficiency of the emissions trading market. In these ways, linking benefits each jurisdiction – the direct result of lower costs of abatement and expanded reduction opportunities.

While the particular effect of linking on the allowance price will depend on factors such as the relative size, stringency, cost of reductions, and availability of offsets in the California and Québec markets, the analysis indicates that the impact of linking with Québec could cause the allowance price in California to remain unchanged or increase slightly. Among the potential impacts that staff analyzed, is a small increase in revenues flowing into the California economy as a result of regulated entities in Québec seeking to reduce their cost of complying with the Québec program by purchasing California allowances. Fully accounting for the potential in-flow of revenue from Québec resulted in positive impacts to California. Additionally, linking with Québec could lead to greater criteria pollutant and greenhouse gas emissions reductions in California. Overall, staff finds no significant adverse impacts on California businesses or consumers as a whole as a result of the proposed regulation compared with impacts previously presented in the October 2010 analysis of the Regulation.

For a detailed analysis of the economic impacts of linkage, please see the *Staff Report: Initial Statement of Reasons*, which can be found online at <u>http://www.arb.ca.gov/regact/2012/capandtrade12/capandtrade12.htm</u>.

Both Jurisdictions Should Have Proven Systems Before Linkage

D-3. (multiple comments): ARB needs to: • Identify, define, "fully spec-out" and test all trading program elements relevant to linkage. This is even more important because this program could set the precedent for more expansive trading in the future as is contemplated by these amendments in this second 15 day package. (WSPA)

Comment: WSPA recommends the use of simpler linkage approaches that would not require detailed market harmonization and that would facilitate linkage with Québec and other programs as well. In doing so, we ask that ARB continue to develop, test, and revise the California program with focus on making sure it works for sources within the State.

In addition, we recommend that ARB defer linkage until the California and Québec capand-trade programs have been successfully implemented and demonstrate success. We make this recommendation noting that neither California's nor Québec's cap-andtrade programs have been fully implemented. In light of California's "adaptive management" approach, it is likely that the California program itself may undergo modifications as the program develops and matures. Hence, rather than linking the California program to Québec (or any other programs) when: i) it's not clear whether or how either one of them will work in practice, ii) it's likely that each program will be a moving target as they adapt regulations, it seems prudent to allow each program to develop on a stand-alone basis and have an opportunity to demonstrate success before attempting linkage. (WSPA)

Comment: The ARB must focus its efforts on maintaining the success of the market it has created. While SCE agrees with the ARB that creating a broader cap-and-trade program through linkage is an important goal, SCE recommends that the ARB postpone linkage activities until both the California and the Québec cap-and-trade programs are shown to be well-functioning – a belief opinion shared by the EMAC, the ARB's own market assessment committee, in its September 2012 report. (SCE)

Comment: However, SEu agrees with the Emissions Market Assessment Committee's (EMAC) recommendation: "To harness the greatest benefits from linking with other GHG C&T markets and still ensure the integrity and viability of California's market, linkage with Québec should be considered once each market is found to be well-functioning." (SEMPRA)

Comment: Linking to an immature, restricted market is inefficient - Linking to the European Union Emissions Trading System (EU ETS), on the other hand, could represent a truly broad and efficient market. Further, California could simply and efficiently recognize the allowances of the EU without the lengthy, restrictive process required by a joint auction. (CHEVRON)

Comment: Both programs should be viable and successful prior to linkage - We recommend that ARB defer linkage until the California and Québec cap-and-trade programs have been successfully implemented and demonstrate success. It is critical to allow each program to develop on a stand-alone basis and have an opportunity to demonstrate success before attempting to link them. (CHEVRON)

Comment: Québec alone does not offer California the opportunity to develop a comprehensive and robust cap-and-trade market. Additionally, the environmental benefits of linking with Québec are relatively insignificant given Québec's small size

compared to California and the negligible amount of emissions-intensive goods traded between the two jurisdictions. Since there is limited benefit to linking with Québec, the ARB should not rush into linkage while the programs are still immature. It should consider linkage only after the California program and any other potential linking partners have proven, viable, and stable markets. (SCE)

Response: The California program is being implemented and operating as anticipated. Board action in October, 2011 already finalized the provisions of California's Cap-and-Trade Regulation. The provisions became effective on January 1, 2012. Two allowance auctions have taken place, and California Carbon Allowances trade on exchanges and over-the-counter. The California program has been running as anticipated.

This rulemaking is only considering amendments to the already approved regulation. Staff has worked with its WCI partner jurisdictions over the course of five years to ensure successful linkage. In proposing linkage with Québec, staff has spent many months in discussions with Québec staff to review and harmonize implementation requirements in the regulations. Staff has also held two public workshops and released draft regulatory text to allow for stakeholders to provide comment on the draft amendments.

Furthermore, pursuant to SB 1018, the Governor found that Québec's program is similar to or identical to California's in all material respects, linkage does not change California's ability to enforce AB 32, Québec's regulations provide for equivalent enforcement of its Cap-and-Trade Program, and that linking will most likely not lead to any significant liability for California. The Governor's findings were supported by a separate review by the Attorney General.

Linking Propagates Flawed Market Policies

D-4. (multiple comments): ARB needs to revisit the programs it has adopted to determine if they are necessary to support a transparent and efficient trading program. For example, ARB has insisted on setting rigorous, and largely unnecessary, requirements that impose conditions that do not appear necessary in other trading markets and have not been found essential in other successful and highly effective trading programs.

We are concerned that moving forward with the program as currently defined and structured, with such rigid criteria for linking, will make it impossible to link in the future with otherwise strong and viable programs – for example, with the EU ETS. WSPA is concerned that the combined market will set precedent and will propagate flawed market policies. We are especially concerned because Québec has followed the WCI design and California regulations closely in preparing its own program. As a result, the Québec program contains a number of market design flaws that are identical to those of California. A prime example is the holding limit which will remove from the California

market a quantity of allowances in excess of the entire amount of GHG allowances contained in the Québec program. (WSPA)

Comment: The EMAC correctly points out that actions to correct any market flaws are much more cumbersome for linked jurisdictions, "Multiple regulatory agencies overseeing the linked markets, with none of them having jurisdiction over the entire linked market, can give rise to circumstances when there is no entity able to take action to quickly respond to an unforeseen circumstance." It would be prudent to make sure any flaws in the California market design are addressed before linking with Québec.

The example metrics to determine the market is well-functioning as laid out by the EMAC include "GHG allowance prices that are tied to abatement costs, convergence in allowance prices (subject to transaction costs) across trading venues, evidence of allowance trading activity taking place, and price volatility reflective of changes in the cost of abatement, not market manipulation." Analysis of these or other similar types of metrics would provide some evidence that there were no major flaws that needed to be addressed before linking. Based on analysis by EMAC and/or the market monitor, the Executive Director could then certify there was a well-functioning market and allow linking to move forward. (SEMPRA)

Comment: <u>Reinforcing flawed market policies</u> - Chevron is concerned that linking prematurely will only lead to spreading the market design flaws of California's program. The current market design, which is now reflected in Québec's program, leaves the door open for market abuse due to the existence of holding limits and lack of frequent auctions. (CHEVRON)

Response: The decision to propose linkage of the California and Québec Capand-Trade Programs followed extensive discussions between California staff and Québec staff on the harmonization of regulatory provisions, in addition to a full public process with California stakeholders. In these discussions, staff considered which items must be identical, which need to be consistent, and which could be different in a linked program. Staff of the jurisdictions each concluded that the remaining differences would not adversely affect the efficiency or equity in a regional program. Thus, the current linkage approach is the result of in-depth economic and policy analysis, and was judged to be the best way forward.

As the programs are implemented, staff in each jurisdiction will monitor their respective programs and discuss areas of stakeholder concern or areas that may be modified through future regulatory amendments to enhance market efficiency and cost containment. Both jurisdictions are committed to continuing to work closely with each other and their respective stakeholders to ensure a successful regional market program.

The comments that relate to the audit of the Québec emissions program are not related to the mandatory reporting of GHG's that will be the basis of the data

used in their Cap-and-Trade Program. The report is focused on Québec's last action plan on climate change for the period of 2006-2012 and the way Québec evaluates, quantifies and follows the results of the different programs put in place since 2006 (programs in energy efficiency, public transportation, biotechnologies, etc.). Québec has made adjustments to its latest action plan to address some of the findings from the audit report.

E. SUPPORT

General

E-1. (multiple comments): SCE continues to support a broad and efficient cap-and-trade market to achieve the goals of Assembly Bill ("AB") 32. Given the lack of meaningful action at the national level, linking California's cap-and-trade program to Western Climate Initiative ("WCI") partners or other programs could be an important step toward developing such a market. (SCE)

Comment: IETA supports the linking of carbon markets, and we appreciate ARB's ongoing efforts to develop a functional linked carbon market with its Western Climate Initiative (WCI) partner jurisdictions such as Québec. If done effectively, linked markets can drive price discovery, which helps to reduce program costs by broadening the scope of available mitigation opportunities while further sparking competition to innovate and mitigate greenhouse gas emissions. A carefully designed and well-executed linkage, which builds off valuable experiences and lessons learned from other environmental markets, will help maximize these benefits as well as maintain California's international reputation as a climate policy leader. (IETA)

Response: Thank you for your support.

Québec Meets Environmental Integrity Standards of California

E-2. Comment: Throughout this rulemaking, our primary interest has been to ensure the environmental integrity of California's cap-and-trade program. CARB has articulated this interest clearly in their analysis under Government Code section 12894, demonstrating that linkage efforts will achieve environmental integrity and that California has retained its ability to effectively enforce our statewide program.

Since California and Québec have both been part of the Western Climate Initiative (WCI), they have been on parallel tracks toward designing cap-and-trade programs with substantially similar core programmatic elements. These elements include stringency of the cap, reliability of mandatory reporting requirements, stringency of offset protocols, limits on borrowing, and adequacy of penalty and enforcement mechanisms. Each of these elements is of great importance for ensuring integrity, and each has been incorporated into Québec's program through harmonization facilitated by WCI participation.

Going forward, it will be important for both California and Québec to identify programmatic elements that continue to further environmental integrity. As planned, joint auctions, a shared compliance instrument tracking system, and equivalent holding limits will achieve that goal.

In sum, we appreciate CARB's thorough discussion of section 12894's requirements, and believe it adequately demonstrates Québec's program is sufficiently strict and enforceable. Furthermore, and equally as important, the program linkage analysis clearly shows that California retains its own enforcement authority. (EDF)

Response: Thank you for your support.

Linking Benefits California

E-3. (multiple comments): Showing that two separate governments, in two separate countries, with two separate economies, can effectively partner to put a price on carbon and reduce greenhouse gas emissions is a transformative step for North America; a step that can, as the Legislature intended, jumpstart a regional effort to join the growing international movement that is desperately needed to combat the threat of climate change.

In general, expanding California's carbon market will provide both economic and environmental benefits for the state in the form of greater market liquidity and an expanded base of emission reduction opportunities. Based on the analysis provided in the staff report, linkage with Québec will also help drive capital flows into the state to buttress California's clean energy sectors and capture in-state reductions, offering even greater benefits. (EDF)

Comment: Linking has many potential benefits for California. Expanding the size of the market will reduce greenhouse gas emissions beyond what could be achieved through a California-only program, and provides greater flexibility to California sources by encompassing a wider range of emissions reduction opportunities, who may enjoy gains from trade if reductions can be achieved more cheaply in-state (which ARB's economic analysis forecasts is likely relative to Québec). Linking to a larger and more liquid market can also improve the performance of California's program by reducing price volatility and the potential for market manipulation. Most importantly, maintaining momentum for the surge in bottoms-up policies at the sub-national level to reduce greenhouse emissions will be instrumental in mitigating the impacts on the health and welfare of Californians from climate change. (NRDC)

Comment: Linking California and Québec's cap-and-trade programs will set the stage for the first regional, economy-wide carbon market in North America, adding momentum to the proliferation of climate and clean energy strategies already underway in regions and localities around the world.

Based on ARB's economic analysis provided in the record, linkage with Québec will also drive additional investment into California, as emission reduction opportunities are projected to be cheaper in California than in Québec. The additional flow of revenue into California will boost the state's economy and can buttress the state's growing clean energy sectors.

Linking also offers opportunities to bolster and expand a broad array of energy and climate policies. Québec's public transit policy, aggressive renewable energy targets and emphasis on clean tech and green job creation align with California's own initiatives under AB 32. Continuing the state's leadership role in promoting regional climate solutions through the WCI, North America 2050 (NA2050), and other sub-national partnerships will promote best practices and lessons learned on the entire suite of policies California is pursuing under AB 32. (NRDC)

Response: Thank you for the support.

Québec Meets Requirements of Senate Bill 1018

E-4. Comment: We support ARB's conclusion that linkage with Québec satisfies the four conditions outlined in Government Code section 12894. Prior to linking California's cap-and-trade program to a program in another jurisdiction, section 12894 requires the Governor, upon the advice of the Attorney General, to make the following finding: (1) the linked program is equivalent to or stricter than AB 32; (2) the proposed linkage would not diminish California's ability to enforce AB 32; (3) the proposed linkage ensures program requirements are fully enforceable in the linked jurisdiction; and (4) the proposed linkage, and California's related participation in WCI, Inc., would not impose significant liability on California.

Regarding the first factor, we agree Québec's mandatory greenhouse gas reduction targets are equivalent to or stricter than California's. Québec's overall emission reduction target is numerically more stringent than California, as it calls for a 20 percent reduction below 1990 emission levels by 2020. As emissions-free hydropower already accounts for nearly all of Québec's electricity generation, Québec's reduction target will be particularly aggressive in driving reductions from other capped sectors. Finally, as noted above, due to both jurisdictions' adherence to joint design principles developed though the WCI, Québec's program contains nearly identical provisions on key environment design components such as emissions reporting and verification, offsets quality, and penalties for noncompliance.

With regard to enforcement, we agree that the rules and regulations adopted in California and Québec provide sufficient authority for each jurisdiction to fully enforce their respective emission reduction programs. As in California, daily monetary penalties may be assessed for violations of Québec's emission reduction requirements (with higher maximums than in California), and automatic penalties attach to any shortfall in submitting compliance instruments under the cap-and-trade program. Every market

participant in either program, mandatory or opt-in, must also affirmatively submit to the jurisdiction in which they registered.

But enforcements practices and coordination efforts cannot be entirely assessed in advance. Joint participation in WCI, Inc. will help streamline and harmonize administrative functions that bear on enforcement, such as compliance instrument tracking and market monitoring. The strong ties developed between ARB and regulators in Québec in preparing to link also provides confidence that joint collaboration and attention to enforcement will continue.

We appreciate ARB's consideration of both the benefits and challenges of linking as reflected in the information and analyses provided in the rulemaking record. We look forward to working with ARB as it finalizes the linkage to Québec and explores other avenues to export California's suite of clean energy programs developed under AB 32. (NRDC)

Response: Thank you for your support. Pursuant to SB 1018, the Governor found that Québec's program is similar to or identical to California's in all material respects, linkage does not change California's ability to enforce AB 32, Québec's regulations provide for equivalent enforcement of its Cap-and-Trade Program, and that linking will most likely not lead to any significant liability for California. The Governor's findings were supported by a separate review by the Attorney General. California and Québec will document the process for ongoing coordination on implementation of the joint market program through a formal agreement.

F. MONITORING

Market Performance Monitoring

F-1. Comment: Linking increases the complexity of the cap-and-trade program. Issues with one or both programs may arise. If so, prompt action will be required to identify and address the issues to avoid negative impacts on the markets, including related markets such as the electricity market. For this reason, the CA Regulation must contain procedures for tracking the performance of each program and for monitoring and reporting on California's and Québec's markets. The flows of compliance instruments between the two jurisdictions and the trading activities of covered entities and (separately) non-covered entities should be monitored. (SCPPA)

Response: ARB takes market monitoring seriously, and staff will track allowance flows and the trading activities of covered and non-covered entities. The same is true of market performance, which will be continually assessed. The data in the market program will be subject to close review by ARB and the market monitor. At least annually, staff will provide a Board update on the market program. Staff does not believe additional text on procedures for program monitoring need to be written into the linkage regulation as those are

part of ARB's usual due diligence in monitoring the performance of any of its programs.

G. GENERAL

Linkage Review Criteria

G-1. (multiple comments): In addition, Québec's cap-and-trade program is a brandnew untested market which has yet to hold auctions, or demonstrate effective program operations. The success of each program should be evaluated on a stand-alone basis and linked only after both market oversight committees demonstrate that the two programs are robust.

SCE suggests that the ARB develop, in conjunction with stakeholders and the EMAC, success metrics that can be used to determine if the markets are ready for linkage. Possible metrics suggested by the EMAC include determining whether GHG prices appear to be tied to abatement costs and the convergence of allowance prices over procurement venues, among others. This analysis takes time. According to EMAC, the success of the California market is unlikely to be determined before 2015, or the beginning of the second compliance period. Linking with Québec before the markets are proven successful on a stand-alone basis exposes both the California and Québec capand-trade programs to unnecessary risk. (SCE)

Comment: The example metrics to determine the market is well-functioning as laid out by the EMAC include "GHG allowance prices that are tied to abatement costs, convergence in allowance prices (subject to transaction costs) across trading venues, evidence of allowance trading activity taking place, and price volatility reflective of changes in the cost of abatement, not market manipulation." Analysis of these or other similar types of metrics would provide some evidence that there were no major flaws that needed to be addressed before linking. Based on analysis by EMAC and/or the market monitor, the Executive Director could then certify there was a well-functioning market and allow linking to move forward. (SEMPRA)

Response: The ISOR provides a clear scope of the level and type of review conducted by staff prior to proposing linkage with Québec. In addition, at least annually, staff will provide a Board update on the market program.

Furthermore, pursuant to SB 1018, the Governor found that Québec's program is similar to or identical to California's in all material respects, linkage does not change California's ability to enforce AB 32, Québec's regulations provide for equivalent enforcement of its Cap-and-Trade Program, and that linking will most likely not lead to any significant liability for California. The Governor's findings were supported by a separate review by the Attorney General.

To date, ARB has successfully implemented two quarterly auctions and there are trades occurring on exchanges and between bilaterally between market

participants. Staff and the market monitor have been carefully monitoring the program and believe the program is working as anticipated. By the time the programs are linked on January 1, 2014, Québec will have held at least one auction and seven months of trading. Per direction from the Governor, ARB staff will provide a report on November 1, 2013 to the Governor and Cal EPA on the progress towards implementing a joint program in 2014 and any impediments to implementing linkage.

H. DE-LINKING

H-1. (multiple comments): The ARB must thoroughly evaluate high-impact threats to its program, including the potential for de-linking. Under the current structure, de-linking could cause significant economic harm to California or a failure to meet AB 32 emissions reduction goals. The ARB should shape its regulation to allow California to de-link as easily as possible. Below, SCE outlines some modifications that could mitigate some of the potential adverse consequences of de-linking. (SCE)

Comment: Regardless of why previously-linked jurisdictions would sever ties, the ARB should plan how it would maintain the environmental integrity of its cap-and-trade program and prevent significant economic harm to California in a de-linking scenario. Under the current linkage structure, there is no provision to make buyers aware of the origin of allowances on which they are bidding - in other words, buyers cannot tell whether any given allowance was issued by California or by a hypothetical Jurisdiction A. Any de-linking from Jurisdiction A would likely result in a large transfer of wealth from California to Jurisdiction A, because Jurisdiction A would receive the revenue for all allowances issued. Meanwhile, California would be committed to accepting those allowances even if Jurisdiction A were no longer part of the cap-and-trade program. For example, if Jurisdiction A issues 25 million allowances in the first year and California issues 150 million, the effective program-wide cap on emissions is 175 million allowances for that year. Jurisdiction A would receive the revenue for its issued allowances, totaling \$500 million (assuming allowance prices of \$20/ton). Yet if Jurisdiction A left the program, 175 million allowances would remain in circulation with a California-only cap of 150 million. The ARB would have to either remove from circulation 25 million allowances by devaluing the remaining allowances proportionally or by issuing fewer allowances in future years, reducing the revenue received. Either way, Jurisdiction A would retain the \$500 million it received for issuing those allowances -- at the expense of Californians. If the cost of de-linking is too high, it is possible the ARB could be forced to make more drastic changes that could entirely compromise the program. This problem is only exacerbated as additional jurisdictions join the program. (SCE)

Comment: All that is needed to form a linked program is the acceptance of compliance instruments from other jurisdictions. Rather than the single joint auction with allowances that are not distinguishable by jurisdiction, as proposed in Section 95911(a)(5) of the Proposed Modified Regulation Order, jurisdictions should have their own auctions and issue their own identifiable compliance instruments. A multi-jurisdictional program will be maintained through the procurement activities of registered entities; they will

purchase allowances from the auctions of both jurisdictions and will trade the allowances of both jurisdictions in the secondary market. This will minimize the organizational and accounting complexity that comes with holding a joint auction. Additionally, many of the potential legal challenges described above relate to California's lack of authority over linked jurisdictions. By holding separate auctions and issuing separate compliance instruments, the direct interaction between the jurisdictions is reduced, which lessens the threat of such challenges.

Furthermore, creating allowances that can be distinguished between jurisdictions would allow jurisdictions to de-link more easily. Separating allowances at the beginning would allow market participants to make informed decisions about where to purchase allowances. For example, any political instability surrounding Québec's cap-and-trade program could cause the value of Québec allowances to fall relative to the value of California allowances. Risk-averse California entities could then choose to purchase only California allowances, while risk-tolerant entities could purchase Québec allowances at a discounted price. Should de-linking occur, jurisdictions could accept only the allowances issued in their jurisdiction thus maintaining the environmental integrity of the cap without causing economic harm. If, as the ARB envisions, a well-functioning program with consistent rules develops, then prices should converge across linked programs. Conversely, if the linked markets do not run as smoothly as expected, the ARB and other market participants will be better positioned to cope with possible de-linking.

Maintaining a well-defined and unchanging regulatory framework is essential for preserving efficient environmental markets. Accordingly, the de-linking process should be established up front to avoid unintended consequences that could prove devastating. Decisions made in haste when adverse situations arise are rarely optimal decisions. The ARB has the opportunity to plan for an optimal de-linking scenario that offers additional clarity to market participants. The ARB should take advantage of this opportunity to implement a simpler linkage structure. (SCE)

Comment: In addition, the CA Regulation should contain provision for delinking in specified circumstances. However, to provide certainty to the market, the delinking provisions must explicitly allow California entities, after delinking, to continue using Québec allowances (which will not be identifiable as such by market participants) that have already been issued. (SCPPA)

Comment: Similarly, CARB staff should enumerate what remedies are available in either jurisdiction in the unlikely scenario that either jurisdiction decides linkage no longer serves their interests. (EDF)

Response: Any process to de-link would require a regulatory action and staff couldn't presuppose what the Board would choose to do under specific conditions. Any proposals to de-link would try to minimize adverse impacts to the market programs. If there are no integrity issues with the compliance

instruments, staff anticipates that any Québec compliance instruments held by California entities would remain valid for compliance.

I. TRANSPARENCY

I-1. Comment: CARB's ongoing commitment to develop the cap-and-trade program and linkage process in an open and public process, exemplified by the four separate opportunities to provide public comment, has been exceptional. Going forward, we urge the Board to continue the collaborative theme and establish a clear process that will provide the public with notice and opportunity to comment on any significant changes that may occur within a linked jurisdiction. (EDF)

Response: As directed in Resolution 13-7, staff will provide a Board update on the market program at least annually. Staff will also update the Board about any changes to a linked jurisdiction's program at least six months before the change becomes effective. This will provide stakeholders an opportunity to review and offer input on the changes. The Board will also have an opportunity to discuss and evaluate the proposed changes to a linked jurisdiction's program. Staff is committed to a transparent review process of the linked jurisdiction's programs and will work with stakeholders in providing recommendations, as needed, to the Board.

J. CHANGES TO AUCTIONS AND RESERVE SALES RELATED TO LINKAGE

Modify Auction Reserve Price Calculation

J-1. (multiple comments): The 15-day proposed changes to Section 95911 should be modified to 1) eliminate the reference to a Québec-specific price index; and 2) keep the auction reserve prices separated across linked jurisdictions. The cleanest way to incorporate these modifications is to delete sections 95911(c)(3)(D) and 95911(c)(3)(E) in their entirety.

Proposed section 95911(c)(3)(D) should be deleted. This section implements a Québecspecific measure of inflation. Unlike the rest of the proposed changes to the cap-andtrade regulation to implement linkage, here there is a specific reference to Québec's measure of inflation – the Québec consumer price index excluding tobacco and alcohol. It is inappropriate to insert a linked jurisdiction's price index in California's regulation. It will also be a future problem if other Canadian jurisdictions link with California. It is doubtful they will want to use a Québec-specific inflation measure instead of a national Canadian price index or their specific region's price index.

Sections 95911(c)(3)(D) and 95911(c)(3)(E) should be deleted to eliminate a calculation of a single auction reserve price. As written, Québec's auction reserve price becomes part of California's regulation if it is higher than California's reserve price measured in a common currency. First, this approach will become unwieldy as more jurisdictions are added if they all have different auction reserve prices. Each jurisdiction's auction reserve price and escalator would have to be inserted into California's regulation. More

importantly, the approach of taking the higher of the two auction reserve prices in this section potentially puts California compliance entities at the mercy of other jurisdictions' reserve prices. While Québec's reserve price is similar, it is not necessarily the case that other jurisdictions will have a reserve price as close to California's auction reserve price. California entities may be required to pay more than the reserve price specified in the California regulation if the auction reserve price is set by another jurisdiction through section 95911(c)(3)(E). Third, if Québec or another jurisdiction allocates most or all allowances to regulated entities and puts a very small amount into the auction, its auction reserve price in setting a single combined auction reserve price.

Instead of taking the higher of the two prices, the auction reserve prices should remain separate for each jurisdiction. Entities in each jurisdiction would not be allowed to bid below their respective jurisdiction's reserve price. If the market-clearing price in a combined auction were to fall below a jurisdiction's reserve price, all entities in the jurisdiction would receive all allowances demanded at the jurisdiction's reserve price. All other compliance entities would receive allowances at the market clearing price. All allowances supplied by the jurisdiction would receive funds based on the jurisdiction's reserve price. If the demand by entities in the jurisdiction exceeded the supply at the jurisdiction's reserve price, excess funds generated would go to the jurisdiction. Such an approach would allow funds returned to each jurisdiction as if they had implemented their individual auction reserve prices and will protect California compliance entities if a future linked jurisdiction has an auction reserve price significantly higher than California and Québec. (SEMPRA)

Comment: PG&E would also like to reiterate its April 13, 2012 comments regarding the determination of the Auction Reserve Price. Rather than using the maximum of the two separate prices which will provide an upward bias on the reserve price, PG&E recommends using the average of the two prices. (PGE)

Comment: One of the key purposes of linking to other cap-and-trade programs is to reduce the cost of compliance. However, one of the changes in the CA Regulation that was included to facilitate linking may instead increase the floor price of allowances at auction ("auction reserve price").

Section 95911(c)(1) of the CA Regulation sets the auction reserve price at \$10 per metric ton for allowances auctioned in 2012. In subsequent years, the auction reserve price will be the higher of the prices established under the Québec and California programs. The Québec and California prices may differ due to differences in inflation rates and currency fluctuations.

Rather than choosing the higher of the two prices, which may result in increasing the floor price above what it would be in the absence of linking, the auction reserve price should be the lower of the two prices. (SCPPA)

Response: The method of setting the auction reserve price was selected following discussions within the WCI. WCI partner jurisdictions agreed to the mechanism to accommodate jurisdictions that had assured their stakeholders that their auction reserve price would not decline. Many stakeholders in all jurisdictions are concerned that oversupply of allowances will result in prices so low that GHG reductions may be limited.

Most ARB economic impact assessment results suggest that one should expect auction settlement prices well above the auction reserve price. If these assessments are correct, then any distortion would be minimal.

Harmonize Auction Purchase Limits

J-2. Comment: Calpine believes that linkage would best be served by aligning the auction purchase limits of the California and Québec Regulations and thereby resolving remaining fairness issues in California's auction purchase limit, as CARB staff has been directed by the Board. We are glad CARB will be addressing this remaining concern with the California limit and look forward to its resolution as early as possible within 2013.

If conjoined, the California and Québec Regulations do not "facilitate fair and equitable access to an efficient market for compliance instruments." In particular, the California Regulation establishes a 40 percent (%) auction purchase limit for electrical distribution utilities for the auction of current vintage allowances; a 15% limit for covered entities; and, a 4% limit for all other auction participants. For the advance auction of future vintage allowances, the auction purchase limit is 25% for all entities.

In contrast, under the Québec Regulations, entities scheduled to receive a free allocation may only purchase up to 15%, while those not receiving a free allocation may purchase up to 40% of the current vintage allowances. The Québec Regulations similarly provide a 4% limit on current vintage allowances for all other participants and a 25% limit on future vintage allowances for all participants. Thus, under the Québec Regulations, covered entities, such as Calpine, who will not receive a free allocation could purchase up to 40% of current vintage allowances available.

Calpine believes the contrast between the California and Québec programs illustrates the inherent unfairness of holding a covered entity such as Calpine, which needs to purchase all the allowances it needs to comply, to a 15% purchase limit, while the electrical distribution utilities which are often its largest customers and competitors can purchase more than two and half times that amount. This denies Calpine the flexibility the Regulation affords to the utilities to decide when and whether to participate in auctions: To obtain all the allowances it will need to meet its compliance obligation for the first compliance period from the auctions, Calpine would need to participate in every auction and submit high enough bids to assure it was

awarded nearly as many allowances as it could purchase without exceeding the 15% limit.

In recognition of the fairness concerns posed by this issue, the Board has directed CARB staff "to take appropriate action, including proposing potential regulatory amendments in 2013 as necessary, to ensure that the purchase limit will allow covered entities to acquire sufficient allowances at auction to comply with the Regulation, and do not deny the largest facilities the flexibility that regulation was designed to provide all covered entities." We are glad the Board has provided this direction to CARB staff and look forward to CARB's fulfillment of its commitment to propose appropriate amendments.

While linked programs need not be identical, linkage would best be served by aligning the auction purchase limits of the California and Québec Regulations for those covered entities which are not receiving a free allocation of allowances. Accordingly, the current vintage auction purchase for such covered entities in the California Regulation should be increased to 40%. This would make the auction purchase limit provisions more equitable, both as between covered entities in linked jurisdictions and as between generators such as Calpine and its customers and competitors (the electrical distribution utilities). We would urge CARB staff to develop appropriate amendments as early as possible in 2013, so they can be finalized prior to holding the first joint auction. (CALPINE)

Response: ARB and Québec staff focused intensely on harmonizing the programs in the areas of market rules to ensure equitable treatment for covered entities in each jurisdiction. The California and Québec Cap-and-Trade Programs have the same purchase limits. ARB staff will continue to evaluate the need for changes to the Purchase Limit and will propose amendments, as appropriate, to address issues.

Hold Joint Practice Auction

J-3. (multiple comments): If linkage is approved, California aims to hold an initial Québec-California joint allowance auction in August 2013. We also understand that Québec plans to hold a trial auction over the coming months, although specific details and timing remain uncertain.

Moving forward, should linkage be approved, we encourage both jurisdictions to consider holding at least one *joint* practice auction, involving participants across both jurisdictions. One or more trial runs – held prior to August 2013 – will enable both auction administrators and participants to test-run the centralized auction platform, which involves important new features (e.g., setting of an exchange rate and a potential auction reserve price change within an hour of the start of the auction). We consider it prudent for all parties to experience this new and potentially complicated process at least once in a *practice joint auction* before the launch of a first real joint auction.

Comment: Alain Olivier, director of the Québec Government Office in Washington, D.C., has indicated that Québec is planning on holding a Québec-only "practice auction" prior to a joint auction in August 2013. PG&E strongly supports his decision, particularly given the value ARB's August 2012 practice auction offered to California stakeholders. Given the additional steps and concerns with joint auction mechanics, PG&E proposes that at least one practice joint auction also be held with sufficient lead time to allow any issues with exchange rates, reserve prices, auction mechanics, and bidder confusion to be resolved prior to the first real joint auction. This will afford participants the opportunity to gain familiarity with the auction systems and seek clarity on any questions before the linked auction is held. Following the practice joint auction, ARB and the Minister should provide detailed feedback on any problems with bids, bid formats, or currency exchange issues, prior to any linked auctions. (PGE)

Response: Staff will consider the suggestion to have a joint practice auction. Per direction from the Governor, ARB staff will provide a report on November 1, 2013 to the Governor and the California Environmental Protection Agency on the progress towards implementing a joint program in 2014 and any impediments to implementing linkage.

Modify Date When Exchange Rate is Set

J-4. (multiple comments): Section 95911(c) of the *Proposed Modified Regulation Order* states the process by which an exchange rate will be established, and an auction reserve price set, across the two jurisdictions before a joint auction. The current proposal uses the most recently available noon daily buying rate for U.S. and Canadian dollars as published by the Bank of Canada to inform the exchange rate (and adjust the auction reserve price accordingly). This means that an exchange rate and auction reserve price will be provided less than one hour before the auction window begins.

IETA suggests that an exchange rate be set and its affect on the auction reserve price be announced at *least one business day before the auction window opens*. Within the current California-only auction process, entities have the option to upload bids well in advance of the auction window, knowing far in advance what the auction reserve price will be. If the auction reserve price were to change within an hour before an auction window, as is possible to occur in a joint-auction – even by one cent – an entity's previously uploaded bids could be ruined.

Providing notice of the exchange rate and auction reserve price at least one business day ahead of an auction allows entities time to adjust pre-submitted bids if necessary, without allowing so much time that the real exchange rate is likely to drastically change before the auction creating arbitrage opportunities. (IETA)

Comment: According to ARB's 15-day language (Section 95911(c)(3)(C)), the exchange rate for the Auction Reserve Price will be set "as the most recently available noon daily buying rate for U.S. and Canadian dollars as published by the Bank of Canada." The auction administrator will then "use the announced exchange rate to

convert to a common currency the Auction Reserve Prices previously calculated in U.S. and Canadian dollars." Section 49(2) of the Québec regulation specifies that the joint minimum price of emission units is defined in terms of "the official conversion rate of the Bank of Canada at noon on the date of the auction or, when that rate is not available, the most recent rate published in its Daily Memorandum of Exchange Rates."

As the exchange rate is set at 9:30AM PST by the Bank of Canada, entities will learn the effective exchange rate and the Auction Reserve Price at most 30 minutes before the auction window opens. This small window of opportunity to make modifications to bids based on an updated Auction Reserve Price could result in potential data entry errors, which is particularly troubling given that bids one cent below the Auction Reserve Price will be rejected. This lastminute modification could also impact the bid guarantee posted by stakeholders at least 12 days before the auction. PG&E strongly encourages the two jurisdictions to work together to remedy this issue before proceeding with a linked auction, rather than unnecessarily complicating the bidding process.

To avoid last-minute errors, the exchange rate and the Auction Reserve Price should both be calculated and announced on the last day prior to the auction that is a business day in both California and any linked jurisdictions. This will afford entities enough time to alter their bids, if needed, while maintaining the accuracy of the calculated exchange rate. (PGE)

Response: Staff agrees that 30 minutes represents an insufficient amount of time to make modifications to bids based on an updated Auction Reserve Price. However, section 95911(c)(3)(C) of the linkage amendments to the Regulation states that ARB will use "the most recently available noon buying rate for U.S. and Canadian dollars…and shall announce the exchange rate before the auction." The most recently available noon daily buying rate is typically published by the Bank of Canada between 12:30 and 1 pm the day prior to an auction, hence entities have nearly a full day to adjust their bids according to the exchange rate.

Clarify Procedure for Sale of Consigned Allowances for Undersubscribed Auction

J-5. Comment: Section 95911(f) specifies (1) an order of sale if the auction is undersubscribed, with consigned allowances sold first, and (2) that when there are insufficient winning bids to exhaust the allowances from a consignment source in section 956911(f)(1), the auction operator will sell an equal proportion of allowances from each consigning entity in that source. The situation becomes more complex if linkage occurs because the amended Québec regulation Section 54 merely states, "Emission units of the vintage of the current year or of previous years that remain unsold after an auction are put up for sale at a later date…" PG&E requests ARB to clarify that section 95911(f)(1) applies to the proportion of total bids coming from California. (PGE)

Response: Staff is not proposing any changes to the regulation regarding the order of sale of California's allowances. The order will remain as currently specified in section 95911(f)(1) and applies to the proportion of total bids coming from California once linked to another jurisdiction.

Clarify Auction Dates

J-6. Comment: Section 95910(a)(2) of the CA Regulation was revised in the January 8, 2013 revisions as follows:

Beginning in 2013, auctions shall be conducted on the twelfth business day in California or a jurisdiction operating and External GHG ETS to which California has linked pursuant to subarticle 12 of the second month of each calendar quarter.

The notice of availability of the proposed changes to the CA Regulation states that this modification was "to recognize that auction dates must be business dates in California and any jurisdiction to which California has linked."

It appears that in fact there are two requirements that must be satisfied when calculating the auction dates: the auction date must be a business day in all linked jurisdictions; and the date must be at least 12 business days after the start of each calendar quarter in at least one of the linked jurisdictions. The second requirement may cause some confusion as the twelfth Québec business day of the second month of each calendar quarter will not necessarily be the same date as the twelfth California business day of the second month of each calendar quarter. One jurisdiction may have a holiday in that period (the first few weeks of the second month of the quarter) whereas the other jurisdiction may not. Furthermore, the twelfth business day in one jurisdiction may not be a business day at all in the other jurisdiction.

The proposed change to section 95910(a)(2) of the CA Regulation does not sufficiently address these complexities. It could be interpreted in various different ways. The language should be clarified, or a simpler method of determining the auction dates should be used (for example, a method that does not require a period to be calculated in business days in multiple jurisdictions). (SCPPA)

Response: Staff disagrees with this comment. Staff believes that the regulation language and the intent are clear. The auctions will be conducted on twelfth business day in California and Québec. If that day is not a business day in either jurisdiction, the auction will be conducted on the next business day.

J-7. Comment: SHOULD THE ARB MOVE FORWARD WITH LINKAGE, SCE OFFERS SOME ADDITIONAL AMENDMENTS TO THE PROPOSED MODIFIED REGULATION ORDER

Various Subsections of Section 95911(c) Are Inconsistent and Require Revision. Sections 95111(c)(3) and (4) of the Proposed Modified Regulation Order state that the

Auction Reserve Price will be announced the morning of the auction, while Sections 95111(c)(2) and (5) suggest that the Auction Reserve Price will be announced at the beginning of each December. To address this inconsistency, SCE suggests the removal of Sections 95111(c)(3)(B) and 95111(c)(4). Updating the Auction Reserve Price before each auction adds unnecessary complexity, and an annual update is sufficient. In addition, Sections 95111(c)(2) and (5) should be reconciled for consistency. (SCE)

Response: Staff disagrees with this comment. Exchange rate fluctuations necessitate updates to the Auction Reserve Price before each auction.

K. COMMENTS UNRELATED TO THE AMENDED REGULATION

Cost Recovery on Long-Term Contracts

K-1. Comment: The SB 1018 Analysis states that "[t]he California and Québec program regulations include identical features to ensure the efficacy of the emissions cap and to facilitate fair and equitable access to an efficient market for compliance instruments." However, despite the fact that the Québec Regulation provides for an allocation of allowances to generators for fixed-price electric power contracts executed before January 1, 2008, the California Regulation still provides no relief to generators subject to long-term contracts that provide no mechanism for recovery of GHG allowance costs. Calpine has worked diligently with its counterparties to renegotiate contracts where possible; however, a number of remaining fixed-price contracts cannot be renegotiated.

Calpine maintains that CARB should amend the California Regulation to provide a direct allocation of allowances to generators subject to long-term contracts that provide no mechanism for recovery of allowance costs only until such time as the existing contract expires or is substantively amended. The need for such amendments is only underscored by the proposed linkage with Québec. Similarly situated covered entities should not be subject to such disparate treatment within linked programs, as exemplified by Québec's allocation of allowances to legacy contract generators and the California Regulation's allocation of none to the same.

We look forward to CARB's fulfillment of its commitment to address the legacy contract issue, as reflected by Board Resolution 12-33 (requiring CARB staff "to develop a methodology that provides transition assistance to covered entities that have a compliance obligation cost that cannot be reasonably recovered due to a legacy contract" and "return to the Board with proposed regulatory amendments in mid-2013."). To that end, CARB staff should move forward with development of a formal notice and proposal of appropriate regulatory amendments as soon as possible. Calpine looks forward to working with CARB staff to develop appropriate regulatory amendments that will resolve this issue at the earliest opportunity. (CALPINE)

Response: The comments do not address proposed changes to the regulation so no response is needed. However, Resolution 11-32 already directs the

Executive Officer to monitor progress on bilateral negotiations between counterparties with existing contracts that do not have a mechanism for recovery of carbon costs associated with Cap-and-Trade for industries receiving free allowances pursuant to Section 95891, and identify and propose a possible solution, if necessary. For fixed-price contracts between independent generators and Investor Owned Utilities, the Board further directs the Executive Officer to work with the California Public Utilities Commission (CPUC) to encourage resolution between contract counterparties. Staff will be working with stakeholders to re-evaluate this concern and may propose additional amendments, as necessary.

IV. SUMMARY OF COMMENTS MADE DURING THE THIRD 15-DAY COMMENT PERIODAND AGENCY RESPONSES

Chapter IV contains all comments submitted during the third 15-day comment period that were directed at the proposed regulation or to the procedures followed by ARB in proposing the regulation, together with ARB's responses. The 15-day comment period commenced on March 22, 2013, and ended on April 6, 2013.

We received 5 letters on the proposed regulation during the third 15-day comment period, all of which directly concerned linkage. Commenters included representatives from the electricity sector, environmental NGOs, and trade groups. Six commenters gave testimony at the April 19, 2013, Board Hearing. To facilitate ease of use, comments are categorized into one of 8 sections below, and are grouped for response wherever possible.

Table IV-1 below lists commenters that submitted linkage comments during the third 15day comment period and identifies the date and form of their comments. Table IV-1 also shows the abbreviation assigned to each commenter.

A. LIST OF COMMENTERS

Abbreviation	Commenter
CBD	Brian Nowicki, Center for Biological Diversity
	Oral Testimony: 04/19/2013
CHEVRON	Stephen Burns, Chevron Corporation
	Written Testimony: 04/05/2013
EDF	Erica Morehouse, Environmental Defense Fund
	Oral Testimony: 04/19/2013
IETA	Robin Fraser, International Emissions Trading Association
	Written Testimony: 04/05/2013
NRDC	Alex Jackson, National Resources Defense Council
	Oral Testimony: 04/19/2013
PGE	Claire Halbrook, Pacific Gas & Electric
	Written Testimony: 04/05/2013
PGE2	Mark Krause, Pacific Gas & Electric
	Oral Testimony: 04/19/2013
SCE	Nancy Allred, Southern California Edison
	Written Testimony: 04/05/2013
SCE2	Frank Harris, Southern California Edison
	Oral Testimony: 04/20/2013
TNC	Alex Leumer, The Nature Conservancy
	Oral Testimony: 04/19/2013
VALERO	Matthew Hodges, Valero
	Written Testimony: 04/05/2013

 Table IV-1: Comments Received During the 3rd 15-Day Comment Period, and at Board hearing on April 19, 2013

B. HARMONIZATION

Market Stress Situations

B-1. Comment: A Contingency Plan is Needed to Respond to Instances of Market Stress/Failure and "De-linkage"

In September 2012, the Emissions Market Assessment Committee (EMAC) advised ARB to resolve five issues prior to linkage. Those included:

- Coordinating legal and regulatory frameworks;
- Consistency in transparency about market mechanisms;
- Consistency of definitions and market rules for the use of compliance instruments;
- Consistency in the enforcement of market rules; and
- Ability to respond quickly to unforeseen contingencies.

ARB and Québec have made significant strides in several of these areas over the last year, but significant progress towards developing a joint response to unforeseen contingencies is needed before successful linkage can occur. As the EMAC suggested during its September workshop, the integration of multiple jurisdictions introduces challenges in assessing the cause of market stress or failure and implementing regulatory remedies. A process for coordinating between jurisdictions to recognize and effectively address market stress conditions, including the increased potential for market manipulation under a linked auction, should be established in Québec and California regulation prior to a joint auction. Linkage should not preclude California from making necessary adjustments to its program in market stress situations. (PGE)

Response: Resolution 13-7 directs the Executive Officer to harmonize processes for coordination between California and Québec on the market programs. The Executive Officer will report back to the Board on linkage implementation readiness in October 2013. Once linked, an annual report will be submitted to the Board detailing the status of the linkage. Staff from both jurisdictions will be monitoring the market in coordination with the same market monitor. Furthermore, pursuant to SB 1018, the Governor found that Québec's program is similar to or identical to California's in all material respects, linkage does not change California's ability to enforce AB 32, Québec's regulations provide for equivalent enforcement of its Cap-and-Trade Program, and that linking will most likely not lead to any significant liability for California. The Governor's findings were supported by a separate review by the Attorney General.

C. OFFSETS

Harmonize Offset Policies

C-1. Comment: The 3rd 15-day notice fails to address significant issues regarding offsets between programs. Page 4 of the second 15-day notice states that the Québec compliance offset program is equivalent to the California program. This is not true in at least two important aspects: **reciprocity** and **liability**. While Québec has revised some language to clarify which offsets in California will be honored, there is still a lack of mutual reciprocity between the jurisdictions. For example, Québec stated for the destruction of ozone depleting substances protocol that only materials extracted from equipment in Canada would be eligible for offset credit under their program. In addition, the liabilities for invalidated offsets are not the same: California leaves the covered entity responsible for replacing invalidated offsets, whereas the Québec program has a pool from which covered entities can pull valid replacement offsets. In this third 15-day notice, there is no discussion at all about offsets, the verification protocol for offsets, and the liability for invalidated offsets. ARB should revise this proposal to address these issues. (VALERO)

Response: Staff recognizes that offsets are treated differently in the two jurisdictions. However, staff believes that the slight dissimilarity does not impede linkage. Both mechanisms allow for environmental integrity of the program and do not impede either jurisdictions ability to take enforcement action, as necessary, against any parties involved in the offset development process registered in each jurisdiction. The ISOR provided a detailed review of the Québec offset program, including third-party verification.

Linkage Should Increase Offset Supply

C-2. Comment: Québec's Regulation Unnecessarily Limits Offset Credit Supply

The use of high quality offsets is an effective cost containment tool and an essential component of a successful cap-and-trade program. However, as stated in PG&E's February 17 and April 13, 2012 comments, without adequate supply and adjustment to the implementation of the quantitative usage limit, the cost containment objectives of providing offsets will not be realized. Québec's cap-and-trade regulation, which includes three existing offset project protocols, limits the volume of offsets that could be generated in Canada and provided for sale to California entities under a linked program, making linkage less advantageous for California. If Québec is a net buyer of AB 32 offset credits, the demand for the already limited supply of AB 32 offsets will increase. The remaining supply of AB 32 offsets for California covered entities will be even lower, reducing the value of this critical cost-containment feature and increasing costs to California covered entities.

For example, Québec's protocols limit offset credit volume by restricting project development to Québec (Covered Manure Storage Facilities - CH4 Destruction, Landfill Sites - CH4 Destruction), whereas the AB 32 protocols can be used to develop projects in "the United States or its Territories, Canada, or Mexico" Similarly, "promoters" in

Québec (the rough equivalent of Offset Project Operators) must be emitters or people domiciled in Québec, or have an establishment in Québec, whereas ARB's protocols have no such geographic restriction.

In addition, future protocols, such as those based on forestry, could be precluded from adoption in Québec's system due to the regulatory requirement that GHG reductions be irreversible. Some projects, by nature, may be reversible due to unforeseen events such as forest fires, etc. The ARB's forestry protocol effectively manages this potential by adding the concepts of intentional and unintentional reversal. To avoid precluding the adoption of certain future protocols, Québec should eliminate the term "irreversible" in the offset rules, or alternatively develop "buffer pools" to insure against risk of reversals.

Finally, if Québec cannot generate sufficient offset credits and becomes a net buyer, fewer offset credits will be available for California entities to fully utilize their 8% quantitative usage limit. Therefore, PG&E also supports changing the ARB's quantitative usage limit described in Section 95854 to include a new Section 95854(c) that would allow an entity to bank any unexhausted portion of its limit from one compliance period for use in subsequent compliance periods. This language change will improve the potential for successful linkage with Québec. This new Section 95854(c) could read:

If O_O/S is less than L_O for any one compliance period, the number of compliance instruments identified in section 95854(a) that are between O_O/S and the number of compliance instruments identified in section 95854(a) where O_O/S is equal to L_O can be added to the quantitative usage limit of the subsequent compliance period. (PGE)

Response: Staff recognizes stakeholder concerns regarding offset supply. The Board must adopt all offset protocols used in the compliance program.

The California and Québec Cap-and-Trade Regulations both allow an entity to fulfill their compliance obligation with up to eight percent in offsets. California will explore, in conjunction with WCI partner jurisdictions, additional opportunities for emissions reductions from offsets in order to ensure a sufficient offset supply is available to contain costs. Pursuant to Resolution 13-7, staff will provide a Board update on the market program at least annually. Staff will also update the Board about any changes to a linked jurisdiction's program at least six months before the change becomes effective. This will provide stakeholders and the Board an opportunity to discuss and evaluate the proposed changes to a linked jurisdiction's program. Staff is committed to a transparent review process of the linked jurisdiction's programs and will work with stakeholders in providing recommendations, as needed, to the Board.

ARB staff held a public workshop in early 2013 to present a proposal to develop two additional offset protocols for mine methane capture and rice cultivation projects. The details surrounding any new offset project types for which ARB

adopts an offset protocol will be considered under that specific rulemaking, and modification will be made to the Cap-and-Trade Regulation as needed. Staff declines to make the suggested regulatory text changes related to "banking" because this is outside the scope of the proposed regulatory amendments.

Environmental Criteria and Offsets

C-3. Comment: I'd like to thank the Board and the staff for the tremendous work that's gone into this regulation and the many ways that we see that it's been improved and really expanded since it was first proposed; for listening a great many of the comments and questions and issues that were -- turned out, not surprisingly, to be quite complicated.

I'd like to focus my small bit of time here just on one little portion of the resolution. And again to thank the staff and the Board for taking up this particular issue.

On page 9, there is a portion of the resolution that directs the, be it further resolved, at least six months prior to any of the following taking effect in a linked jurisdiction, the Executive Officer will provide a report to the Board that includes an assessment of environmental factors and provide a recommendation for Board action, if appropriate. And goes on to list a few different actions that would trigger that.

The reason why this is particularly important is because, as we've already heard, the regulation requires California to accept any offset credit accepted by a linked jurisdiction partner. And therefore, any offset credit from any offset protocol, not just in California's partner, but partners of those partners and so on.

So that means that California with this regulation is committing to accepting not just offsets from Québec under the current offset protocols, but any future protocols adopted by Québec and any protocol adopted in the future by any of Québec's future partners.

Obviously, it's impossible for ARB right now to determine whether these as yet undeveloped protocols will meet the requirements and standards of AB 32. Or whether there are potential detrimental environmental impacts associated with any of these protocols.

Now I'm today not bringing -- I haven't heard anybody else raise specific problems with Québec's existing protocols. But I will note that Québec's cap and trade regulation contains no environmental criteria for offsets or adoption of protocols in the future in that California's regulation requires -- this regulation requires Air Resources Board to ensure all offsets in the program are real, permanent, quantifiable, verifiable, enforceable, et cetera. But it does not provide for any determination of the environmental impacts.

And furthermore, the Western Climate Initiative agreements to which ARB and California are a party, they explicitly reject the notion of standards for environmental or social impacts when evaluating protocols. I'll be done in one second.

Meaning that the different -- when a new protocol is brought up by one of those partner jurisdictions that the issues that can be brought to the table by the different partners, the agreements as they're currently laid out, explicitly exclude these environmental impacts. Which brings me back to the resolution today, which I think is very important and gets us in the right direction. I would like to see the Air Resources Board further explicate this as we go over the next few months as we get towards the end of the year and start to see perhaps new partners and new protocols coming online so that we can better develop and know how we're going to deal with that so we can evaluate those environmental impacts on the front end and be able to engage in those various arenas to address them. (CBD)

Response: Staff will continue to monitor and coordinate closely with any jurisdiction to which the California market program is linked. Pursuant to Resolution 13-7, at least annually, staff will provide a Board update on the market program. Staff will also update the Board about any changes to a linked jurisdiction's program at least six months before the change becomes effective. This will provide stakeholders and the Board an opportunity to discuss and evaluate the proposed changes to a linked jurisdiction's program. Staff is committed to a transparent review process of the linked jurisdiction's programs and will work with stakeholders in providing recommendations, as needed, to the Board.

Any offsets allowed for compliance use in the California program must meet the AB 32 offset criteria. This requires any offsets issued by linked jurisdictions to meet the same offset criteria. The WCI design documents and California's Capand-Trade Regulation have similar descriptions for offset criteria.

D. OPPOSED

Both Jurisdictions Should Have Proven Systems Before Linkage

D-1. (multiple comments): As stated in our June 27, 2012 comments, we reiterate that Valero does not support linkage of the California and Québec programs at this time due to differences between the two cap-and-trade programs and the high potential for inequitable treatment of covered entities. The California program is significantly more prescriptive than Québec's which will result in inconsistent interpretation and application of the program requirements on affected businesses and create adverse impacts for California facilities. Before considering linkage, we again stress that ARB and Québec should allow both cap-and-trade programs to be fully developed and implemented separately. After both programs have been operational for a reasonable period of time, ARB and Québec will be in a position to truly evaluate program performance and cross program equity so as to avoid adverse impacts to business. While these comments focus on linkage with Québec, the same logic holds true for any trading partners that may potentially link with ARB's program in the future. A well planned and evaluated linkage will help to ensure the success of multiple linked programs by ensuring availability of credits, fluidity of the market and reasonable pricing. (VALERO)

Comment: Linking to an immature, restricted market is inefficient - Linking to the European Union Emissions Trading System (EU ETS), on the other hand, could represent a truly broad and efficient market. Further, California could simply and efficiently recognize the allowances of the EU without the lengthy, restrictive process required by a joint auction. (CHEVRON)

Response: Staff believes that the California Cap-and-Trade Program has been operational for a sufficient amount of time to evaluate its success. Board action in October 2011 already finalized the provisions of California's Cap-and-Trade Regulation. The provisions became effective on January 1, 2012. Two allowance auctions have taken place, and California Carbon Allowances trade on exchange and over-the-counter. Staff believes the program has been working as anticipated.

This rulemaking is only considering amendments to the already approved regulation. Staff has worked with its WCI partner jurisdictions over the course of six years to ensure successful linkage. In proposing linkage with Québec, staff has spent many months of intense discussions with Québec staff to review and harmonize implementation requirements in the regulations. And, staff has held two public workshops and released draft regulatory text to allow for stakeholders to provide comment on the drafting of the amendments.

AB 32 specifies that California should link its Cap-and-Trade Program with other such programs. Since the intention has always been for WCI partner jurisdictions to link, it is best to coordinate on the market programs whether they are linked now, or later.

Furthermore, pursuant to SB 1018, the Governor found that Québec's program is similar to or identical to California's in all material respects, linkage does not change California's ability to enforce AB 32, Québec's regulations provide for equivalent enforcement of its Cap-and-Trade Program, and that linking will most likely not lead to any significant liability for California. The Governor's findings were supported by a separate review by the Attorney General.

Constitutional Issues

D-2. Comment: Linkage to External GHG ETS. The regulatory record for justifying linkage between the California Cap-and-Trade program and other jurisdictions fails to provide a defensible argument as to how linkage will not overstep constitutional limits on states engaging in foreign affairs. In *Massachusetts v. Environmental Protection Agency*, 549 U.S. 497, 519 (2007), The Supreme Court wrote: "Massachusetts cannot invade Rhode Island to force reductions in greenhouse gas emissions, [and] it cannot negotiate an emissions treaty with China or India." There are a number of constitutional doctrines that ARB has not sufficiently addressed to justify program linkage to foreign entities, including but not limited to constitutional doctrines of preemption, the dormant foreign affairs power, the Compact Clause, or the dormant Commerce Clause. Thus the

potential for litigation appears to be a distinct possibility, creating significant uncertainty in the market and potentially jeopardize participants with significant capital investments in a linked program. (VALERO)

Response: Health and Safety code section requires the Board to "facilitate the development of integrated and cost-effective regional, national, and international greenhouse gas reduction programs." Thus, the legislature has directed ARB to integrate greenhouse gas reduction programs where possible. In this case, linking with Québec has several advantages. The reduction of greenhouse gas emissions that can be achieved collectively by the two programs is larger than what can be achieved through a California-only program. Broadening the scope of the market will also provide greater flexibility to California businesses by encompassing a wider range of emissions reduction opportunities and greater market liquidity, and may have a positive impact on the California economy.

Staff is confident that linkage is designed in such a way as to avoid violating constitutional doctrines. Acceptance of Quebec allowances is neither an "invasion" of another state, nor does it represent an "emissions treaty" for purposes of the Compact Clause. California has authority to provide options to its covered entities regarding the allowances that may be used in its system, based on a thorough review of the issuing jurisdiction's emissions reduction program. California merely defines the environmental currency that satisfies a compliance entity's surrender obligations in California's regulations. California has also not engaged in any treaty negotiations that would violate the foreign affairs power. Rather, California has evaluated the stringency and enforceability of Quebec's program and determined that an allowance issued by Quebec has the same emissions value as an allowance issued by California. Based on this evaluation, California has determined that acceptance of Quebec allowances in California's system for compliance purposes is an effective method of expanding the pool of allowances while not diluting allowance value.

Linkage Raises Costs for California

D-3. Comment: Increasing costs for California - The economics study done by the Western Climate Initiative1 (WCI) shows a significant increase in allowance price, which will increase the competitive disadvantages faced by California's business sector, electrical generators, and ultimately residents. (CHEVRON)

Response: Staff provided a detailed economic analysis of the proposed linkage in Chapter V of the ISOR. The economic advantages of linking with other jurisdictions are analogous to the benefits of including multiple sectors under a broad California Cap-and-Trade Program. Expanding the number of sources that are able to trade allowances will reduce the overall cost of achieving the desired level of emission reductions and improve the efficiency of the emissions trading market. In these ways, linking benefits each jurisdiction – the direct result of lower costs of abatement and expanded reduction opportunities. While the particular effect of linking on the allowance price will depend on factors such as the relative size, stringency, cost of reductions, and availability of offsets in the California and Québec markets, the analysis indicates that the impact of linking with Québec could cause the allowance price in California to remain unchanged or increase slightly. Among the potential impacts that staff analyzed, is a small increase in revenues flowing into the California economy as a result of regulated entities in Québec seeking to reduce their cost of complying with the Québec program by purchasing California allowances. Fully accounting for the potential in-flow of revenue from Québec resulted in positive impacts to California. Additionally, linking with Québec could lead to greater criteria pollutant and greenhouse gas emissions reductions in California. Overall, staff finds no significant adverse impacts on California businesses or consumers as a whole as a result of the proposed regulation compared with impacts previously presented in the October 2010 analysis of the Regulation.

For a detailed analysis of the economic impacts of linkage, please see the *Staff Report: Initial Statement of Reasons*, which can be found online at http://www.arb.ca.gov/regact/2012/capandtrade12/capandtrade12.htm.

Delay Linkage

D-4. (multiple comments): There is no broad linkage on the horizon - California limits itself to linkage to WCI partners. While we understand that ARB considers this linkage a first step, it is also the only step that California is choosing to make in the foreseeable future. Other WCI partners (U.S. states and Canadian provinces equally) have backed away from implementing cap-and-trade programs. (CHEVRON)

Comment: Both programs should be viable and successful prior to linkage - We recommend that ARB defer linkage until the California and Québec cap-and-trade programs have been successfully implemented and demonstrate success. It is critical to allow each program to develop on a stand-alone basis and have an opportunity to demonstrate success before attempting to link them. (CHEVRON)

Comment: However, SCE's support has always included the caution that linkage should not be attempted until California's program has been shown to be functional and that the carbon market is robust. ARB should heed the advice of its own Emissions Market Assessment Committee ("EMAC") and many of its stakeholders, and postpone a linkage decision, as well as an *effective date*, until the beginning of the second compliance period. (SCE)

Response: Health and Safety code section 38564 requires the Board to "facilitate the development of integrated and cost-effective regional, national, and international greenhouse gas reduction programs." Thus, the legislature has directed ARB to integrate greenhouse gas reduction programs where possible. In this case, linking with Québec has several advantages. The reduction of

greenhouse gas emissions that can be achieved collectively by the two programs is larger than what can be achieved through a California-only program. Broadening the scope of the market will also provide greater flexibility to California businesses by encompassing a wider range of emissions reduction opportunities and greater market liquidity, and may have a positive impact on the California economy.

Delaying linking has been considered as an alternative. The benefits of a broader market for California entities would not be seen if there were a deferral in linking California and Québec's Cap-and-Trade Programs. ARB would also be seen as nonresponsive to AB 32 requirements to pursue sub-national collaborative efforts to achieve greater GHG emissions reductions than California could achieve on its own.

Under this alternative, it is also unclear when any future program linkage would occur. While the WCI emissions trading group consists of several Canadian provinces that have been active in the development of the requirements for a regional WCI market program, at this time only Québec has established a Capand-Trade Program (Government of Québec 2011).

While deferring linkage may allow for a broader market than one with just linkage to Québec, it is important to take this first step now and develop a regional program to which other jurisdictions can link. As described in Appendix B, significant time and effort have been spent to develop and enable a regional Cap-and-Trade Program. The successful linkage of the California and Québec Cap-and-Trade Programs will be a clear signal that California is taking the next step to work with other sub-national jurisdictions to address climate change and increase GHG emission reductions through cost-effective methods for its covered entities.

The California program is up and running. Two allowance auctions have taken place, and California Carbon Allowances trade on exchange and over-thecounter. Staff believes the program has been working as anticipated. By the time the programs are linked on January 1, 2014, Québec will have held at least on auction and seven months of trading.

Linking Propagates Flawed Market Policies

D-5. Comment: Reinforcing flawed market policies - Chevron is concerned that linking prematurely will only lead to spreading the market design flaws of California's program. The current market design, which is now reflected in Québec's program, leaves the door open for market abuse due to the existence of holding limits and lack of frequent auctions. (CHEVRON)

Response: The decision to propose linkage of the California and Québec Capand-Trade Programs followed extensive discussions between California staff and

Québec staff on the harmonization of regulatory provisions, in addition to a full public process with California stakeholders. In these discussions, staff considered which items must be identical, which need to be consistent, and which could be different in a linked program. Staff of the jurisdictions each concluded that the remaining differences would not adversely affect the efficiency or equity in a regional program. Thus, the current linkage approach is the result of in-depth economic and policy analysis, and was judged to be the best way forward.

As the programs are implemented, staff in each jurisdiction will monitor their respective programs and discuss areas of stakeholder concern or areas that may be modified through future regulatory amendments to enhance market efficiency and cost containment. Both jurisdictions are committed to continuing to work closely with each other and their respective stakeholders to ensure a successful regional market program.

E. SUPPORT

E-1. (multiple comments): PG&E views successful linkage with Québec as a critical first step in broadening California's cap-and-trade market through linking with other jurisdictions. Larger more diverse markets enhance the prospects for efficient market outcomes, eventually leading to lower-cost emission reduction opportunities. (PGE)

Comment: IETA supports the linking of carbon markets, and we appreciate ARB's ongoing efforts to develop a functional linked carbon market with its Western Climate Initiative (WCI) partner jurisdictions such as Québec. If done effectively, linked markets can drive price discovery, which helps to reduce program costs by broadening the scope of available mitigation opportunities while further sparking competition to innovate and mitigate greenhouse gas emissions. A carefully designed and well-executed linkage, which builds off valuable experiences and lessons learned from other environmental markets, will help maximize these benefits as well as maintain California's international reputation as a climate policy leader. (IETA)

Comment: IETA supports the proposed regulatory modification to add an explicit date (1 January 2014) on which compliance instruments issued by Québec may be used by California covered and opt-in covered entities for compliance purposes, with a first joint auction to follow. (IETA)

Comment: The Nature Conservancy is supportive of the linkage program and encourages the program to approve the resolution. It's important to leverage additional greenhouse gas reductions beyond California's borders and address the enormity of this problem.

California can't do it along and it's not. As is provided in the Governor's language in the resolution, we are extremely supportive of ARB developing a process for public review and input with respect to any changes which may occur to Québec's program in the

future to ensure both programs maintain comparable levels of integrity. We commend the staff on their hard work on the resolution and encourage you to support it. (TNC)

Comment: My name is Alex Jackson on behalf of the Natural Resources Defense Council. Here to speak in support of the resolution to formally link California's Cap and Trade Program with Québec.

We share Chair Nichols' assessment that today is indeed an historic day. It's not every day that two subnational governments formally link economy-wide Cap and Trade Programs to stand up and combat climate change. Indeed, today is the first and only day that has happened.

We do see tremendous benefits of this proposal. It will both expand the range of emission reduction opportunities for California's program. Importantly, it will expand the total number of reductions you can expect be achieved for both programs. That has an impact not only for climate change at large, but for California itself who is particularly vulnerable to the impacts we are seeing and will see in the future from unmitigated climate change.

Also, we see benefits to just enhance the resiliency and performance of California's market by linking into a more liquid and larger market, reduce the volatility, help deter efforts and manipulation, which we know we need to be vigilant about.

That said, we do know that AB 32 first and foremost must work for California. In that sense, we are very appreciative of the commitment from staff and the Board to always approach AB 32 in its implementing regulations through that lens and we very much support and appreciate the language in the Board resolution committing that effort to continue, even as these programs are formally linked.

To be clear, we do not see any cause for concern at this time. This is very much more of a safeguard insurance policy as we monitor the status of both programs moving forward as enforcement activities and increasing collaboration efforts continue. And we do share the findings of both ARB and the Attorney General that this linkage satisfies the four findings set out in SB 1018.

All told, again, I think this is an historic day. This is a good thing. And we encourage the Board to vote it out. Thank you. (NRDC)

Comment: Last summer at the Board meeting on linkage, Chair Nichols, you noted that California and Québec were engaged, but not yet married. And now that this steps of the marriage process are actually in progress, I think it's incredibly gratifying to be able to look around and note that this is a marriage that the entire international community is celebrating. And in a world without a global agreement to combat climate change, this type of partnership is the best and perhaps the only way to nurture progress.

The process that California and Québec have engaged in, which began with the high level information sharing back in 2007 and it's telescope into line by line analysis to harmonize the regulations has sent a message to the world about California and Québec's unwavering commitment to creating the most robust and effective program for reducing carbon pollution.

The high standards for environmental integrity that California and WCI partners have set for themselves act as an inspiration force for nascent climate programs around the world and will create a race to the top on climate action.

We look forward to following the important steps that California and Québec will take before this joint auction in 2014. And we look forward to remaining informed and engaged, as the relationship with Québec moves ensures.

We applaud the CARB staff on their diligent work to date and urge the Board to vote in favor of this important milestone. Thank you. (EDF)

Comment: As you are no doubt aware, Southern California Edison has always supported a broad-based regional or national Cap and Trade Program to facilitate the most effective and efficient emission reductions under AB 32. And we agree that today's step is a critical part of that process, and we congratulate the staff and the leadership on their efforts thus far. Again, we congratulate the staff and the Board on this important step. We look forward to working with ARB over the ensuing months for this year for the cap and trade amendments -- or the amendments to the program, I should say. And appreciate all the efforts thus far. Thank you. (SCE2)

Comment: Mark Krausse on behalf of Pacific Gas and Electric Company. PGE has long supported linkage with other cap and trade jurisdictions, and we support the resolution before you today.

As many have observed, we support linkage because it gives us opportunities for greater efficiencies in cap and trade and, of course, driving down the cost of carbon reduction opportunities.

I want to harken back to Richard's comments on your congratulating him and do the same. One of the words he said and he said I think with heart is stakeholder involvement. And we've appreciated in this particular process in particular that staff has heard all of our input, taken much of it to heart, and we see it reflected in the resolution. (PGE2)

Response: Thank you for your support.

F. GENERAL

F-1. Comment: Given the ARB's responsibility to carefully design a cap-and-trade program and establish a fair and transparent market, the ARB should monitor the success of the market it has created, before trying to expand it. The EMAC has concluded that linkage with Québec should not move forward until the California cap-and-trade market is deemed well-functioning. SCE strongly agrees and urges the ARB to develop, in conjunction with stakeholders and the EMAC, success metrics for determining when and if the California market is ready for linkage with other jurisdictions.

Additionally, SCE recommends that the ARB develop a set of criteria to assess any potential linkages to ensure that the economic and environmental impacts of such partnerships are in line with California's cap-and-trade goals. Identifying the possible costs and benefits of linking with another jurisdiction on a case-by-case basis will allow the ARB to make informed decisions and avoid harmful future linkages.

Further discussion of these issues can be found in SCE's comments to the ARB on linkage with Québec submitted January 23, 2013. (SCE)

Response: The ISOR provides a clear scope of the level and type of review conducted by staff prior to proposing linkage with Québec. At least annually, staff will provide a Board update on the market program. Staff will provide a report in November 2013 on the status of linkage implementation readiness as requested by the Governor.

California's program has been running as anticipated. Two allowance auctions have taken place, and California Carbon Allowances trade on exchanges and over-the-counter.

Furthermore, pursuant to SB 1018, the Governor found that Québec's program is similar to or identical to California's in all material respects, linkage does not change California's ability to enforce AB 32, Québec's regulations provide for equivalent enforcement of its Cap-and-Trade Program, and that linking will most likely not lead to any significant liability for California. The Governor's findings were supported by a separate review by the Attorney General.

Linkage Process

California and Québec Should Link Through WCI, Inc.

F-2. Comment: Linkage through WCI, Inc. It has been Valero's understanding that the process of "linking" Cap-and- Trade programs from varying jurisdictions was to occur through WCI, Inc. We note that nowhere in the proposed revisions does ARB mention WCI, Inc: all mention of linkage is in the context of a direct relationship with the external GHG ETS. Valero contends that this is inappropriate in light of the statements ARB has made with regards to the process of linkage, particularly in regards to the constitutional limitations mentioned above. WCI, Inc. will play a pivotal role in the linkage process.

ARB has stated that all GHG ETS systems are ultimately linked only to WCI, Inc., and it is through this linkage the participating jurisdictions have coupled programs. Valero contents that ARB should revise the proposed language to reflect the linkage process as occurring through the entity of WCI, Inc., and not directly with external GHG ETS. (PGE)

Response: Staff disagrees with this suggestion and declines to make the changes suggested. WCI, Inc. is an administrative organization and the jurisdictions will not delegate any policy, oversight, or enforcement authority to this organization. Linkage is between the jurisdictions and staff believes that process complies with applicable constitutional laws.

Hold a Joint Practice Auction

F-3. Comment: We appreciate staff's incorporation of stakeholder comments provided in response to previous iterations of the amendment language and applaud the decision to pursue activities that will ensure implementation readiness prior to a joint auction in 2014. A practice joint auction with significant stakeholder involvement and independent evaluation of processes, procedures, and systems will further improve the likelihood of successful linkage with Québec. (PGE)

Comment: So we find that a very beneficial property of this linking agreement. Edison continues to support testing of the joint auction process. We are confident that such an approach will yield valuable information for all participants, the auction mechanism and system designers, as well as all stakeholders that are participating in this. And we look forward to participating in that process. (SCE2)

Comment: And in particular, a joint practice auction. We think that working through that and having stakeholder input that in process and working toward how things can be approved if there are issues, that makes us all, as Bob Fletcher said, it's a reduction in angst. So we appreciate that. (PGE2)

Response: Staff will consider the suggestion to have a joint practice auction prior to a first linked auction. Per direction from the Governor, ARB staff will provide a report on November 1, 2013 to the Governor and Cal EPA on the progress towards implementing a joint program in 2014 and any impediments to implementing linkage.

F-4. Comment: IETA supports the pre-linking activities ARB anticipates to take place between the time that the regulation is adopted and 1 January 2014. We thank ARB for taking into consideration IETA's suggestion to hold a practice joint auction between the two jurisdictions, as well as a sufficient technical testing of the current auction platform to ensure that it can allow for a joint auction, which involves important new features (e.g., setting of an exchange rate and a potential auction reserve price change within an hour of the start of the auction). (IETA)

Response: Staff agrees that setting the exchange rate within an hour of the start of the auction does not provide a sufficient amount of time to make modifications to bids based on an updated Auction Reserve Price. However, section 95911(c)(3)(C) of the linkage amendments to the Regulation states that ARB will use "the most recently available noon buying rate for U.S. and Canadian dollars...and shall announce the exchange rate before the auction." The most recently available noon daily buying rate is typically published by the Bank of Canada between 12:30 and 1 pm the day prior to an auction, hence entities have nearly a full day to adjust their bids according to the exchange rate.

A Simpler Approach is Best

F-5. Comment: When developing such a complicated program as we've seen over the years, challenges and events come up that one could not have predicted. And linking with another program increases that. So SCE suggested the staff continue to look for opportunities to keep the program as simple as possible. We feel that the potential for unforeseen challenges is minimized with a more simple program, more straight forward program. After all, the goal is to ensure that the linked programs work effectively, as a prior speaker stated, for California, but also to demonstrate cap and trade can work when involving all sectors and as many regions as possible.

We encourage ARB to participate in all – to anticipate all possible challenges and to clearly develop approaches in advance of any challenges. (SCE2)

Response: Staff agrees with the comment and endeavors to design a simple program where that is possible.

Clarify Definitions

F-6. Comment: §95830(h)(2): This section requires clarification as to the definition of "entity" in that if "entity" is defined as the "corporation", then registering in any other jurisdiction other than California would be prohibited, regardless of the presence of operations in linked jurisdictions. (VALERO)

Response: The Regulation does not include a subsection (h) in section 95830. Thus, Staff cannot formulate a response. However, an entity in the context of registration (95830, subsection (c)) is defined in section 95802 as:

"Entity" means a person, firm, association, organization, partnership, business trust, corporation, limited liability company, company, or government agency.

Thus, an entity does not necessarily mean a corporation.

Accounts of Entities with Operations in Multiple Jurisdictions

F-7. Comment: §95833(f)(3)(D) and 95920(g): Significant clarity is needed around how the holding limits will apply to entities with operations in multiple jurisdictions.

Statements regarding "opting-out" of consolidation notwithstanding, we request that ARB provide concise regulatory language regarding how the holding limits will apply under these circumstances. (VALERO)

Response: Section 95833(f)(3)(D) was added to clarify how holding and purchase limits will apply to entities with direct corporate associations across a joint program. This section requires entities with direct corporate associations who are subject to the California and Québec programs to register with the appropriate jurisdiction and share their purchase and holding limits across the jurisdictions.

G. DE-LINKING

G-1. (Multiple Comments): Linkage should not preclude California from making necessary adjustments to its program in market stress situations. This plan should also address the possibility of "de-linkage" and guarantee the permanence of compliance instruments issued from linked jurisdictions. (PGE)

Comment: De-linking could cause significant economic harm to California and impact California's ability to meet its AB 32 emissions reduction goal. The ARB should plan how it would maintain the environmental integrity of its cap-and-trade program and prevent significant economic harm to California before linking with another jurisdiction. In its draft linkage agreement, the ARB proposes a brief "Withdrawal Procedure" for a de-linking scenario, but this procedure is not sufficient. The Withdrawal Procedure is merely guidance for *when* jurisdictions would de-link rather than *how* jurisdictions would de-link. The ARB has yet to offer any details on what would happen to the surplus of compliance instruments in the program, and how economic and environmental impacts will be assuaged. SCE is convinced that de-linkage poses a serious threat and that market participants should be informed of how this process might unfold. Additional comments on de-linking can be found in SCE's January 23, 2013 comments. (SCE)

Comment: All that is needed to form a linked program is the acceptance of compliance instruments amongst jurisdictions. Rather than the single joint auction with allowances that are indistinguishable by jurisdiction (as proposed in Section 95911(a)(5) of the Proposed Modified Regulation Order7), each jurisdiction should have its own auction and issue its own identifiable compliance instruments. A multi-jurisdictional program could be then maintained by trading in the secondary market. This will minimize the organizational and accounting complexity that comes with holding a joint auction and better maintain the environmental and economic integrity of the linked programs. Additionally, creating allowances that can be distinguished between jurisdictions would allow jurisdictions to de-link more easily. Separating allowances at the beginning would allow market participants to make informed decisions about where to purchase allowances based on policy risk in either jurisdiction. If, as the ARB envisions, a well-functioning program with consistent rules develops, then prices should converge across linked programs. Conversely, if the linked markets do not run as smoothly as expected,

the ARB and other market participants will be better positioned to cope with possible delinking. (SCE)

Comment: We're very pleased to hear, for example, the comments regarding the potential de-linking and the assurance that I presume under all but extraordinary circumstances a Québec-sourced allowance would still be eligible to be utilized by a California participant who may be holding it at the time that that happens. That's a critical advance plan for something that we all hope will not happen.

So we find that a very beneficial property of this linking agreement. Edison continues to support testing of the joint auction process. We are confident that such an approach will yield valuable information for all participants, the auction mechanism and system designers, as well as all stakeholders that are participating in this. And we look forward to participating in that process. (SCE2)

Comment: Another thing that was mentioned I think in the presentation we'd like to work more with staff on is the potential for de-linkage and that we have a checklist for what needs to be done if there is a need to de-link from Québec. So that isn't a, oh, no moment and everybody says what do we do now. But instead, we have the particulars. I don't think that's going to happen. But it gives us great solace that staff is open to take that approach. (PGE2)

Response: Any process to de-link would require a regulatory action and staff cannot presuppose what the Board would choose to do under specific conditions. Any proposals to de-link would try to minimize adverse impacts to the market programs. If there are no integrity issues with the compliance instruments, staff anticipates that any Québec compliance instruments held by California entities would remain valid for compliance.

H. TRANSPARENCY

Information Disclosure

H-1. Comment: §95921(6) should be expanded to state that price disclosure is also not required for secondary market transactions. (VALERO)

Response: Staff disagrees with this comment. Price disclosure is a fundamental element of market monitoring and a price signal is vital for the ability for market participants to make informed discussions about how best to comply with the Regulation.

H-2. Comment: Information Sharing Guidelines Should Be Harmonized

ARB is in the process of determining what auction information will be shared publicly, following a January 25, 2013 workshop and comment period. At this workshop, ARB expressed that both jurisdictions will be aligned on the release of information, for all

types of data. PG&E recommends that section 95921(e) be clarified to state that the section applies both to accounts registered to entities in California and in any linked jurisdictions. (PGE)

Response: Staff agrees that public information sharing policies may have an impact on the market aspect of linked Cap-and-Trade Programs. Thus, ARB and Québec will endeavor to release market-related information at the same time and in the same manner and level of detail. Staff does not believe this policy intent requires a regulation change to implement.

I. CHANGES TO AUCTIONS AND RESERVE SALES RELATED TO LINKAGE

I-1. Comment: §95913(i) does not allow an entity registered in an external GHG ETS to purchase from the California Reserve. While it may make sense to prevent a Canadian company without any related entities in California to buy up California reserve allowances, this requirement would preclude a company with entities in both Québec and California from optimizing its compliance strategy. All aspects of the market should be uniform and open to entities in all linked jurisdictions. Similarly, section 95942(d)-(e) should include reserve allowances. (VALERO)

Response: Québec will also have an Allowance Price Containment Reserve. Québec registered entities can purchase from that reserve if they are covered under Québec's program.

I-2. Comment: §9511(c)(3)(e): Valero contends that it is inappropriate for the auction administrator to set the auction reserve price to the highest market value of any participating jurisdiction. Unforeseen market circumstances that artificially inflate market prices in one jurisdiction should not penalize all other participants. ARB should explore other approaches to setting the reserve price that reflect the market signals from all linked jurisdictions. (VALERO)

Response: It is true that choosing the higher of the two prices may result in slightly increasing the floor price above what it would be in the absence of linking. However, such an action also ensures that no linked jurisdiction would be selling its allowances below its designated floor price as the result of currency exchange rate fluctuations. This latter benefit outweighs the cost of slightly higher floor prices. The overall benefits of linking are explained in the ISOR.

I-3. (multiple comments): The Exchange Rate and Auction Reserve Price Should be Posted Prior to the Day of the Auction (Section 95911(c)). According to ARB's 15-day language (Section 95911(c)(3)(C)), the exchange rate for the Auction Reserve Price will be set "as the most recently available noon daily buying rate for U.S. and Canadian dollars as published by the Bank of Canada." The auction administrator will then "use the announced exchange rate to convert to a common currency the Auction Reserve Prices previously calculated in U.S. and Canadian dollars." Section 49(2) of the Québec regulation specifies that the joint minimum price

of emission units is defined in terms of "the official conversion rate of the Bank of Canada at noon on the date of the auction or, when that rate is not available, the most recent rate published in its Daily Memorandum of Exchange Rates."

As the exchange rate is set at 9:30AM PST by the Bank of Canada, entities will learn the effective exchange rate and the Auction Reserve Price at most 30 minutes before the auction window opens. This small window of opportunity to make modifications to bids based on an updated Auction Reserve Price could result in potential data entry errors, which is particularly troubling given that bids one cent below the Auction Reserve Price will be rejected. This last-minute modification could also impact the bid guarantee posted by stakeholders at least 12 days before the auction. PG&E strongly encourages the two jurisdictions to work together to remedy this issue before proceeding with a linked auction, rather than unnecessarily complicating the bidding process.

To avoid last-minute errors, the exchange rate and the Auction Reserve Price should both be calculated and announced on the last day prior to the auction that is a business day in both California and any linked jurisdictions. This will afford entities enough time to alter their bids, if needed, while maintaining the accuracy of the calculated exchange rate. PG&E recommends the following modifications:

95911(c)(3)(C): The auction administrator shall set the exchange rate as the most recently available noon daily buying rate for U.S. and Canadian dollars as published by the Bank of Canada on the last day prior to the auction that is a business day in both California and in any jurisdiction operating an External GHG ETS to which California has linked pursuant to subarticle 12, and shall announce the exchange rate prior to the opening of the auction window 10 a.m. Pacific Prevailing Time on the day the exchange rate is set.

95911(c)(4): The Auction Reserve Price will be announced prior to the opening of the auction window at 10 a.m. Pacific Prevailing Time Pacific Standard Time (or Pacific Daylight Time when in effect) on the day the exchange rate is set per Section 95911(c)(3)(C) of auction, and will be in effect until the window closes at 1 p.m. Pacific Prevailing Time on the day of the auction. Standard Time (or Pacific Daylight Time when in effect).

PG&E would also like to reiterate its April 13, 2012 comments regarding the determination of the Auction Reserve Price. Rather than using the maximum of the two separate prices which will provide an upward bias on the reserve price, PG&E recommends using the average of the two prices. PG&E suggests the following change to section 95911(c)(3)(D):

The auction administrator will use the announced exchange rate to convert to a common currency the Auction Reserve Prices previously calculated separately in U.S. and Canadian dollars. The auction administrator will set the Auction reserve Price equal to the higher average of the two values. (PGE)

Comment: Section 95911(c) of the *Proposed Modified Regulation Order* states the process by which an exchange rate will be established, and an auction reserve price set, across the two jurisdictions before a joint auction. The current proposal uses the most recently available noon daily buying rate for U.S. and Canadian dollars as published by the Bank of Canada to inform the exchange rate. The auction administrator then uses this exchange rate to convert to a common currency the auction reserve prices previously calculated separately in U.S. and Canadian dollars, setting this new auction reserve price to the higher of the two values. This means that an exchange rate and auction reserve price will be provided less than one hour before the auction window begins.

IETA suggests that an exchange rate be set and its effect on the auction reserve price be announced at *least one business day before the auction window opens*.

Within the current California-only auction process, entities have the option to upload bids well in advance of the auction window, knowing far in advance what the auction reserve price will be. If the auction reserve price were to change within an hour before an auction window, as is possible to occur in a joint-auction – even by one cent – an entity's previously uploaded bids could be ruined.

Providing notice of the exchange rate and auction reserve price at least one business day ahead of an auction allows entities time to adjust pre-submitted bids if necessary, without allowing so much time that the real exchange rate is likely to drastically change before the auction creating arbitrage opportunities. (IETA)

Response: The method of setting the auction reserve price was selected following discussions within the WCI. WCI partner jurisdictions agreed to the mechanism to accommodate jurisdictions that had assured their stakeholders that their auction reserve price would not decline. Many stakeholders in all jurisdictions are concerned that oversupply of allowances will result in prices so low that GHG reductions may be limited.

Most ARB economic impact assessment results suggest that one should expect auction settlement prices well above the auction reserve price. If these assessments are correct, then any distortion would be minimal.

Staff agrees that setting the exchange rate within an hour of the start of the auction does not provide a sufficient amount of time to make modifications to bids based on an updated Auction Reserve Price. However, section 95911(c)(3)(C) of the linkage amendments to the Regulation states that ARB will use "the most recently available noon buying rate for U.S. and Canadian dollars...and shall announce the exchange rate before the auction." The most recently available noon daily buying rate is typically published by the Bank of Canada between 12:30 and 1 pm the day prior to an auction, hence entities have nearly a full day to adjust their bids according to the exchange rate.

I-4. Comment: Clarify Procedure for Sale of Consigned Allowances In The Event of An Undersubscribed Auction (Section 95911(f))

Section 95911(f) specifies (1) an order of sale if the auction is undersubscribed, with consigned allowances sold first, and (2) that when there are insufficient winning bids to exhaust the allowances from a consignment source in section 956911(f)(1), the auction operator will sell an equal proportion of allowances from each consigning entity in that source. The situation becomes more complex if linkage occurs because the amended Québec regulation Section 54 merely states, "Emission units of the vintage of the current year or of previous years that remain unsold after an auction are put up for sale at a later date..." PG&E requests ARB to clarify that section 95911(f)(1) applies to the proportion of total bids coming from California. PG&E proposes the following modification:

(f) <u>Allowances will be sold from California sources (including consigned</u> <u>allowances) and from each jurisdiction to which California has linked</u> <u>pursuant to subarticle 12 in the same proportion as allowances were</u> <u>provided to the auction, rounded to the nearest 1000 allowances.</u>

(f) (g) If the quantity of bids accepted by the Auction Administrator is less than the number of allowances offered for sale then some allowances will remain unsold.

(1) If allowances remain unsold at auction, the auction administrator will fulfill winning bids with <u>California-sourced</u> allowances from consignment sources in the following order:

(A) Allowances consigned to auction pursuant to section 95910(d)(2);

(B) Allowances consigned from limited use holding accounts pursuant to section 95910(d)(1);

(C) Allowances redesignated to the auction pursuant to section 95911(fg)(3); and

(D) Allowances designated by ARB for auction pursuant to section 95910(c)(1)(B) and (c)(2)(B) and (C).

(2) When there are insufficient winning bids to exhaust the allowances from a consignment source in section 95911(fg)(1), the auction operator will sell an equal proportion of allowances in equal proportion to the number of allowances consigned from each consigning entity in that source, rounded down. If, as a result of rounding down, not all California-sourced allowances specified in section 95911(f) are sold, the auction operator will assign a random number to each unsold bundle of 1,000 metric tons of CO2e from that source. Beginning with the lowest random number assigned and working in increasing order, the auction operator shall sell allowances specified in section 95911(f) are sold. (PGE)

Response: Staff is not proposing any changes to the regulation with regard to the order of sale of California's allowances will remain as currently specified in section 95911(f)(1) and applies to the proportion of total bids coming from California once linked to another jurisdiction.

V. NONSUBSTANTIVE CORRECTIONS

Chapter V contains the explanation of non-substantial modifications that were made to clarify the regulation, as described below. This non-substantive modification does not materially alter the requirements, rights, responsibilities, conditions or prescriptions contained in the regulation. Text of the Final Regulation Order filed with OAL appears in plain text below and the nonsubstantial modifications are shown in underline and strikethrough format.

The third 15-day version of the modified text had a reference in new section 95833(f)(3)(D) that referenced 95822(f)(3). This was a typographical error, as section 95822(f)(3) has never existed. The correct reference is 95833(f)(3), as shown below.

§ 95833. Disclosure of Corporate Associations.

- (f) Consolidation of Accounts for Corporate Associations.
 - (3) To opt out of consolidation of accounts, the primary account representative or alternate account representative for an entity within the corporate association must provide to the Executive Officer by October 1, 2012:
 - (D) If an entity registered in the California Cap-and-Trade Program has a direct corporate association with an entity(ies) registered in an External Greenhouse Gas Emissions Trading System to which California has linked its Cap-and-Trade Program pursuant to subarticle 12, the entity registered in the California Cap-and-Trade Program must opt out of consolidation with the entity(ies) registered in an External Greenhouse Gas Emissions Trading System and meet all the requirements of section 95833(f)(3).

NOTE: Authority cited: Sections 38510, 38560, 38562, 38570, 38571, 38580, 39600 and 39601, Health and Safety Code. Reference: Sections 38530, 38560.5, 38564, 38565, 38570 and 39600, Health and Safety Code.

ATTACHMENT A: FINAL STATEMENT OF REASONS

Response to Comments on the Environmental Analysis Prepared for the Proposed Amendments to the California Cap on Greenhouse Gas Emissions and Market-Based Compliance Mechanisms to Allow for the Use of Compliance Instruments Issued by Linked Jurisdictions

May 2013

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Commenters

The list below identifies the commenters that submitted comments related to the Environmental Analysis, and includes commenter information.

Commenter ID	Commenter Information
BREATHECALIFORNIA	Andy Katz Affiliation: Breathe California Oral Testimony: 06/28/2012 Hearing Witness #: 10
CBD	Brian Nowicki Affiliation: Center for Biological Diversity Written Testimony: 06/27/2012 45-Day Linkage Comment #: 17
EDF2	Erica Morehouse, Environmental Defense Fund; Michelle Passero, The Nature Conservancy; Alex Jackson, Natural Resources Defense Council; Jennifer Martin, Center for Resources Solutions Written Testimony: 06/27/2012 45-Day Linkage Comment #: 16
EDF3	Tim O'connor, Environmental Defense Fund; Erica Morehouse, Environmental Defense Fund; Kristin G. Eberhard , Natural Resources Defense Council Written Testimony: 06/26/2012 45-Day Linkage Comment #: 15
EDF4	Erica Morehouse Affiliation: Environmental Defense Fund Oral Testimony: 06/28/2012 Hearing Witness #: 3
PFT1	Paul Mason Affiliation: Pacific Forest Trust Written Testimony: 06/27/2012 45-Day Cap-and-Trade Amendment Comment #: 18
TWS1	Ann Chan Affiliation: The Wilderness Society Written Testimony: 06/27/2012 45-Day Linkage Comment #: 2093

Commenter ID	Commenter Information
TWS2	Ann Chan Affiliation: The Wilderness Society Oral Testimony: 06/27/2012 Hearing Witness #: 14
WSPA1	Catherine Reheis Boyd Affiliation: Western States Petroleum Association Written Testimony: 06/27/2012 45-Day Linkage Comment #: 8

Location of Comment Letters on the ARB Website

All comment letters and attachments received on the proposed Cap-and-Trade Regulation are posted on the ARB website at the following link: <u>http://www.arb.ca.gov/lispub/comm/bccommlog.php?listname=capandtradelinkage12</u>

To manually locate the comments on the ARB website:

- Go to www.arb.ca.gov.
- Select "Climate Change Program" in the left column.
- Under "Assembly Bill 32 Implementation and Other Activities," Select "Cap-and-Trade Program" on the Activities tab.
- Select "View All Public Comments" in the right column.

On the website, the comments are ordered by date received, grouped by review period.

BREATHECALIFORNIA

Name: Andy Katz Affiliation: Breathe California Oral Testimony: 06/28/2012 Hearing Witness #: 10

Comment: To clarify a process for ensuring that linked jurisdiction's programs continue in the future to meet the requirements of AB 32, I'm thinking specifically of environmental integrity criteria that are specified in AB 32. When you think about offsets, it's that they're real, permanent, quantifiable, verifiable, enforceable. They're additional to what would have otherwise occurred. And the overall program and compliance instrument from another jurisdiction is equivalent to California's jurisdiction.

Response: AB32 is clear what criteria an offset must meet in order to be eligible for use for compliance by California entities. Staff will continue to monitor and coordinate closely with any jurisdiction to which the California market program is linked to ensure any changes to existing protocols or new protocols would result in offsets that meet the AB32 criteria of real, quantifiable, permanent, enforceable, additional and verifiable. Staff will provide the Board with updates prior to the actual revision to existing or adoption of new offset protocols or linkage to another jurisdiction. The update would include an AB 32 offset criteria analysis, assessment of environmental factors, and evaluation of potential offset supply. This will provide stakeholders and the Board an opportunity to discuss and evaluate the proposed changes to a linked jurisdiction's program. It is difficult to plan responses to situations that have not yet occurred and whose potential impact on the California program cannot be determined at this time. Staff is committed to a transparent review process of the linked jurisdiction's programs and will work with stakeholders in providing recommendations to the Board. If staff identifies that potential changes to the jurisdiction's program could harm attainment of the program goals, California regulated parties or California, staff would brief the Board and pursue the Board's direction.

CBD

Name: Brian Nowicki Affiliation: Center for Biological Diversity Written Testimony: 06/27/2012 45-Day Linkage Comment #: 17

Comment: Our primary concern is that the regulation linking California's greenhouse gas cap-and-trade program with partner jurisdictions will force California to accept carbon offset credits from projects with low or no environmental standards, thereby leading to substantial negative environmental impacts. This is of particular concern with respect to forest offset projects, which, if not developed pursuant to environmentally rigorous standards, can impair forest ecosystems, wildlife habitat, and water quality, even in cases when those forest projects may provide climate benefits. California's cap-and-trade program should not contribute financial incentives that would drive forest ecosystem degradation in other states and provinces. California must ensure that our greenhouse gas reduction efforts do not rely on projects that result in ecosystem degradation to our forests or outside the state in order to reduce the costs of compliance for industrial polluters in California.

Response: In this introductory comment, and in the more specific comment that follow, the commenter expresses an overarching concern that linking with partner jurisdictions will force California to accept offset credits from projects with low or no environmental standards. The commenter expresses a particular concern with regard to potential future forest offset projects in potential future linked jurisdictions. The proposed amendments to the regulation currently under consideration would link the California market program only with Québec's market program. Québec does not currently have, nor is currently proposing, to develop or adopt a forest protocol. Québec's protocols are discussed in the ISOR, and the potential indirect environmental impacts associated with implementation of those protocols are specifically addressed in Chapter IV of the ISOR.

With regard to the general concern about the environmental integrity of offset protocols in other WCI partner jurisdictions, for over five years ARB has been engaged with these partner jurisdiction to establish a set of common goals and standards for offset projects and crediting. Through this process, ARB is able ensure there is consistency in environmental standards for offset protocols throughout a regional market program. ARB has also been coordinating with its WCI Partner jurisdictions to develop and approve the document entitled "Final Recommendations - Offset System Essential Final Recommendations." This document sets forth agreed upon standards for offset credits in state and provincial greenhouse gas emissions trading programs. In addition, the Linkage Agreement will describe how ARB and Québec will consult in the development of new protocols and modification of existing protocols. Please refer to the more detailed responses to the more detailed comments regarding offset credits below.

Comment: The regulation commits California to accept offsets generated under future regulations not yet written in other jurisdictions. The regulation requires California to accept any offset credit accepted by any linking partner. "Once a linkage is approved, a compliance instrument issued by the linked jurisdiction may be used to meet a compliance obligation in California." § 95942 (e) at page 75.

This regulation would commit California now to accepting in the future offset credits from protocols that have not yet been developed yet by partner jurisdictions, as well as any offset credits issued by any other jurisdictions to which we link our cap-and-trade program in the future. California cannot rationally agree to offsets when we do not yet know the content of the protocols for those offsets. It is impossible for ARB to ensure that these as-yet-undeveloped protocols will meet AB 32 standards and other applicable laws, particularly AB 32's requirement that ARB maximize environmental co-benefits in developing market-based greenhouse gas reduction programs. It is not possible even to know the environmental costs of these protocols, much less maximize their environmental benefits, when they do not yet exist. ARB must first determine what the protocols are for any offset it wishes to potentially accept, and then must conduct environmental review of those protocols and receive public comment. ARB cannot and should not commit California to buying offset credits out of this "black box" of potential future protocols.

Furthermore, because we do not yet know the content of the protocols of other jurisdictions, ARB is creating a situation that could lead to contradicting protocols. In the future, when other jurisdictions establish their own protocols, those protocols may or may not be consistent with the protocols California has established. Also, it is not possible for the public to meaningfully comment on protocols that do not yet exist. Only after other jurisdictions establish their protocols can the public meaningfully examine and analyze those protocols.

Response: The proposed amendments to the regulation currently under consideration would link the California market program only with Québec's market program. The ISOR for the proposed amendments discusses Québec's offset program. Staff's analysis found Québec's offset program to be consistent with WCI recommendations and consistent with California's compliance offset program. Chapter IV of the ISOR also included an analysis of the potential indirect environmental impacts associated with implementation of those protocols, and Appendix C of the ISOR includes a table that depicts Canada's environmental protections that are in place at the national and provincial level.

Any proposal to link with another jurisdiction will involve a full rulemaking process with an opportunity for stakeholders to provide comment. The ISOR for any proposal to link with another jurisdiction would include a full analysis of that jurisdiction's program, including an analysis of the jurisdiction's offset program and an environmental analysis. ARB is not at this time, with the current proposed amendments to link with Québec, committing California to buying offset credits out of a "black box" of protocols from other jurisdictions.

Furthermore, as discussed in the ISOR at page 34, ARB has been coordinating with its WCI Partner jurisdictions to develop and approve the WCI Offset System Essential Elements Final Recommendations Paper (Western Climate Initiative 2010b). This document incorporates the AB 32 offset criteria and is consistent with how California's program has defined and chosen to implement those criteria. This process provides a mechanism for ARB to ensure that offset programs in potential linked partner jurisdictions will be consistent with California's compliance offset program and meet a set of common goals and standards.

As far as concern about future changes to the Québec program once California is linked to its program, staff plans to provide the Board an update prior to any adoption of a new protocol in Québec. The update would include an AB 32 offset criteria analysis, assessment of environmental factors, and evaluation of potential offset supply. This update at a public meeting of the Board will provide stakeholders the opportunity to discuss any concerns about the proposed action by Québec before there is formal inclusion of the protocol by the linked program.

Comment: The regulation would force California to accept offset credits with low or no environmental standards.

While the regulation requires California to accept any offset credit accepted by any linking partner, there is no mention in the regulation or the ISOR of any review of offset protocols adopted by other jurisdictions, any consideration of the environmental impacts of offset projects, or any mechanism for reducing California's reliance on offset credits generated by projects with negative environmental impacts. Furthermore, Québec's cap-and-trade regulation contains no environmental criteria for offsets or the adoption of offset protocols.

Under this provision, California would be forced to accept offset credits generated under offset protocols with lesser environmental standards than the offset protocols adopted by California for the same project types (e.g. forest projects), even when the offset projects in other jurisdictions result in significant negative environmental impacts. And while the regulation requires ARB to ensure that all offsets accepted as compliance instruments in California's cap-and-trade are real, permanent, quantifiable, verifiable, and enforceable, it does not provide for any determination of the environmental impacts.

These agreements similarly exclude any determination of environmental impacts. The WCI agreements, to which ARB is a party but which have not been adopted under any California regulatory process, contain no environmental criteria for offset projects or the approval of offset protocols except for the practically meaningless requirement that "projects must meet all applicable local environmental regulations and be in compliance with all applicable laws." The WCI agreements acknowledge that offset projects have

"the potential to impact the environment or social environment in which the project is located," but sets neither standards for ensuring that offset projects do not result in negative environmental impacts nor thresholds for allowable levels of environmental impacts. Furthermore, the WCI agreements explicitly reject the notion of setting standards to achieve environmental or social benefits: "WCI Partners recognize the environmental, social, economic and health benefits that may arise from an offset project and the offset system will focus on those benefits directly related to mitigating climate change. <u>A WCI offset project is required only to result in a greenhouse gas emission reduction or removal</u>."

In December 2011, WCI adopted a process for the approval of offset protocols by WCI partner jurisdictions. Under that process, if a protocol is found to be consistent with WCI principles (which do not include environmental criteria or standards), the protocol would be available for use by any of the WCI partners. The WCI process thus appears to require California to accept any offset credits accepted by a WCI partner, and it does not appear to allow California to object to a protocol used by a WCI partner based on negative environmental impacts.

Response: Although the proposed amendments include a provision that California would accept any offset compliance instruments of a linked partner, the current proposal includes linkage with Québec only. Linkage with any other jurisdiction requires another amendment to the regulation which must go through the full rulemaking process required by the Administrative Procedures Act. The ISOR for any future linkage proposal would include an analysis of the jurisdiction's program, including its offset program as was conducted for Québec's program. With each linkage proposal, ARB would analyze, and stakeholders would have the opportunity to comment on, the offset credits of that jurisdiction and their potential environmental impacts as analyzed in an environmental analysis prepared as part of the ISOR for that proposal. With each linkage proposal, ARB will also analyze the program to ensure that all offsets accepted as compliance instruments in California's program are real, permanent, quantifiable, verifiable, and enforceable.

To ensure compatible standards with potential linkage partners, California has been coordinating with WCI Partner jurisdictions for five years and will continue to do so to ensure there is consistency throughout a regional market program.

Please refer to the response below that explains why ARB rejects what appears to be a recommendation to alter the regulation to include additional mechanisms for reviewing and accepting credits from adopted protocols from a linked jurisdiction.

Comment: The regulation would undermine California's authority to achieve AB 32's mandate to maximize environmental co-benefits.

AB 32 mandates that market-based compliance mechanisms, such as this one, must maximize environmental co-benefits. However, by explicitly committing to accept offsets from any future protocols yet to be written and providing no conditions on their acceptance, the regulation not only makes it impossible to maximize environmental co-benefits, it forfeits any opportunity to analyze, assess, or reduce negative environmental impacts of future protocols. The regulation should explicitly require ARB to analyze the environmental impacts of any offset protocol that generates offset credits that can be used as compliance instruments in California. In addition, the regulation should include provisions that explicitly require that all offsets used for compliance in California must maximize environmental benefits, and that all offset projects in linked jurisdictions meet or exceed the standards of protocols adopted by ARB for similar offset types.

Response: ARB rejects the recommendation that the amendments should explicitly require ARB to analyze the environmental impacts of any offset protocol that generates offset credits that can be used as compliance instruments in California, because the implication is that if any offset protocols in a linked jurisdiction did not meet acceptable environmental standards, the resulting offsets could not be used in California. As described in Alternative 4 in the ISOR, this suggestion would not be effective, as Québec could still allow for the use of the resulting offsets, but California entities would not be able to use them and maximize the benefits of cost containment from a linked program. Such a situation could result in increased compliance costs to California entities. Only allowing certain offsets from a linked jurisdiction could result in a greater demand for "non-California-approved" offsets in the linked jurisdiction, whose entities would just use more offsets, maximizing their offset usage limit, for compliance and sell their allowances to California's covered entities. That being said, it is staff's intention to coordinate closely with any linked jurisdiction as it develops a protocol, and staff will report to the Board prior to any changes in a linked jurisdiction's program. This will provide an open and public process through which stakeholders can comment on those changes for Board consideration.

Comment: The Center for Biological Diversity has repeatedly expressed concerns over the potential for offset projects to result in negative environmental impacts. This is of particular concern with forest offset projects, which can result in substantial impacts to forest ecosystems, wildlife habitat, and water quality. In order to ensure that California's cap-and-trade program does not rely on or result in the degradation of forests and ecosystems elsewhere, the regulation should not allow credits from forest protocols adopted by any linked jurisdictions to be sold into California's cap-and-trade system absent meaningful minimum protections (e.g. provisions to ensure maintenance of native species, diverse age classes, structural diversity, wildlife habitat, water quality, and other natural resources). **Response:** The proposed amendments link the California market program only with Québec's market program, which is not currently proposing to develop or adopt a forest protocol. California and Québec will continue coordinate closely with other WCI Partner jurisdictions in the development of any future offset protocols, including forestry. Staff will also provide a Board update prior to the adoption of a new protocol by a linked jurisdiction. The update would include an AB 32 offset criteria analysis, assessment of environmental factors, and evaluation of potential offset supply. This will provide an open and public process through which stakeholders can comment on those changes for Board consideration.

ARB rejects the recommendation that the regulation should be changed to not allow credits from forest protocols adopted by any linked jurisdictions to be sold into California's Cap-and-Trade System absent "meaningful minimum protections." As described in Alternative 4 in the ISOR, and in the prior response, this suggestion would not be effective, as Québec could still allow for the use of the resulting offsets, but California entities would not be able to use them and maximize the benefits of cost containment from a linked program. Such a situation could result in increased compliance costs to California entities. See also the responses below on the alternatives that restrict offset credits from linked jurisdictions analyzed in the ISOR.

Comment: Accepting lower quality offsets would allow project developers to choose among different protocols to select one with the lowest standards.

The regulation does not expressly prevent offset developers and projects located in U.S. states outside of California (or even within California) from choosing among offset protocols offered by other linked jurisdictions; therefore, a project can select the option that offers the lowest standards. Furthermore, the WCI agreements specifically allow any WCI partner to "issue offset certificates for projects located…outside the WCI Partner Jurisdictions within North America." This obviously includes U.S. states outside of California.

A WCI partner could propose a forest offset protocol with lower environmental standards than the protocol adopted by ARB, other WCI partners would be able to adopt the protocol with lower standards, and California would be forced to accept offset credits generated under those less stringent protocols. This scenario could place California in a position that violates the letter and intent of AB 32, which gives ARB the sole authority to adopt offset protocols, and specifically requires ARB to verify and enforce the quality of offsets used for compliance in California. Also, even if California were to reject credits generated under less stringent protocols—in fact, even if WCI were to reject a protocol, and a protocol was acknowledged only within a single partner jurisdiction—the fungible nature of offset credits in an auction system means that those credits still would effectively become part of California's compliance market.

Response: The currently proposed amendments link the California market program only with Québec's market program. The protocols approved in California are only applicable in the United States. The proposed protocols in Québec are only applicable in Canada or Québec. This design feature will ensure there is no protocol 'shopping' because there is only one choice for either region. Further, ARB cannot link with a program that does not achieve the AB 32 standards and objectives.

California and Québec will coordinate closely with each other and other WCI Partner jurisdictions in the development of any future offset protocols, including forestry. California stakeholders will be able to provide comments during the WCI development process. Staff will also provide a Board update prior to the adoption of a new protocol by a linked jurisdiction. The update would include an AB 32 offset criteria analysis, assessment of environmental factors, and evaluation of potential offset supply. This will provide stakeholders and the Board the opportunity to discuss any concerns about the proposed action by a linked jurisdiction before there is formal inclusion of the protocol by the linked program.

Comment: The ISOR fails to acknowledge or analyze potential environmental impacts of projects that will generate offset credits that become part of the California market.

The ISOR implies that because Québec has not adopted a forest protocol, there is no need to analyze potential impacts to forest resulting from linking. "*The proposed amendments to the cap-and-trade regulation would not change how entities would comply as evaluated in the FED for California's cap-and-trade regulation. Therefore, implementation of the Proposed Amendments to the cap-and-trade regulation would not result in any potentially significant agricultural and forest resources impacts, as evaluated and disclosed in the FED summarized above." ISOR at 53.*

However, this ignores the possibility that Québec may develop a forest protocol in the future, and under the regulation California would be committed to accepting offset credits from that protocol. This also ignores the fact that British Colombia, also a WCI partner, has already adopted a forest offset protocol that fails to ensure the value of the reductions and fails to protect forest environmental values.

Response: ARB prepared an environmental analysis (EA) in the Staff Report that considered the potential for indirect impacts resulting from California-covered entities acquiring offset credits from projects in Québec based on Québec's current protocols. Québec is not currently proposing to develop or adopt a forest protocol. It is not reasonably feasible for ARB to conduct an environmental analysis based on the speculation that Québec could develop a forestry protocol at some point in the future or based on British Colombia's adoption of a forest offset protocol and staff is only proposing to link with Québec, not British Colombia. Please also see the responses below about the scope of the EA analysis. California and Québec will continue to coordinate closely with other WCI Partner jurisdictions in the development of any future offset protocols, including forestry. California stakeholders will be able to provide comments during the WCI development process. Staff will also provide a Board update prior to the adoption of a new protocol by a linked jurisdiction.

Comment: Rather than analyze the potential environmental impacts of forest offset protocols issued by other jurisdiction, the ISOR largely defers to the environmental analysis in the FED for the cap-and-trade regulation. *"The environmental analysis for the proposed amendments to California's cap-and-trade regulation relies on the analysis conducted for the cap-and-trade regulation FED and the environmental analysis for the Landfill Regulations to the extent that the environmental impacts of the proposed amendments would be consistent with the impacts addressed in those prior documents." ISOR at 44. At the same time, the ISOR does acknowledge that forest offset programs have the potential for significant adverse environmental impacts, and that linking to partner jurisdictions could increase demand in California for offset credits generated in other jurisdictions.*

However, the FED explicitly stated that it did not analyze the potential impacts of linking. "No linkages are proposed at this time; however, future linkages are anticipated. Each linkage would be approved by the Board and subject to its own environmental review." FED at 33 "Each compliance response project implemented by a covered entity in California, offset protocol adopted by ARB, or linkage agreement approved by ARB, that constitute a "project" as defined by CEQA, section 21065, would be subject to CEQA environmental review." FED at 130.

Furthermore, the FED, in its analysis of potential environmental impacts of forest offsets, acknowledged the need for environmental criteria. The FED also acknowledged that linking to jurisdictions with lower environmental criteria could result in discrepancies in the environmental quality of offsets. Also, the FED acknowledged the need for comprehensive environmental standards to apply to protocols in all linked jurisdictions. "A linkage program with comprehensive environmental protection standards adopted as conditions of approval would create the opportunity to gain GHG reduction benefits while avoiding or minimizing the potential for other environmental impacts. Protocols could be established to require achievement of environmental standards, including definition of the standards, monitoring procedures, regular reporting of monitoring results to California, and adaptive environmental management for refining the standards and approaches for their achievement over time. Variations in the approvals of linkages could influence environmental impacts of allowances and offset credits created under other linked programs. A primary question related to the environmental impacts of linked programs is the degree of environmental review and protection/mitigation requirements in the other jurisdictions where linked programs would be approved . California environmental laws are typically more protective than the laws of other states and nations. If linkage was restricted to California programs only, the state's environmental laws would maintain protections through environmental impact

assessment of public agency actions (under CEQA) and other laws protecting natural resources. Restricting linkage to California may have some advantages for environmental protection; however, the capacity to develop emissions credits would be substantially limited. Also, the overall cap-and-trade program includes accepting offset projects from outside California, so a geographic limitation on linkage would not result in a substantial environmental advantage on its own.

A linkage program with comprehensive environmental protection standards adopted as conditions of approval would create the opportunity to gain GHG reduction benefits while avoiding or minimizing the potential for other environmental impacts. Protocols could be established to require achievement of environmental standards, including definition of the standards, monitoring procedures, regular reporting of monitoring results to California, and adaptive environmental management for refining the standards and approaches for their achievement over time." FED at 387.

The FED offers a list of reasons it fails to provide a good-faith, reasoned analysis of the regulation's environmental impacts as required by CEQA, *see* CEQA Guidelines16 sections 15144, 15151. None are valid.

Response: As explained in the prior response, the current proposal is to link with Québec only, which is not currently proposing to develop or adopt a forest protocol. The CEQA Functional Equivalent Document (FED) prepared for California Cap-and-Trade Regulation (Regulation) was certified and adopted by the Board when the Regulation was adopted in October 2011. The proposal to link with Québec involves amendments to the Cap-and-Trade Regulation, so the environmental analysis (EA) for the proposed amendments focuses only on the potential environmental impacts associated with the proposed changes and potential impacts not analyzed in the prior certified FED. The EA references the FED to the degree that analysis is relevant to the amendments currently under consideration. Since staff's analysis of Québec's regulation found it to be largely similar and as stringent as ARB's regulation, the EA concluded there would be no change in the compliance responses of California covered entities as analyzed in the certified FED prepared for the Regulation. The EA concluded that the only change that warranted further environmental review was the potential for California entities to seek offset credits from projects in Québec (see EA pages 49-50). Although it is unclear whether ARB is required under CEQA to analyze potential indirect impacts outside of California or the United Stated, the EA provided a good faith effort to disclose, to the degree feasible, potential impacts associated with offset projects in Québec based on Québec's approved offset protocols. Since Québec's ODS and Livestock Offset Protocols are very similar to ARB's ODS and Livestock Offset Protocols analyzed in the FED, that FED analysis was referenced and incorporated for the discussion of potentially similar impacts from California covered entities acquiring offset credits from very similar projects in Québec. Since Québec is not currently proposing to develop or adopt a forest protocol, the FED analysis for ARB's Forestry Protocol was not referenced and is not applicable to the proposed amendments currently under

consideration. To the degree that the commenter is critiquing the certified FED prepared for the Regulation, that document is final and has not been reopened for comment.

Comment: First, the FED seeks to rely on the environmental document prepared for the overall cap-and-trade regulation. Such reliance ("tiering" in CEQA parlance) is appropriate, however, only to the extent that the specific environmental impacts associated with the linkage regulation were already identified, analyzed, and mitigated to the extent feasible in the FED for the cap-and-trade regulation. The current FED makes no real attempt to demonstrate whether, or to what extent, this is the case. Indeed, the linking regulation may have a number of impacts not identified in the prior FED simply because it anticipates acceptance of credits under protocols developed—or, in many cases, not even developed yet—by partner jurisdictions. To the extent that these protocols incent activities that may have environmental impacts, those impacts could not have been discussed in the cap-and-trade FED. Therefore, they must be disclosed and analyzed here.

Response: See the prior response for the discussion of the relationship between the current EA and the FED prepared for the Regulation and the one below that discusses the scope of the EA analysis. Because a FED was certified and adopted for the Cap-and-Trade Regulation, the environmental analysis (called an EA for this action) focuses only on the potential environmental impacts associated with the proposed changes to the regulation and potential impacts not previously examined in the certified FED. As explained in the EA at pages 49-50, the further environmental analysis provided in the EA focuses on the potential indirect environmental impacts resulting from offset projects in Québec based on Québec's offset protocols because it is possible that California entities may purchase offset credits from such projects in Québec. This analysis is provided in the EA because it was not provided in the FED prepared for the Regulation. This is because there was no specific proposal to link at that time and no specific information about offset protocols to analyze.

Comment: Second, however, the FED claims that it need not analyze these impacts because they cannot be determined with any specificity. ISOR at 45 ("The FED relied on the agencies with local permitting authority to analyze site- or project-specific impacts because the programmatic FED could not determine with any specificity the project-level impacts"). Again, this is incorrect. ARB, must make a good-faith effort to disclose all it reasonably can about these projects. Where protocols exist, and underlying environmental standards are ascertainable, ARB must do its best to forecast the reasonably foreseeable environmental consequences of offset projects. These are not projects that would happen anyway; indeed, if any of these projects are truly additional—which the linking regulation ostensibly requires—they would not happen but for the incentives created by the linking regulation. Accordingly, the environmental consequences of these projects of the regulation. Nor may the FED simply state that all projects are expected to comply with legal standards applicable in the host jurisdiction. The fact that a project may comply

with legal standards alone does not relieve a lead agency of its obligation to determine whether its environmental impacts are significant. *See, e.g., Californians for Alternatives to Toxics v. Dept. of Food & Ag.* (2005) 136 Cal. App. 4th 1.

Response: The section of the EA that the commenter quotes (ISOR page 45) provides a summary of the analysis and conclusions of the FED certified and adopted for the Regulation. To the degree that the commenter is critiquing the certified FED prepared for the Regulation, that document is final and has not been reopened for comment.

As explained in the prior response, the additional environmental analysis provided in the EA focuses on the potential environmental impacts associated with the proposed changes to the regulation that were not previously examined in the certified FED. Staff's analysis found that Québec's regulation is largely similar and essentially as stringent as ARB's regulation. The proposal to link with Québec allows California entities to purchase offset credits from approved offset projects in Québec, but does not require them to do so. An entity's decision to purchase credits available on the market from Québec projects depends on the relative price and availability of such credits. Although CEQA discourages forecasting and speculation, drafting an environmental document necessarily involves some degree of forecasting. For the EA, ARB used its best efforts to find out and disclose all that it reasonably can about the potential environmental impacts associated with linking with Québec. The EA analysis provides as much information as is currently available, without being speculative, about the potential indirect impacts associated with California entities potentially incentivizing offset projects in Québec. Because Québec's protocols are similar to already approved California protocols analyzed in the certified FED, the FED analysis was referenced and incorporated for the discussion of impacts from the similar California protocols. The degree of specificity required in an environmental analysis corresponds to the degree of specificity involved in the underlying activity being proposed. The analysis of the indirect effects of Québec's protocols cannot be, and need not be, as detailed as an environmental analysis that would occur at the local level for actual offset projects undertaken in accordance with the protocols. Since it is not possible to ascertain how or where particular offset projects may occur in Québec, a more detailed analysis of offset project level impacts, and potential mitigation, is not reasonably feasible as part of this proposal to link California's Cap-and-Trade Program to Québec's.

The EA provided as much information as was feasible with the information that is available at this time in order to inform the public and the decision makers about the potential environmental consequences of linking with Québec. ARB does not have any land-use authority in Québec and cannot require project-level mitigation for offset projects in Québec as part of ARB's action to link with Québec. As discussed in the EA (e.g. odor impact associated with Québec's Livestock Protocol) the authority to determine project-level impacts and require project level mitigation lies with the permitting agencies in Québec. It is infeasible as part of this proposal to link with Québec to identify specific feasible mitigation measures to reduce or eliminate identified potentially significant impacts (e.g. odors) associated with potential Québec offset projects. Because ARB is not responsible for mitigation at the local level, the EA took a very conservative approach in its post-mitigation significance conclusion by finding potentially significant indirect impacts as remaining significant after mitigation.

It is worth noting that Québec needs offset protocols for its own Cap-and-Trade program and that linking does not add an additional need for offset protocols in Québec.

Comment: Third, the FED argues that it is a "program" document and thus lacks specificity. Again, the argument fails. Under CEQA, a program environmental document still must disclose all reasonably available information, and is most helpful if "it deals with the effects of the program as specifically and comprehensively as possible." CEQA Guidelines § 15168(c)(5). Indeed, a program document can provide "an occasion for a more exhaustive consideration of effects and alternatives that would be practical" in analyzing individual actions. *Id.*, § 15168(b)(1). This is especially the case here, where *only* at the programmatic level can all of the incentives governing underlying project activities be disclosed and considered. Rather than prepare a program-level document in accordance with these CEQA principles, ARB has largely declined to offer any meaningful analysis at all. This is improper.

Response: Please refer to the prior response.

Comment: Finally, ARB claims it has no authority to require mitigation. ISOR at 45 ("ARB does not have the authority to require project-level mitigation for specific projects carried out to comply with California's cap-and-trade regulation or protocols.") Again, the claim is patently false. Program-level review specifically allows agencies to "consider broad policy alternatives and program wide mitigation measures at an early time when the agency has greater flexibility to deal with basic problems or cumulative impacts." *Id.*, § 15168(b)(4). ARB cannot plausibly claim that it has no role in mitigating the environmental harm potentially caused by offset projects that would not occur absent the linking regulation. ARB is designing the regulation and has ultimate responsibility under AB 32 for adopting methodologies and protocols governing these projects. ARB therefore has both legal and practical authority to condition the acceptance of offsets in a way that minimizes minimize and avoid environmental impacts. ARB has not shown that its own mitigation measures are legally infeasible. It cannot simply abdicate its responsibility to consider feasible mitigation measures for projects *entirely* subject to its own design, authority, and control.

CEQA requires that ARB act with full knowledge of the environmental consequences of its actions. Because of the extraordinary nature of this regulation—seeking to commit California to accepting offset credits from protocols that do not yet exist—the review of environmental impacts will need to be extraordinarily conservative and circumspect. If linking to a partner jurisdiction commits California to accepting offset credits even when

the offset protocols lack even the insufficient environmental safeguards of protocols adopted by ARB, it will not be possible to dismiss the effects of future offset projects in those jurisdictions as too speculative for analysis.

Response: As explained in the prior responses, the analysis of the indirect impacts of potential offset projects in Québec based on the protocols that Québec currently has, was examined to the degree reasonably feasible without being speculative. In terms of the recommendation that ARB design the regulation to restrict offset credits from a linked jurisdiction, alternative (d) in the EA examined linkage with restrictions on Québec offsets as did Alternative 4 in chapter VI of the ISOR. As described in Alternative 4, under this alternative Québec could still allow for the use of the resulting offset credits, but California entities would not be able to use them. Staff analysis of this alternative found since allowances and offset credits are fungible, only allowing certain offsets from a linked jurisdiction could result in a greater demand for "non-Californiaapproved" offsets in the linked jurisdiction, whose entities would just use more offsets, maximizing their offset usage limit, for compliance and sell their allowances to California's covered entities. If California entities could not take advantage of a broader liquid market that provides cost containment benefits there could be increased compliance costs for California entities. For these same reasons, alternative (d) in the EA was found to not meet one of the basic project objectives (cost containment) as well as the proposed amendments. The same is true for the variation that the commenter appears to be suggesting.

Comment: In conclusion, the regulation fails to ensure that carbon offsets generated in other jurisdictions will not result in negative impacts to forest ecosystems, will not undermine the integrity of California's cap-and-trade program, and will not contradict the mandate of AB 32 to maximize environmental co-benefits. The regulation should include environmentally rigorous standards and require affirmative determination by ARB that offset protocols in other jurisdictions—and in California—will not result in negative environmental impacts.

Response: Please see prior responses. As a general matter, it is difficult to respond to situations that have not yet occurred and whose potential impact on the California program cannot be determined at this time. Staff is committed to a transparent review process of the linked jurisdiction's programs and will work with stakeholders in providing recommendations to the Board. Staff would brief the Board prior to adoption of new protocols by linked jurisdictions and will pursue the Board's direction. Staff believes that changes in a linked jurisdiction would not threaten the environmental integrity of California's Cap-and-Trade Program and will serve to achieve greater environmental benefits than if California did not link to the jurisdiction. Furthermore, any offset protocol adopted within another jurisdiction must go through the regulatory and stakeholder review processes as required within that jurisdiction before it can be formally adopted.

EDF3

Name, Affiliation: Tim O'connor, Environmental Defense Fund; Erica Morehouse, Environmental Defense Fund; Kristin G. Eberhard, Natural Resources Defense Council Written Testimony: 06/26/2012 45-Day Linkage Comment #: 15

Comment: Environmental Defense Fund (EDF) and the Natural Resources Defense Council (NRDC) support CARB's efforts to consider linking California's cap-and-trade program to Québec's through a formal rulemaking process that has the potential to lead to a mutual recognition of compliance instruments issued by either program, should CARB determine upon thorough evaluation, that Québec's program meets California's rigorous standards for environmental integrity. EDF and NRDC's paramount interest is to preserve the integrity of California's cap-and-trade program. That said, linking, or mutual recognition between strong programs, can, in principle, provide additional flexibility and cost-saving opportunities for regulated entities in both California and Québec. It was clear from the linkage workshop that CARB's decision on whether to recognize the validity, for compliance purposes, of compliance instruments in the Québec program will be based on CARB's thorough consideration, and continuing assessment, of what will provide the strongest and most effective means of reducing greenhouse gas (GHG) emissions and protecting California from the impacts of climate change. We strongly encourage CARB to maintain that perspective throughout the rulemaking process. (EDF3)

Response: Thank you for your support.

Comment: We support the current proposal to amend the cap-and-trade regulation to allow California to accept compliance instruments from linked jurisdictions and specifically to link with Québec. Showing that two separate governments, in two separate countries, with two separate economies, can effectively partner to put a price on carbon and reduce greenhouse gas emissions is a transformative step for North America; a step that can jumpstart a regional effort to join the growing international movement that is desperately needed to combat the threat of climate change.

In general, expanding California's carbon market will provide both economic and environmental benefits for the state in the form of greater market liquidity and an expanded base of emission reduction opportunities. Based on the analysis provided in the staff report, linkage with Québec will also help drive capital flows into the state to buttress California's clean energy sectors and capture in-state reductions, offering even greater benefits.

Our primary interest in this rulemaking has been and remains ensuring the environmental integrity of California's cap-and-trade program. Because California and Québec have been part of the Western Climate Initiative, they have been on parallel tracks towards designing cap-and-trade programs with substantially similar core programmatic elements such as: the stringency of the cap, the reliability of mandatory reporting requirements, the stringency of offset protocols, limits on borrowing, and the adequacy of penalty and enforcement mechanisms. This provides a critical layer of certainty about the equivalency and environmental integrity of Québec's program. CARB's efforts through this rulemaking to identify the programmatic elements such as joint auctions, a shared compliance instrument tracking system, and equivalent holding limits that require harmonization will also enhance the integrity of both programs.

Response: Thank you for your support.

EDF2

Name, Affiliation: Erica Morehouse, Environmental Defense Fund; Michelle Passero, The Nature Conservancy; Alex Jackson, Natural Resources Defense Council; Jennifer Martin, Center for Resources Solutions Written Testimony: 06/27/2012 45-Day Linkage Comment #: 16

Comment: We appreciate CARB's ongoing commitment to develop the cap-and-trade program in an open and public process and we urge CARB to continue this practice with stakeholders and other branches of government as linkage with Québec and other jurisdictions progresses. Specifically, we urge the Board to direct staff to establish a clear process that will provide the public with notice and opportunity to comment on any significant changes that may occur within a linked jurisdiction. The Board, in conjunction with any staff, public or legislative input, should explicitly retain the authority to make regulatory changes affecting linkage if future adjustments are necessary. California must ensure that any changes made within a linked jurisdiction do not threaten the environmental integrity or overall benefits that California seeks to achieve through linkage.

Response: California has been coordinating with WCI Partner jurisdictions for five years and will continue to do so to ensure there is consistency throughout a regional market program. Staff will provide the Board with an update prior to any changes in a linked jurisdiction's program, including proposal of future protocols. This will provide an open and public process through which stakeholders can comment on proposed changes.

Any offset protocol adopted within a jurisdiction must go through the regulatory and stakeholder review processes as required within the jurisdiction before it can be formally adopted. In California, the review and adoption process for changes to California's program includes an environmental review under ARB's certified regulatory program.

Comment: In considering whether to link California's program with Québec's, the primary question and the ultimate driver behind CARB's action should be what is best for the integrity of California's cap-and-trade program and for California in its efforts to protect its citizens from the threats of climate change. While we await the final proposed regulatory language and full rulemaking package, we are encouraged by CARB's direction as evidenced in the discussion draft and workshop to remain focused on maintaining the high standards of California's program and that the iterative process of harmonizing certain provisions with Québec's has been undertaken with any eye towards clarifying and strengthening those provisions. As we noted in our initial comments, EDF and NRDC see many potential benefits to California from linking into a broader market, including providing additional flexibility and cost-effective reduction opportunities for regulated entities and building broader support for actions to combat climate change. We look forward to receiving further information from the documents

that CARB will release when the formal comment period begins such as the initial statement of reasons, the economic impacts analysis and the CEQA analysis.

Response: Thank you for your support.

EDF4

Name: Erica Morehouse Affiliation: Environmental Defense Fund Oral Testimony: 06/28/2012 Hearing Witness #: 3

Comment: And the main thing with other jurisdictions that meet California's rigorous environmental standards can provide both economic and environmental benefits, including increasing market liquidity and broaden the emission reductions that are possible and also expanding the demand for emission reduction technology, many of which are made here in California.

Response: Thank you for your support.

PFT1

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Name: Paul Mason Affiliation: Pacific Forest Trust Written Testimony: 06/27/2012 45-Day Cap-and-Trade Amendment Comment #: 18

Comment: Establish a public process to evaluate offset protocols adopted by other linked jurisdictions in order to evaluate whether the offsets that will generate compliance instruments used in California are fully consistent with California standards and requirements. Such an evaluation should happen prior to those compliance instruments being accepted into the system and used by a covered entity to meet a compliance obligation. (PFT1)

Response: California has been coordinating with WCI Partner jurisdictions for five years and will continue to do so to ensure there is consistency throughout a regional market program. Staff will provide the Board with an update prior to any changes in a linked jurisdiction's program, including proposal of future protocols. This will provide an open and public process through which stakeholders can comment on proposed changes. Please also refer to the responses to comments from CBD (Comment #: 17) above regarding restrictions on offsets from linked jurisdictions.

TWS1

Name: Ann Chan Affiliation: The Wilderness Society Written Testimony: 06/27/2012 45-Day Linkage Comment #: 7

Comment: TWS seeks specific clarification regarding the process and any remedies for addressing findings that proposed or amended protocols for offsets available in linked jurisdictions either: (1) fail to meet the WCI Offset System Essential Elements Recommendations for ensuring that offsets are real, quantifiable, permanent, enforceable, additional and verifiable, and/or (2) have the potential for generating significant adverse, environmental impacts that are not adequately avoided or mitigated including, but not limited to, any transboundary environmental impacts or environmental impacts not otherwise subject to a NEPA-equivalent environmental impact assessment. TWS commends and supports ARB's long-standing approach to program implementation that incorporates transparency, public engagement, and on-going evaluation and adaptive management of implementation of programs and regulations, including any needed updates and adjustments. (TWS1)

Response: AB32 is clear what criteria an offset must meet in order to be eligible for use for compliance by California entities. Staff will continue to monitor and coordinate closely with any jurisdiction to which the California market program is linked to ensure any changes to existing protocols or new protocols would result in offsets that meet the AB32 criteria of real, quantifiable, permanent, enforceable, additional and verifiable. Staff will provide the Board with updates prior to the actual revision to existing or adoption of new offset protocols or linkage to another jurisdiction. This will provide stakeholders and the Board an opportunity to discuss and evaluate the proposed changes to a linked jurisdiction's program. It is difficult to respond to situations that have not yet occurred and whose potential impact on the California program cannot be determined at this time. Staff is committed to a transparent review process of the linked jurisdiction's programs and will work with stakeholders in providing recommendations to the Board. If staff identifies that potential changes to the jurisdiction's program could harm attainment of the program goals, California regulated parties or California, staff would brief the Board and pursue the Boards direction.

Please also refer to the response to comments from CBD (Comment #: 17) above related to restriction of offsets from other jurisdictions.

TWS2

Ann Chan Affiliation: The Wilderness Society Oral Testimony: 06/27/2012 Hearing Witness #: 14

Comment: We'd also like to see additional clarification regarding any remedies that might be available pursuant to a finding that any after-adopted protocols or amended protocols or not in compliance with the WCI offset essential elements recommendations for additionality, verifiability, and additionality. And also any remedies that might be available for findings that after adopted protocols or modifications are in violation or inconsistent with other relevant environmental laws. (TWS2)

Response: Please refer to prior response. Staff will continue to monitor and coordinate closely with any jurisdiction to which the California market program is linked. Staff will provide Board updates prior to the actual revision to existing or adoption of new offset protocols, or linkage to another jurisdiction. This will provide stakeholders and the Board an opportunity to discuss and evaluate the proposed changes to a linked jurisdiction's program. This process should ensure any adopted protocols are in compliance with the WCI offset criteria, but also the AB 32 offset criteria. Each jurisdiction is responsible for monitoring its own regulatory programs. As is the usual practice, ARB staff will monitor the Capand-Trade Program and will not issue offsets or will invalidate ARB offsets post-issuance if the offset project does not meet environmental regulations. Any new or additional ARB protocols would be subject to environmental review under ARB's certified regulatory program.

WSPA1

Name: Catherine Reheis Boyd Affiliation: Western States Petroleum Association Written Testimony: 06/27/2012 45-Day Linkage Comment #: 8

Comment: Relationship of CEQA to Cap-and-Trade

WSPA continues to have significant concerns regarding the interplay between the requirements of CEQA and the AB32 C/T program. For example, one could envision emission reductions from a C/T program as mitigation for project-related impacts if the reductions exceed project emissions. In other words, allowances purchased under the C/T program that are in excess of project-related emissions should be considered as valid mitigation under CEQA. Yet, ARB staff stated during the presentation that actions under the C/T program are not intended to address CEQA requirements. ARB has provided no explanation for its unwillingness to address this obvious and important issue. It would be very useful to know from the outset that GHG reductions under the C/T program count for CEQA mitigation.

<u>Recommendation</u>: We strongly urge ARB to address the potential of GHG reductions under the CTR as mitigation for CEQA to industries working within the AB32 Cap-and-Trade market-based mechanism. (WSPA1)

Response: This comment falls outside the scope of the current rulemaking. None the less, ARB rejects this recommendation because ARB does not have authority to define within the Cap-and-Trade Regulation how lead agencies conduct their CEQA analysis for any particular project. ARB cannot, as the commenter suggests, require that lead agencies count allowances purchased under the Cap-and-Trade Regulation as mitigation under CEQA. The requirements for CEQA analysis and mitigation for a project are at the discretion of the lead agency undertaking the project.

REFERENCES

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ATTACHMENT B: ACRONYMS

ACR ARB AVA CAISO CAR CARBIS CCA CCR CEA CEQA CFTC CHP CITSS CO ₂ CO2e CHP CPUC DOJ EDU EO EDU EO EPA ETS EU ETS FED FERC FINRA FSA FSOR GHG GWP ICE IETA IOU IPP ISOR JPA KYC LADWP LAO LSE	American Carbon Registry California Air Resources Board Account Viewing Agents California Independent System Operator Climate Action Reserve California Carbon Allowance California Carbon Allowance California Code of Regulations Commodities Exchange Act California Environmental Quality Act Commodity Futures Trading Commission Combined Heat and Power Compliance Instrument Tracking System Service carbon dioxide carbon dioxide equivalent combined heat and power California Public Utilities Executive Officer U.S. Environmental Protection Agency Emissions Trading Scheme European Union Emissions Trading System Functional Equivalent Document Federal Energy Regulatory Commission Financial Industry Regulatory Authority financial services administrator Final Statement of Reasons greenhouse gas global warming potential Intercontinental Exchange International Emissions Trading Association investor-owned utility independent power producer Initial Statement of Reasons Joint Powers Agency Know Your Customer Los Angeles Department of Water and Power Legislative Analyst's Office load serving entity
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LUHA MRR	limited use holding accounts
NAFTA	Mandatory Reporting of Greenhouse Gas Emissions Regulation North American Free Trade Agreement

NEPA NERC NFA	National Environmental Policy Act North American Electric Reliability Corporation National Futures Association
NOx	oxides of nitrogen
ODS	ozone depleting substance
POU	publicly owned utility
PSE	purchasing-selling entity
QE	qualified export
REC	Renewable Energy Credit
RGGI	Regional Greenhouse Gas Initiative
RPS	Renewables Portfolio Standard
SEC	Securities and Exchange Commission
UNFCCC	United Nations Framework Convention on Climate Change
UOG	Utility-Owned-Generation
VAE	voluntarily associated entity
WCI	Western Climate Initiative
WREGIS	Western Renewable Energy Generation Information System