

**State of California  
Environmental Protection Agency  
AIR RESOURCES BOARD**

**CALIFORNIA'S CAP-AND-TRADE PROGRAM**

**SUPPLEMENT TO THE FINAL STATEMENT OF REASONS**

**December 2011**

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State of California  
California Environmental Protection Agency  
AIR RESOURCES BOARD

**Supplement to the Final Statement of Reasons for Rulemaking,  
Including Summary of Public Comments and Agency Responses**

PUBLIC HEARING TO CONSIDER ADOPTION OF A PROPOSED CALIFORNIA CAP  
ON GREENHOUSE GAS EMISSIONS AND MARKET-BASED COMPLIANCE  
MECHANISMS REGULATION, INCLUDING COMPLIANCE OFFSET PROTOCOLS

Public Hearing Date: December 16, 2010  
Agenda Item No.: 10-11-1

This Supplement (Supplement) to the Final Statement of Reasons (FSOR) for the Public Hearing to Consider Adoption of a Proposed California Cap on Greenhouse Gas Emissions and Market-Based Compliance Mechanisms Regulation, Including Compliance Offset Protocols (Cap-and-Trade Regulation) summarizes and responds to written concerns ARB received between October 10, 2011, and October 20, 2011 (pursuant to ARB's public process for submitting written comments regarding Board action), and any oral concerns raised to the Air Resources Board (ARB or Board) at its October 20, 2011, public hearing to adopt the Cap-and-Trade Regulation. ARB's responses are not required to be included in this record pursuant to the Administrative Procedure Act or any other provision of law. In addition, even if ARB was required to respond to these concerns, our response would be that each and every concern raised requires no response due to one or more of the following: it is repetitive and/or duplicates prior comments made during APA comment periods; it repeats or duplicates prior comments; it was provided outside of a comment period requiring a response; it is irrelevant; and/or it is not directed at a substantive change that ARB can make within required APA time periods. Nonetheless, ARB is responding to these concerns to ensure transparency in the proceedings. For simplicity, concerns raised and discussed hereinafter are referred to as "comments."

On October 10, 2011, ARB posted a Notice of Public Hearing to Consider Adoption of the Proposed California Cap on Greenhouse Gas Emissions and Market-Based Compliance Mechanisms Regulation, Including Compliance Offset Protocols on ARB's website. Documents supporting the Notice for the October 20–21, 2011, hearing included the Final Regulation Order, the ARB Response to Comments on the Cap-and-Trade Functional Equivalent Document, the Adaptive Management Plan for the Cap-and-Trade Regulation, and the Final Compliance Offset Protocols. These documents can be found here: <http://www.arb.ca.gov/cc/capandtrade/capandtrade.htm>. In the notice, ARB staff noted that any written and oral comments not physically submitted at the meeting had to be received no later than 12:00 noon on October 19, 2011. In addition, ARB staff noted that any comments would be considered by the Board and would be part of the administrative record for the cap-and-trade rulemaking action;

however, ARB staff would not prepare written responses to these comments, and they would not be included in the Final Statement of Reasons. However, subsequent to the release of the notice, ARB staff decided to include the comments and appropriate responses, as discussed above.

## A. LIST OF COMMENTERS

Table 1 below lists commenters that submitted comments on the cap-and-trade regulation item presented at the October 20, 2011, Board Hearing and identifies the date and form of their comments and the Reference Code assigned to each. In addition, three letters were received that were duplicates of letters submitted during the second 15-day public review period. As such, these letters were already responded to in the second 15-day comments and responses section (Chapter V) of the FSOR. These commenters are:

1. Metropolitan Water District of Southern California (Metropolitan), letter dated September 27, 2011;
2. Communities for a Better Environment, letter dated September 27, 2011; and
3. Verallia, letter dated September 27, 2011.

Table 1: Comments Received for the October 2011 Board Hearing

|            |   |
|------------|---|
| ACC6       | Emily Rooney, Agricultural Council of California<br>Oral Testimony: 10/20/2011            |
| AGIF3      | Willie Galvan, American GI Forum<br>Oral Testimony: 10/20/2011                            |
| AGIF4      | Jake Alarid, American GI Forum<br>Oral Testimony: 10/20/2011                              |
| ALA2       | Bonnie Holmes-Gen, American Lung Association<br>Oral Testimony: 10/20/2011                |
| AWSINC2    | James Brady, 100 Black Men of the Bay Area<br>Written Testimony: 10/19/2011               |
| AWSINC3    | James Brady, 100 Black Men of the Bay Area<br>Oral Testimony: 10/20/2011                  |
| BAAQMD4    | Jack P. Broadbent, Bay Area Air Quality Management District<br>Oral Testimony: 10/20/2011 |
| BAC2       | Catherine Lyons, Bay Area Council<br>Written Testimony: 10/18/2011                        |
| BAC3       | Catherine Lyons, Bay Area Council<br>Oral Testimony: 10/20/2011                           |
| BATEMAN    | Lori Bateman<br>Oral Testimony: 10/20/2011  |
| BGCEBS2    | Allan Bedwell, BGC Environmental Brokerage Services, L.P.<br>Oral Testimony: 10/20/2011   |
| BP3        | Ralph Moran, BP America Inc.<br>Oral Testimony: 10/20/2011                                |
| BUGLEGROUP | Marlin K. Brown, The Bugle Group<br>Written Testimony: 10/18/2011                         |

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| CACA        | Norm Hattich, California Contractors Alliance<br>Oral Testimony: 10/20/2011  |
| CACAN4      | Jeanne Merrill, California Climate and Agriculture Network<br>Oral Testimony: 10/20/2011   |
| CACC4       | Bruce Magnani, California Cogeneration Council<br>Oral Testimony: 10/20/2011   |
| CAHISPCMBR2 | Julian Canete, California Hispanic Chamber of Commerce<br>Oral Testimony: 12/20/2011   |
| CAHISPCMBR3 | Berman Obaldia, California Hispanic Chamber of Commerce<br>Oral Testimony: 10/20/2011  |
| CALCHAMBER5 | Shelly Sullivan for California Chamber of Commerce; California Manufacturers and Technology Association; AB 32 Implementation Group; California Hispanic Chambers of Commerce; California League of Food Processors; Howard Jarvis Taxpayers Association; National Federation of Independent Business/California; California Small Business Alliance; California Business Properties Association; Small Business Action Committee; Industrial Environmental Association; Santa Barbara Technology and Industry Association; Kern County Taxpayers; San Diego Tax Fighters; Santa Barbara County Taxpayers Association; Western States Petroleum Association; California Independent Oil Marketers Association; California Independent Petroleum Association; Independent Oil Producers Agency; Sacramento Black Chamber of Commerce; Carson Black Chamber of Commerce; Long Beach Black Chamber of Commerce; Kern County Black Chamber of Commerce; Moreno Valley Black Chamber of Commerce; Greater Los Angeles African American Chamber of Commerce; African American Chamber of Commerce of San Joaquin Valley; Regional Black Chamber of Commerce of San Fernando Valley; Sacramento Cultural HUB; California Association of Black Pastors; Professional Small Business Services, Inc.; Black Business Association; Hispanic Chamber of Commerce of Contra Costa County; American GI Forum; American GI Forum Women of California; Antelope Valley Hispanic Chamber of Commerce; Antelope Valley Black Chamber of Commerce; Greater Riverside Hispanic Chamber of Commerce; Hispanic Chamber of Commerce of Silicon Valley; South Bay Latino Chamber of Commerce; Los Angeles Metropolitan Hispanic Chamber of Commerce; San Joaquin County Hispanic Chamber of Commerce; Greater Corona Hispanic Chamber of Commerce<br>Written Testimony: 10/18/2011 |
| CALCHAMBER6 | Brenda Coleman, California Chamber of Commerce<br>Oral Testimony: 10/20/2011   |

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| CALFP5   | John Larrea, California League of Food Processors<br>Oral Testimony: 10/20/2011  |
| CALPINE5 | Kassandra Gough, Calpine Corporation<br>Oral Testimony: 10/20/2011   |
| CANNELLA | Anthony Cannella, California State Senate<br>Written Testimony: 10/19/2011   |
| CAPCOA4  | Barbara Lee, California Air Pollution Control Officers Association<br>Oral Testimony: 10/20/2011   |
| CAPCOA5  | Larry Greene, California Air Pollution Control Officers Association<br>Oral Testimony: 10/20/2011  |
| CAR6     | Gary Gero, Climate Action Reserve<br>Oral Testimony: 10/20/2011  |
| CASTLEG2 | Bill Berryhill, California State Assembly; Kristin Olsen, California State Assembly; Anthony Canella, California State Senate; Tom Berryhill, California State Senate<br>Written Testimony: 10/17/2011 |
| CBCC     | Aubry L. Stone, California Black Chamber of Commerce<br>Written Testimony: 10/20/2011  |
| CBD6     | Brian Nowicki and Kevin Bundy, Center for Biological Diversity<br>Written Testimony: 10/19/2011  |
| CBE5     | Julia May, Communities for a Better Environment<br>Oral Testimony: 10/20/2011  |
| CBE6     | Greg Karras, Communities for a Better Environment<br>Oral Testimony: 10/20/2011  |
| CCA5     | Nidia Bautista, Coalition for Clean Air; Andy Katz, Breathe California<br>Written Testimony: 10/20/2011  |
| CCEEB5   | Robert W. Lucas and Gerald D. Secundy, California Council for Environmental and Economic Balance<br>Written Testimony: 10/18/2011  |
| CEEIC2   | Steven Schiller and Audrey Chang, California Energy Efficiency Industry Council<br>Written Testimony: 10/19/2011   |
| CEEIC3   | Steven Schiller, California Energy Efficiency Industry Council<br>Oral Testimony: 10/20/2011   |
| CFL      | Tim Rainey, California Labor Federation<br>Written Testimony: 10/19/2011   |
| CIPA3    | Norman Plotkin, California Independent Petroleum Association<br>Oral Testimony: 10/20/2011   |

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| CMTA4        | Mike Rogge, California Manufacturers and Technology Association<br>Oral Testimony: 10/20/2011  |
| CONOCO4      | Rand Swenson, ConocoPhillips Company<br>Oral Testimony: 10/20/2011<br>** In addition, 1 supplemental document was submitted **             |
| CPUC         | Andrew Schwartz, California Public Utilities Commission<br>Oral Testimony: 10/20/2011  |
| CRPE5        | Alegria de la Cruz, Center on Race, Poverty and the Environment<br>Oral Testimony: 12/20/2011  |
| DWA          | Bob Reeb, Desert Water Agency<br>Oral Testimony: 10/20/2011  |
| EDF7         | Tim O'Connor, Environmental Defense Fund<br>Written Testimony: 10/13/2011  |
| EDF8         | Fred Krupp, Environmental Defense Fund<br>Written Testimony: 10/14/2011  |
| EDF9         | Tim O'Connor, Environmental Defense Fund<br>Oral Testimony: 10/20/2011   |
| ENERGYSOURCE | Vince Signorotti, Energy Source<br>Oral Testimony: 10/20/2011  |
| EOSC5        | Saskia Feast, EOS Climate<br>Oral Testimony: 10/20/2011  |
| GALGIANI     | Cathleen Galgiani, California State Assembly<br>Written Testimony: 10/14/2011  |
| GLASSPI2     | Lynn Bragg, Glass Packaging Institute<br>Written Testimony: 10/13/2011   |
| GLASSPI3     | Mike Robson, Glass Packaging Institute<br>Oral Testimony: 10/20/2011   |
| GORDON       | Randy Gordon<br>Written Testimony: 10/14/2011  |
| GORDON2      | Randy Gordon<br>Oral Testimony: 10/20/2011   |
| GPI6         | Richard M. Johnston, Graphic Packaging International<br>Written Testimony: 10/18/2011  |
| GREENLINING3 | Ryan Young, Greenlining Institute<br>Oral Testimony: 10/20/2011  |
| IEPA4        | Jan Smutny-Jones, Independent Energy Producers Association;<br>Gary Ackerman, Western Power Trading Forum<br>Written Testimony: 10/10/2011 |
| IEPA5        | Steven Kelly, Independent Energy Producers Association<br>Written Testimony: 10/20/2011  |

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| IEPA6        | Steven Kelly, Independent Energy Producers Association<br>Oral Testimony: 10/20/2011                                   |
| ITZIGHEINE   | Ed Itzigheine<br>Oral Testimony: 10/20/2011  |
| JCEEP        | Eric Emblum, Joint Committee on Energy and Environmental Policy<br>Oral Testimony: 10/20/2011                          |
| LADWP6       | Cindy Montanez, Los Angeles Department of Water and Power<br>Oral Testimony: 12/20/2011                                |
| LADWP7       | Cindy Parsons, Los Angeles Department of Water and Power<br>Oral Testimony: 12/20/2011                                 |
| LAHISPCHMBR2 | Andrew Barrera, Los Angeles Metropolitan Hispanic Chamber of Commerce<br>Oral Testimony: 12/20/2011                    |
| LAMAYOR      | Silvia Solise, Los Angeles Mayor Antonio Villagairosa<br>Oral Testimony: 10/20/2011                                    |
| LASD6        | Frank R. Caponi, Los Angeles County Sanitation Districts<br>Oral Testimony: 10/20/2011                                 |
| LESTAGE      | Wade Lestage<br>** 73 additional commenters submitted similar comments **<br>Written Testimony: 10/14/2011             |
| MAPLES       | Marlia Maples<br>Oral Testimony: 10/20/2011  |
| MILLERM      | Mike Miller<br>Oral Testimony: 10/20/2011  |
| MWDSC5       | Jeffrey Kightlinger, The Metropolitan Water District of Southern California<br>Written Testimony: 10/19/2011           |
| MWDSC6       | Debra Man, Metropolitan Water District of Southern California<br>Oral Testimony: 10/20/2011                            |
| NAACPSD      | Edward Price, National Association for the Advancement of Colored People of San Diego<br>Written Testimony: 10/19/2011 |
| NC10         | Michelle Passero, The Nature Conservancy<br>Written Testimony: 10/19/2011  |
| NC11         | Michelle Passero, The Nature Conservancy<br>Oral Testimony: 10/20/2011   |
| NCPA5        | Susie Berlin, McCarthy & Berlin, P.C. for Northern California Power Agency<br>Oral Testimony: 10/20/2011               |
| NRDC5        | Kristin Eberhard, Natural Resources Defense Council<br>Oral Testimony: 10/20/2011                                      |

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| OPERATIONFREE | Major General Paul Monroe, retired and Lieutenant General Norman R. Seip, retired, Operation Free<br>Written Testimony: 10/20/2011 |
| PEBI3         | Michael Mazowita, P.E. Berkeley, Inc.; Sean P. Lane, Olympus Power, LLC<br>Written Testimony: 10/18/2011                           |
| PGE6          | Kate Beardsley, Pacific Gas and Electric Company<br>Written Testimony: 10/20/2011  |
| PGE7          | Kate Beardsley, Pacific Gas and Electric Company<br>Oral Testimony: 10/20/2011   |
| POWEREX3      | Nicholas W. van Aelstyn, Beveridge & Diamond, P.C. for Powerex Corp<br>Written Testimony: 10/19/2011                               |
| POWEREX4      | Nicholas W. van Aelstyn, Beveridge & Diamond, P.C. for Powerex Corp<br>Oral Testimony: 10/20/2011                                  |
| RILEY         | Chris Riley<br>Oral Testimony: 10/20/2011  |
| SBCC          | Edwin Lombard, Sacramento Black Chamber of Commerce<br>Written Testimony: 10/19/2011   |
| SBCC2         | Edwin Lombard, Sacramento Black Chamber of Commerce<br>Oral Testimony: 10/20/2011  |
| SBLC          | Erick Verduzco Vega, South Bay Latino Chamber<br>Oral Testimony: 10/20/2011  |
| SCAQMD6       | Barry Wallerstein, South Coast Air Quality Management District<br>Oral Testimony: 10/20/2011                                       |
| SCE5          | Frank Harris, Southern California Edison Company<br>Oral Testimony: 10/20/2011   |
| SCPPA9        | Norman Pederson, Southern California Public Power Authority<br>Oral Testimony: 10/20/2011  |
| SDCWA         | Maureen A. Stapleton, San Diego County Water Authority<br>Written Testimony: 10/17/2011  |
| SDCWA2        | Jeff Volberg, San Diego County Water Authority<br>Oral Testimony: 10/20/2011   |
| SFPUC4        | Bart Broome, San Francisco Public Utilities Commission<br>Written Testimony: 10/19/2011  |
| SIMMONS       | David Simmons<br>Oral Testimony: 10/20/2011  |
| SMITHS3       | Steven B. Smith, Verallia<br>Written Testimony: 10/17/2011<br>** In addition, 2 supplemental documents were submitted **           |
| SMUD5         | Timothy Tutt, Sacramento Municipal Utility District<br>Oral Testimony: 12/20/2011  |

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| SVLG      | Kris Rosa, Silicon Valley Leadership Group<br>Oral Testimony: 10/20/2011                    |
| SWADER    | Steve Swader<br>Oral Testimony: 10/20/2011  |
| SWC5      | Tim Haines, State Water Contractors<br>Oral Testimony: 10/20/2011                           |
| SWC6      | Doug Headrick, San Bernardino Valley Municipal Water District<br>Oral Testimony: 10/20/2011 |
| SWC7      | Steve Robbins, Coachella Valley Water District<br>Oral Testimony: 10/20/2011                |
| SWC8      | Dan Masnada, Castaic Lake Water Agency<br>Oral Testimony: 10/20/2011                        |
| TWS3      | Ann Chan, The Wilderness Society<br>Written Testimony: 10/18/2011                           |
| UC5       | Patrick Lenz, University of California<br>Oral Testimony: 10/20/2011                        |
| UCS10     | Dan Kalb, Union of Concerned Scientists<br>Oral Testimony: 10/20/2011                       |
| USDOD4    | Ned McKinley, United States Department of Defense<br>Oral Testimony: 10/20/2011             |
| USDON2    | Mary Kay Faryan, United States Department of the Navy<br>Oral Testimony: 10/20/2011         |
| USW2      | Ron Espinoza, United Steel Workers<br>Written Testimony: 10/20/2011                         |
| USW3      | Lisa Bowman, United Steel Workers Local 675<br>Oral Testimony: 10/20/2011                   |
| USW4      | David Campbell, United Steel Workers Local 675<br>Oral Testimony: 10/20/2011                |
| USW5      | Ron Espinoza, United Steel Workers<br>Oral Testimony: 10/20/2011                            |
| USW6      | Jeff Clark, United Steel Workers<br>Oral Testimony: 10/20/2011                              |
| VALERO4   | Patrick Covert, Valero<br>Written Testimony: 10/18/2011                                     |
| VILLAREAL | Elvis Villareal<br>Oral Testimony: 10/20/2011   |
| VINES     | Keith Vines<br>Oral Testimony: 10/20/2011   |
| WCPL      | Charles McIntyre, West Coast Protection League<br>Oral Testimony: 10/20/2011                |
| WEC4      | Doug Davie, Wellhead Electric Company<br>Oral Testimony: 10/20/2011                         |

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|-------------|---|
| WESTK       | Kathy West<br>Oral Testimony: 10/20/2011  |
| WILDFLOWER2 | Bo Buchynsky, Wildflower Energy LP<br>Written Testimony: 10/14/2011   |
| WILDFLOWER3 | Paul Shepard, Wildflower Energy LP<br>Written Testimony: 10/20/2011   |
| WILDFLOWER4 | Paul Shepard, Wildflower Energy LP<br>Oral Testimony: 10/20/2011  |
| WILLIAMSZ10 | Laurie Williams and Allan Zabel<br>Written Testimony: 10/19/2011  |
| WILLIAMSZ11 | Laurie Williams and Allan Zabel<br>Written Testimony: 10/19/2011  |
| WILLIAMSZ5  | Laurie Williams and Allan Zabel<br>Written Testimony: 10/19/2011  |
| WILLIAMSZ6  | Laurie Williams and Allan Zabel<br>Written Testimony: 10/18/2011  |
| WILLIAMSZ7  | Laurie Williams and Allan Zabel<br>Written Testimony: 10/18/2011  |
| WILLIAMSZ8  | Laurie Williams and Allan Zabel<br>Written Testimony: 10/19/2011  |
| WILLIAMSZ9  | Laurie Williams and Allan Zabel<br>Written Testimony: 10/19/2011  |
| WM5         | Charles White, Waste Management<br>Written Testimony: 10/20/2011  |
| WM6         | Charles White, Waste Management<br>Oral Testimony: 10/20/2011   |
| WSPA5       | Catherine Reheis-Boyd, Western States Petroleum Association<br>** In addition, 1 supplemental document was submitted**<br>Written Testimony: 10/19/2011 |
| WSPA6       | Mike Wang, Western States Petroleum Association<br>Oral Testimony: 10/20/2011   |
| WSPA7       | Tim Maples, Western States Petroleum Association<br>Oral Testimony: 10/20/2011  |
| YUROKTRIBE2 | Nathan Voegeli, Yurok Tribe, Office of the Tribal Attorney<br>Written Testimony: 10/19/2011   |
| YUROKTRIBE3 | Nathan Voegeli, Yurok Tribe, Office of the Tribal Attorney<br>Oral Testimony: 10/20/2011  |

## **B. AB 32 / CAP-AND-TRADE DESIGN**

### **AB 32**

#### *Emissions Levels/Targets/Forecasts*

**B-1. Comment:** We're deeply concerned that the current climate policy construct will lead to widespread curtailment of domestic oil and gas production. To reiterate our previously filed comments, we are opposed to CARB continuing on the path of adoption of the Cap and Trade Program. As noted previously, as CIPA began the climate change policy journey with the position that market mechanisms most efficiently provide for compliance flexibility, the evolution of our position has been influenced by two irrefutable factors. First, the emissions numbers. The Legislative Analyst's Office has covered quite comprehensively that enough activity has been undertaken, numerous programs and policies put into place, coupled with the dramatically reduced economic output have allowed us to achieve or at least establish a glide path toward emission reduction targets envisioned by the framers of AB 32. Secondly, we look at the market design features of the currently proposed program and inherently understand that no matter how well intentioned, they portend disaster for the economy as a whole and regulated parties specifically. CIPA asserts again that CARB has met all of the emission targets required by AB 32 and need only eliminate the cap and trade program from the current policy mix to arrive at a combined strategy that satisfies AB 32 and does not set us up for a re-run of the terrible crisis the State experienced last time it embarked upon an untested and Rube Goldberg policy regime. Having registered our opposition to the cap and trade scheme, we understand you likely have no intention of abandoning this train wreck today. (CIPA3)

**Response:** See the response to Comment B-1 in the second 15-day comments and responses (Chapter V of the October FSOR).

### **Cap-and-Trade**

#### *Working Group/Advisory Group/Oversight Committee*

**B-2. Comment:** We believe that ARB should establish an AB 32 oversight sub-committee, similar to the Moyer Administrative Committee that Board Member Berg runs. The Moyer Administrative Committee provides a beneficial service to stakeholders and Board Members to engage in the implementation of this landmark regulation. CCEEB would urge Board Members to make a commitment to become involved with staff on the development of the remaining policy questions from the first resolution and this upcoming resolution. (CCEEB5)

**Response:** This comment falls outside the scope of the rulemaking. Nevertheless, we agree that we need to carefully monitor implementation of the regulation, although we do not necessarily see the need for an AB 32 oversight

committee suggested by the commenter. As specified in Board Resolution 11-32 for the regulation, the Board directed the EO to coordinate with the Market Surveillance Committee and stakeholders to evaluate the effectiveness of the cost-containment provisions of this program, including the Allowance Price Containment Reserve, offsets, banking, and the three-year compliance period, and to update the Board annually on a number of policy and implementation issues.

**B-3. Comment:** As we proceed in implementation of cap and trade, we're concerned about having a plan that will help California agriculture address climate change sustainably and effectively. And we think through offsets that take a whole farm systems approach and full life cycle analysis along with allowance value investments in research, technical assistance for farmers, and financial incentives for those farmers who can't participate in the offsets market are essential components to helping California agriculture begin to address climate change. We are not there yet as a state. We're the largest agriculture state in the country, and we have yet to really fully flush out a plan for making sure that California agriculture remains viable and sustainable in the long term. We're very interested in working with the staff and the Board on those issues. (CACAN4)

**Response:** The agriculture sector can generate offset credits. The Board adopted a livestock protocol that allows for the generation of offsets credits within the agricultural sector. We believe that the regulation supports participation from the agricultural sector and maximizing the amount of GHG reductions. Agriculture is an uncapped sector and does not have a compliance obligation. Under the regulation, agriculture will be encouraged to be more efficient as the carbon price signal is passed through on transportation fuels, electricity, and natural gas. This price signal will drive investment in clean low-polluting technologies. In addition, staff announced it will begin to develop new offset protocols including two focusing on agriculture. We welcome input on priorities for additional protocol development.

In Chapter II and Appendix J of the Staff Report, we discussed a Low Carbon Investment Fund to provide financial incentives for projects that support investments in clean green technologies. We will initiate a public process to develop recommendations on the uses of allocation proceeds. We anticipate that the uses for allocation revenue in the Staff Report will be further developed.

### *Transparency*

**B-4. Comment:** The California Black Chamber of Commerce firmly supports the Cap-and-Trade activities of AB 32. While not perfect because of implementation questions, the long term objectives are correct for both the State and the country. We fully expect that every effort would be expanded by the Board to minimize the economic impact on businesses in California and funding created by the penalties and taxes be recycled back into California communities, with the emphasis placed on people of color. As

stated, while we support implementation of Cap-and-Trade, there is complete expectation of transparency throughout the process and the California Black Chamber would like to be engaged with the Air Resource Board and every critical junction. (CBCC)

**Response:** Thank you for the support. As specified in Board Resolution 11-32 for the regulation, the cap-and-trade regulation will establish a greenhouse gas market that allows business flexibility to comply with the regulation while also ensuring strong oversight and transparency.

#### *Collaboration/Coordination*

#### **B-5. (multiple comments)**

**Comment:** There are some significant implementation issues that remain to be worked out with that program and, indeed, with how the broader Cap and Trade Program and the other AB 32 efforts will interact with the traditional air pollution control program that we implement in partnership with you and have for so many years. We look forward to resolving those issues with staff and have appreciated the support of this Board for resolving those issues in the past. We would ask you to have us back early in 2012 to talk with you about the progress we hope to have made by then and would appreciate a strong commitment from you to hear that early in the year so that we all have something concrete and some real momentum to move forward on. (CAPCOA4)

**Comment:** On page 13 of your resolution at the top of the page is a provision that the staff has added, and we're thankful they have, about working with the local air districts. We would ask that at the end of that provision at the top of page 13 that you simply add a statement that says "come back before the Board the first quarter of 2012 to report on progress working with the local air districts." The reason that I'm asking that it be specifically included in the Resolution is there have been two other occasions where the Board has told both the air districts and the staff to get together and work in partnership on various issues associated with implementation of AB 32. Unfortunately, we have not seen those provisions in Board resolutions actually come to fruition. So I think it's important for your Board to monitor us at the local air districts as well as your staff and have a report back in the first quarter. So if you could just add one sentence, we'd be very happy. (SCAQMD6)

**Comment:** We continue to believe that there should be continued and ongoing dialogue about how we can harmonize, frankly, the local Air Pollution Control Program with the Cap and Trade Program. We think there's going to be a considerable amount of discussion that's going to be needed in the future in order to make that harmonization work, only because I know your staff and, of course, the Air Pollution Control District staff don't want to see conflicts. We don't want to see any issues arise as we continue to move forward in not only addressing regional smog, but also localized impacts and continue to reduce climate change precursors. (BAAQMD4)

**Response:** Board Resolution 11-32 directs staff to report back on coordination efforts with the air districts in early 2012 with a specific focus on coordination on air district regulatory activities and the cap-and-trade program. We look forward to continuing this dialogue with the air districts. Furthermore, Resolution 11-32 was modified to require the ARB staff to "report back periodically to the Board on the nature and extent of this Partnership with the first report due in the first quarter of calendar year 2012."

### *Program Monitoring and Review*

**B-6. Comment:** We believe creating a metric that assesses economic leakage and other economic impacts that may be attributed to the regulation should be made a priority. This will entail reviewing the program on an annual basis, much like what is being proposed under the Adaptive Management Plan. Measuring and mitigating these impacts would send the confident signal needed for successful implementation of the program, as well as successful linkage to future regional and/or federal programs. (CALCHAMBER6)

**Response:** See the response to Comment B-32 in the 45-day comments and responses (Chapter III of the October FSOR).

**B-7. Comment:** Modify the GHG Cap-and Trade Rule Proposed Resolution Text as follows:

~~BE IT FURTHER RESOLVED that the Board directs the Executive Officer to initiate a public process for the review of additional compliance offset protocols and no later than February 2011, for the purpose of bringing additional protocols to the Board for approval no later than March 2012. consideration as soon as is practical~~

BE IT FURTHER RESOLVED that the Board directs the Executive Officer to update the Board annually on the status of the cap-and-trade program, including:

- Information on the operation of the California program and any linked programs;
- Actions being taken by covered entities to comply with the program;
- Information on shifts in business activity that may result in emissions leakage and changes in market share for covered entities and sectors;
- Shifts in fuel use in different sectors, including information on the use of electricity in the transportation sector, and the use of biofuels and biomass;
- Effects on small business and on low-income households;
- ~~Any sales of allowances from the allowance reserve~~The quantity and price of allowances purchased from the Allowance Price Containment Reserve;
- The status of the ARB offset program including but not limited to the 1) quantity supply of offset credits issued by registered in ARB's tracking system, approved third-party registries or the tracking system registries of linked programs and the quantity of offsets

reversed by ARB. 2) identifiable barrier challenges to the development of offset credits from approved ARB protocols. 3) the expected offset supply from projects listed on these systems, including the geographic locations of listed offset projects; and 4) the localized air quality impacts and forest impacts of the emissions reductions from offsets projects participating in this program

- Any changes to linked cap-and-trade programs. (PGE6)

**Response:** We believe that it is not necessary to make these suggested changes to the text of Resolution 10-42, which was issued by the Board on December 16, 2010.

On October 20, 2011, the Board adopted the final cap-and-trade regulation and issued Resolution 11-32. In Resolution 11-32, the Board directs the Executive Officer to monitor protocol development and to propose technical updates to adopted protocols, as needed. In addition, Board Resolution 11-32 directs the Executive Officer to evaluate the effectiveness of the cost-containment provisions of this program, including the Allowance Price Containment Reserve.

The Board also adopted an Adaptive Management Plan (plan) that establishes a process to monitor and respond as appropriate to address unanticipated adverse impacts. The plan focused on two specific areas: (1) localized air quality impacts from the cap-and-trade regulation; and (2) forest impacts from the proposed Compliance Offset Protocol for U.S. Forest Projects (U.S. Forest Protocol) contained in the cap-and-trade regulation.

## **Adaptive Management Plan**

### *Coordination with the Local Air Districts*

#### **B-8. (multiple comments)**

**Comment:** What I wanted to speak about specifically was the Adaptive Management Plan. We also believe that, frankly, there are mechanisms in place, but there needs to be a lot of coordination with the Bay Area Air District. And you've also heard from the other districts as well. That's why I think it's very critical this Resolution that your staff has included in the Adaptive Management Plan calls for that coordination. We think there is going to be very much of a need for your Board to hear back from all of us in a very distinct time frame. It's also that you're moving ahead with a program where you don't know exactly what people are going to do in the Cap and Trade Program. You cannot predict human behavior in a program like this. And so given that it's really important that you hear back from us to really talk about how we can coordinate our efforts in the future. And we think that a little beefing up of the resolution along those lines would go a long way. (BAAQMD4)

**Comment:** We applaud your commitment to managing the air quality and public health aspects of this Cap and Trade Program through your Adaptive Management Plan. We

stand ready to work with you as you do that and appreciate the recognition of our role in that. (CAPCOA4)

**Response:** As specified in Board Resolution 11-32 for the regulation, the Board directs the Executive Officer to partner with the air quality management districts and air pollution control districts in the implementation of the cap-and-trade regulation, including, but not limited to, an evaluation of the impacts of the cap-and-trade program on industrial source greenhouse gas permitting and implementation of the Adaptive Management Plan.

### *Public Process*

#### **B-9. (multiple comments)**

**Comment:** We ask the Board to direct staff to present a monthly briefing to the Board, as part of the Adaptive Management Plan that includes opportunity for public comment through 2012 on the progress of resolving these issues. (CCEEB5)

**Comment:** Only now, ten days before this final approval, did you release an Adaptive Management Plan, which purports to address the health concerns we have raised for years. Given the short time we have had to review and respond, I'm grateful this plan was short and unsubstantive, but its brevity and lack of substance also speaks to its flaws. (CRPE5)

**Comment:** The processes for achieving the objectives of ARB's Adaptive Management Plan are not clear. ARB's approach lacks the detail needed to provide stakeholders with a clear process of how ARB will reach their conclusions. (VALERO4)

**Comment:** We urge CARB to continue to solicit and accommodate the active involvement of stakeholders in this process. Our organizations remain committed to working with CARB staff to ensure a successful effort going forward. (NC10)

**Comment:** Public participation should occur earlier in the adaptive management process than is outlined in the proposal. The public comment and review process should begin at the conclusion of step 1, when ARB staff has determined that an impact to local air quality has occurred. Stakeholders from impacted communities should also have the opportunity to consult with staff on the process from start to finish and be able to inform the process as it moves forward. (CCA5)

**Comment:** CARB should clarify the decision-making process for engaging in corrective action. (CCA5)

**Response:** See the response to Comment B-12 in the second 15-day comments and responses (Chapter V of the October FSOR).

### *Increased Monitoring*

#### **B-10. (multiple comments)**

**Comment:** The undersigned organizations commend the California Air Resources Board (CARB) for your ongoing commitment to develop and adopt an adaptive management plan to monitor environmental impacts of the U.S. Forest Protocols for the cap and trade regulation. We recommend that CARB staff pursue an integrated approach that considers impacts from both offset projects and energy and fuels, given the broad overlap in data needs and impact monitoring. (NC10)

**Comment:** We ask that ARB work with stakeholders to monitor the progress and issues of the Cap and Trade Program as part of the Adaptive Management Plan. (WSPA6)

**Comment:** We think it's extremely important in response to environmental review that has gone over this past year to move forward with this and to ensure that ARB is doing this annual monitoring protecting against any unintended impacts. (ALA2)

**Response:** As specified in Board Resolution 11-32 for the regulation, ARB approved the proposed Adaptive Management Plan for the cap-and-trade regulation (Adaptive Management Plan) that describes ARB's commitment and process to monitor and respond to any significant unanticipated and unintended adverse impacts related to localized air quality resulting from implementation of the cap-and-trade regulation and adverse forestry impacts from implementation of the U.S. Forest Protocol.

### *Data Collection and Analysis*

#### **B-11. (multiple comments)**

**Comment:** ARB is vague in the statistical protocol that would be employed to determine if the change was part of normal process/data variability or related to the change; how they will fully evaluate changes in economic activity and relate them to air quality and emission trends; and how they will effectively and accurately correlate emission changes to changes in the economy, consumer demand or manufacturing trends. Valero believes that ARB should fully disclose how they plan on assessing the data to draw conclusions regarding the impact of a cap-and-trade regulation before a rule is promulgated that provides a high degree of uncertainty to the regulated community. The conclusions reached by ARB using the available data described could ultimately result in changes to the regulation requiring additional investments and costs to business. (VALERO4)

**Comment:** The baseline for measuring adverse environmental impacts should consider the regulatory environment. The data examined should include analysis of the regulatory environment, including US EPA and local air district rules and regulations, to evaluate whether the cap and trade program is a cause of an adverse environmental

impact. Specifically, reductions in pollution required by a local air district regulation should be attributed to that regulation, and not be double-counted in the adaptive management program. The process defined by CARB appropriately identifies the challenges in identifying, linking and acting on unintended negative outcomes that may arise due to cap and trade implementation. The process does rely on regulatory judgments based on the weight of the evidence, but this process is not yet well defined by the proposal. Further identification of potential causal pathways would advance the methods for evaluating the evidence, as well as a timeline and detail on specific staff responsibilities. (CCA5)

**Response:** See the response to Comment B-12 in the second 15-day comments and responses (Chapter V of the October FSOR).

### *Adverse Impacts*

#### **B-12. (multiple comments)**

**Comment:** This plan requires that CARB find that a cap and trade rule causes an increase in emissions and that the increase has an adverse impact before it acts. Yet, in almost the same breath, that plan says it will be very difficult to determine when there is a direct or indirect causal link to the regulation. And it will also be very difficult to determine when an adverse impact is caused by the regulation. Given these two impossibly high hurdles, an Adaptive Management Plan will certainly not be able to address the impacts we know will happen. AB 32 requires that you design regulations in a way that does not disproportionately impact vulnerable communities. You have the power to do this right. Please do it. (CRPE5)

**Comment:** CARB should work to prevent potential adverse impacts before they occur. The stepwise approach provides for remedial action once an environmental change caused by the regulation results in an adverse impact. While this is a significant step, it is important to consider if early indicators and observed environmental changes are on the path toward becoming adverse impacts, and to initiate an early response. The potential need and procedural considerations for a more rapid response to adverse impacts should also be considered. (CCA5)

**Response:** See the response to Comment B-12 in the second 15-day comments and responses (Chapter V of the October FSOR).

### *Triggers and Indicators*

**B-13. Comment:** The proposed adaptive management plan is not an adaptive management plan. As explained in the staff response, the "staffs proposed adaptive management plan describes ARB's commitment to a specific process, including an analysis of available data, triggers for further analyses to determine whether there are localized air quality impacts or adverse forestry impacts, and if impacts are identified, the process for devising specific mitigation measures." Staff response at 18. However, the proposed adaptive management plan (October 10, 2011) includes no policy

"triggers" or indicators of forest impacts, only a plan to hire a contractor to develop them in the future. "The ARB contractor will develop Tier 1, Tier 2, and Tier 3 indicators and analyses." Adaptive management plan at 26. Without specific indicators and analyses, this document does not constitute an adaptive management plan so much as a plan to develop an adaptive management plan. ARB has a responsibility under CEQA to provide feasible mitigation for the regulation's significant impacts. ARB has conservatively concluded that the Forest Protocol may have significant and unavoidable impacts on the environment. CEQA thus requires ARB to identify and incorporate all feasible mitigation measures to minimize these impacts, and to make specific findings regarding the infeasibility of other measures that could reduce those impacts to a less-than-significant level. (CBD6)

**Response:** See the response to Comment B-12 in the second 15-day comments and responses (Chapter V of the October FSOR) and the responses to CBD1 in Attachment A of the October FSOR.

### *Responses*

**B-14. Comment:** CARB should include the full range of response actions identified to date. The Initial Statement of Reasons provides a fuller listing of the potential responses than are included in the proposed Adaptive Management program. Including the additional market/regulatory responses included in the ISOR provides the public a broader range of examples as to the type of actions that could be taken should an unforeseen issue arise. (CCA5)

**Response:** As specified in Board Resolution 11-32 for the regulation, ARB's commitment is to develop and implement appropriate responses or actions to address any impacts identified as set forth in the Adaptive Management Plan.

### *Forest Data and Impacts*

**B-15. Comment:** To the extent that the offsets program is meant to be national in scope, TWS recommends that the list of Forest Data sources must include forest data sources related to forests outside California. TWS also requests further clarification regarding plans for the development of adaptive management strategies outside California if existing data sources in other jurisdictions are inadequate to support analyses of impacts caused by forest offsets associated with the California cap-and-trade program. Understanding that ARB is committed to seeking additional help from sister agencies, experts, and a third-party contractor to track and analyze forest data, TWS seeks further clarification regarding opportunities for public engagement relating to the development of data analyses, clarification on how information from disaggregated forest data sources will be compiled for analysis, and clarification on whether forest data gathered, compiled and analyzed for adaptive management purposes will be publicly available on an ongoing basis, or in some other format, outside planned annual reports by ARB. TWS seeks further specificity with respect to process issues relating to ARB's response to any identified adverse impacts caused by the U.S. Forest Protocol

(including timeframes for action and opportunities for public engagement). TWS also seeks further clarification regarding ARB's consideration of response actions beyond those that would limit future adverse impacts (such as revising the U.S. Forest Protocol and cap-and-trade regulation to limit types of offsets or geographic location of offsets) and seeks additional information regarding any response actions that would mitigate adverse impacts and restore any forest resources damaged by current or past projects. (TWS3)

**Response:** As specified on page 19 in the Adaptive Management Plan, ARB will work with out-of-state resource agencies if a forest project is outside of California. Some data sets require ARB to work with other California State agencies and academia, as well as out-of-state resource agencies to interpret the data, and to conduct further analysis using the data. In 2012, ARB plans to hire a contractor to develop a process to track data to detect environmental changes resulting from the U.S. Forest Protocol. ARB will also coordinate with and utilize the forestry expertise of the resource agencies during the implementation of this adaptive management plan.

#### *Forest Biomass*

**B-16. Comment:** The adaptive management plan fails to address the potential impacts to forests resulting from the exemption of forest biomass combustion from compliance obligation. In response to our comments that the exemption of forest biomass combustion from compliance obligation would have adverse impacts on forest resources, the staff response points to the economic analysis that purportedly found no indication that the exemption from compliance obligation would increase the combustion of biomass feedstocks. (CBD6)

**Response:** See the response to Comment B-23 in the first 15-day comments and responses (Chapter IV of the October FSOR).

#### *Consistency with Other Programs*

**B-17. Comment:** Right now, it's important to remember that the industry is faced with five concurrent rule-makings, including this regulation, the high-carbon intensity crude regulation, low-carbon fuel standard, clean fuel outlet, and energy efficiency audit reports. We need to ensure that we make decisions that make sense and are consistent with future programs. (WSPA6)

**Response:** We will ensure that the implementation of the cap-and-trade regulation is consistent with other air pollution control programs.

#### *Energy Efficiency*

**B-18. Comment:** All participants must realize that a cap and trade system does not replace our State's other greenhouse gas mitigation policies and thus we need to stay

the course and even expand implementation activities related to energy efficiency and other clean energy policy initiatives. This particularly includes the public benefits charge funding for energy efficiency programs. (CEEIC2)

**Response:** See the response to Comment B-33 in the 45-day comments and responses (Chapter III of the October FSOR).

**B-19. Comment:** The following is CCEEB's suggested resolution language that reflects the persisting concerns raised in our comment letters and the desire of our membership to have a functional and cost-effective cap-and-trade program:

WHEREAS AB 32 mandates that ARB achieve GHG emission reductions to 1990 levels and that at the same time ARB minimize emission and jobs leakage and minimize economic impacts; ARB has identified certain business sectors in the Cap-and-Trade Program as energy intensive and trade-exposed (EITE) requiring assistance to mitigate transition risk and emissions leakage risk; ARB must continue an on-going dialogue with stakeholders to ensure successful implementation of the overall program as the Cap-and-Trade Program becomes initiated, in particular, dialog must focus on; The potential contribution of reductions in allowances (10 percent initially, then 25 percent and 50 percent as shown in the declining Industry Assistance Factors) to leakage of jobs and emissions to facilities outside the state; Additional documentation needed to evaluate the impacts of the allowance reduction on the cap and trade market and the statewide economy; Options to reduce the impacts of the reductions on EITE sector entities; All stakeholders should be encouraged to identify, evaluate and, where appropriate, implement alternatives that achieve the goals of AB 32; Industries charged with implementing and complying with air quality, water quality and fuels regulations over the past years have spent billions of dollars in support of State Agency initiatives; Over a 10-year period ending in 2009, the petroleum industry spent over \$200 billion on environmental improvements with the highest portion coming in California; Programs should encourage investment in California to produce jobs while minimizing GHG emissions.

Now Therefore Be It Resolved that the Board: Approves the Cap-and-Trade Program with the express proviso that the 10 percent reduction in allowances is removed—and that all participants in EITE sectors get 100 percent of Industry Assistance Factor during the first and second compliance period (2013–2017). To accomplish this task, ARB must edit all sections in the regulation (e.g., Sub-article 9 and following) to adjust upward by 10 percent the calculated allowances directly allocated to an operator of an EITE sector industrial facility for the period 2013–2017.

Be It Further Resolved that the Board Directs Staff to, by December 31, 2012, develop the mechanisms necessary to equitably align the compliance obligations under the Cap-and-Trade Program with the lifetime GHG impact of waste management practices, including waste to energy, through the application of

appropriately validated and peer reviewed information, consultation with other regulatory agencies and industry experts, including the U.S. EPA and CalRecycle, and use of the U.S. EPA's Municipal Solid Waste Decision Support Tool.

Be It Further Resolved that the Board Directs Staff to develop, through a public process, an approach to quantitatively evaluate the appropriate level of reduction, if any, of allowances to be provided to participants in EITE sectors during the 3rd compliance period.

Be It Further Resolved that the Board Directs Staff to conduct Overall Program Review that includes semiannual reports on the following tasks:

- Review and report back to board the basis for and impact of the 10%, 25%, and 50% reduction in allowances on Energy Intensive and Trade Exposed (EITE) industries.
  - Review recent economic and trade data to provide input into an updated evaluation of trade-exposure and leakage to California business and industry;
- Work with stakeholders to:
  - Review and identify obstacles to compliance in the Cap-and-Trade and Mandatory Reporting Regulation programs.
  - Perform needed updates to the Mandatory Reporting Regulation to allow for successful implementation of the Cap-and-Trade Program, including the implementation of the USEPA reporting requirements and for compliance with the calibration and accuracy requirements in the 2011 changes to the Mandatory Reporting Regulation.
  - Ensure the appropriateness and accuracy of the petroleum and natural gas sector benchmark values, including full consideration of indirect emissions associated with electricity usage through confirmation of the reported and verified data and the calculation methodologies.
  - Ensure that the recent modification of Mandatory Reporting Regulation to incorporate federal Subpart W equipment categories is properly accounted for in the in petroleum and natural gas sector benchmark values.
  - Ensure that portable equipment, currently subject an existing ARB program, is properly addressed in petroleum and natural gas sector benchmark values. Complete the work required by Resolution 10-42 of December 16, 2010 including: Identify needed expertise and tools to monitor and measure effectiveness of the operation of the Cap-and-Trade Program, including all the elements outlined on page 13 of Resolution 10-42, preparation of an annual report on status of the Cap-and-Trade Program as outlined on page 14 of Resolution 10-42. Identify obstacles to compliance and to enhance compliance assistance, identify measures to mitigate economic impacts of Cap-and-Trade Program, evaluate Treatment of Combined Heat and Power projects (CHP), clarify the Point of regulation for transportation fuels to

ensure all fuels are covered by the Cap-and-Trade Program, develop protocols for geologic sequestration of CO<sub>2</sub>, assess enforcement provisions, propose additional offset protocols, pursue federal equivalency for the state program, identify remaining tasks and a schedule for completing needed for a successful start to the allowance auction, offset and trading for the Cap-and-Trade Program in 2013, ensure that the proposed allowance value directed to the electric distribution utilities is used for the benefit of industrial ratepayers that might otherwise face indirect costs from the implementation of this regulation.

Be It Further Resolved that the Board Directs Staff to conduct Economic Review, in consultation with Department of Finance and CEC, that will evaluate the impacts of the Cap-and-Trade Program on the state economy. Further, Staff will

- Work with stakeholders to identify economic indicators, such as changes in consumer price index and energy (electricity, natural gas, and transportation fuels) supply and price volatility that allow ARB, Department of Finance and CEC to assess the impact of cap-and-trade.
- Work with CEC and Finance on measures to track and evaluate economic and jobs impacts of the Cap-and-Trade Program.
- Work with stakeholders to evaluate and report on the impacts of the operation of the market to ensure that the market is working effectively and that the cost containment mechanisms are robust, in particular ARB shall evaluate the impacts of the sale and backfilling of allowances in the reserve account. (CCEEB5)

**Response:** AB 32 requires the Board to adopt greenhouse gas emission limits and emission reduction measures that minimize leakage. As part of the regular program monitoring, we will monitor for potential economic and emissions leakage. We will conduct evaluations sufficiently in advance of the end of each compliance period to allow for sufficient time to adjust the cap-and-trade program, if warranted, before commencement of the next compliance period. If we determine during the periodic review that the cap-and-trade program is not achieving the objectives as defined by AB 32, or if substantial, unanticipated adverse economic or environmental effects are identified (e.g., substantial leakage), we will revise the operation and/or design of the program accordingly. Furthermore, we will contract with the University of California to perform additional leakage and market simulation analysis and provide consultation on market rules and oversight.

Industrial facilities are being provided allowance value for the purposes of transition assistance and leakage protection. We believe that benchmark stringency should reflect the emissions intensity of highly efficient, low-emitting facilities within each sector. The allocation strategy will minimize leakage by incentivizing continued production and improved emissions efficiency from all

facilities in California. We do not agree that this will result in adverse impacts for California businesses.

We arrived at the 90 percent of average product-based emissions efficiency benchmark after careful analysis of data and approaches used in other successful cap-and-trade programs. We are balancing the need for providing adequate transition assistance and minimization of leakage while meeting the emission reduction goals of AB 32. To develop each benchmark, we began by analyzing the average emissions intensity of each sector and constructed benchmarks set at 90 percent of this average. "Best in class" benchmarks were developed, exceptionally, for any sector where the "90 percent of average" benchmark would be more stringent than the emissions intensity of any existing California facility in that sector. Please see the response to Comment C-8 in the second 15-day comment and responses (Chapter V in the October FSOR) for additional justification of benchmark stringency.

Within each sector, the most efficient facilities with efficiencies better than the benchmark will be receiving more allowances than they will need, and can sell their excess allowances. Less-efficient facilities will need to purchase allowances to fulfill their compliance obligations. Beyond the initial allocation period, the level of free allowances will decline through the use of a cap declining factor and an assistance factor. Because allowances can be traded, the program provides incentives for those with the most cost-effective reduction opportunities to reduce emissions quickly. This is an incentive we built in the system for industrial sectors to choose innovation for reducing GHG.

In addition, please see the responses to Comments I-117 through I-127 in the first 15-day comments and responses (Chapter IV in the October FSOR) for additional justification of our approach to coverage of combined heat and power facilities.

At this time we do not believe that the modification to the MRR to incorporate federal Subpart W, including the coverage of portable equipment, will require changes to the calculation of the oil and gas extraction benchmark values. However, we will conduct an analysis to examine this issue and make any necessary changes through future rulemakings.

As the cap-and-trade regulation and the MRR are closely intertwined, there may be future amendments to the cap-and-trade regulation that may require corresponding amendments to the MRR, and both will be done as part of new rulemakings, each with a new public process and Board consideration.

Finally, Board Resolution 11-32 requires staff to continue to work with Cal/Recycle and other stakeholders to characterize lifecycle emissions reduction opportunities for different options for handling solid waste, including recycling, remanufacturing of recovered materials in state, composting and anaerobic

digestion, waste-to-energy facilities, landfilling, and the treatment of biomass. Staff will identify and propose regulatory amendments, as appropriate, so that AB 32 implementation, including the cap-and-trade regulation, aligns with statewide waste management goals, provides equitable treatment to all sectors involved in waste handling, and considers the best available information. Staff will report to the Board on this progress in summer of 2012. Board Resolution 11-32 also directs the Executive Officer to monitor protocol development and to propose technical updates to adopted protocols, as needed. In addition, the Board directs the Executive Officer to evaluate the effectiveness of the cost-containment provisions of this program, including the Allowance Price Containment Reserve.

## C. ALLOCATION OF ALLOWANCES

### Natural Gas

**C-1. Comment:** Modify the GHG Cap-and-Trade Rule Proposed Resolution Text as follows:

BE IT FURTHER RESOLVED that the Board directs the Executive Officer to initiate a public process by March 2012 for determining whether allowances should be allocated directly to natural gas utilities on behalf of their customers and, if so, to recommend to the Board what method should be used for that allocation to be implemented prior to the initial allocation of allowances for the second compliance period starting in 2015. (PGE6)

**Response:** We did not adopt the proposed date in the text of Board Resolution 11-32. However, we are continuing to evaluate all proposals presented. We will initiate a public process to determine how, and if, allowances should be allocated for natural gas distribution utilities, prior to coverage of the sector beginning in 2015. We note the importance of transparent price signals for fuel consumers in achieving reductions in this sector.

### Refineries

**C-2. Comment:** I would like to read a proposed USW resolution in order to make implementation a more reasonable and feasible plan.

"Whereas, the State of California is faced with adverse economic times with unemployment levels exceeding 12.1 percent.

And whereas, a 10 percent reduction in free allowances at the start of the program has a potential to disadvantage medium and small size refineries and could lead to lost refinery jobs in a state already suffering double-digit unemployment and weaken in-state manufacturing while contributing to leakage of jobs to competitors outside the state.

And whereas, the ten percent reduction in free allowances selectively increases the operating costs to only some companies, and as a result, provides a direct economic benefit in the marketplace to others operating within the state.

And whereas, the impact of a ten percent reduction to some of the 15 refineries and not others is not in the best interest of protecting jobs in California and may put at risk inconsistent and comparatively priced supply of clean fuels for California consumption and create an energy and security risk for foreign imports due to supply shortages

Now, therefore be it resolved, that the Board approves the Cap and Trade

Program with the express proviso that companies will receive 100 percent free allowances in the first and second compliance period, 2013 through 2017, less the required annual cap reduction. And this will be implemented in regulation by establishing energy efficiency, benchmarks at sector average, as opposed to 90 percent of sector average in other value lower than 100 percent of sector average.” (USW2, USW5)

**Response:** The proposed text was not added to Board Resolution 11-32. Please see the response to Comment C-8 in the second 15-day comments and responses (Chapter V of the October FSOR) for a justification of benchmark stringency.

### **Waste-to-Energy Facilities**

**C-3. Comment:** California utilities will be given allowances for free. Unlike utilities, Waste-To-Energy facilities must pay for their allowances. California's three existing waste-to-energy facilities are included in the Greenhouse Gas Cap and Trade Program. Facilities must buy allowances each year for their annual emissions to comply with the program and expect added cost of about \$8 ton for disposal. The added cost may result in facility closings. California's waste management operations rely heavily on the Waste-to-Energy facilities to meet recycling goals and provide safe disposal. When tip fees rise, garbage haulers will choose cheaper landfill disposal. The facilities' only option is to buy allowances on the market to cover the annual compliance obligation. Recycling and other waste management programs will be hurt because they depend on Waste-to-Energy operations. (WM5)

**Response:** Please see the response to Comment E-26 in the second 15-day comments and responses (Chapter V on the October FSOR).

### **Benchmark Stringency**

#### **C-4. (multiple comments)**

**Comment:** The 10 percent reduction, known as the haircut, poses potential significant problems for the availability of allowances at the onset of the program when uncertainty is expected to be greatest. At the very least, this will lead to severe inefficiency of the market and will likely increase the already significant cost burdens to industry sectors. No documentation or information substantiating the need for the haircut has been presented. In reality, the reductions originally planned during the first compliance period now occur up front, instead of staggered over a three-year period. Also, the reduction in allowances has no relevant air quality benefit or emission reductions. It basically will generate hundreds of millions of dollars for no stated purpose and is a hidden tax on industry. (CIPA3)

**Comment:** We have several concerns there are still several flaws with the proposed regulation ranging from the imposition of buyer liability to other issues that have already been outlined before you today. If left unaddressed, these flaws will only exacerbate

the current fragile economy that we are facing and ultimately jeopardize the success of the program going forward. With regard to the haircut, we believe this is an illegal tax that will negatively impact businesses and consumers at a time when they can least afford it. Arbitrarily withholding up to 10 percent of allowances will only put California companies at an immediate competitive disadvantage. It runs contrary to CARB's recognition of a soft start to the program and does nothing to mitigate economic or emissions leakage. Members, with a twelve percent unemployment rate, it is unwise to ignore the economic impact of the haircut by continuing to move forward with this tax proposal. We strongly encourage CARB to keep in mind that constitutionally fees must provide a direct benefit or service to the fee payer or be directly connected to a reasonable regulatory program serving the fee payers. Otherwise, these fees are taxes and are subject to a two-thirds vote of the Legislature. We, therefore, ask if you plan to vote the Resolution through today that you commit to addressing the design flaws in a way that is consistent with the AB 32 requirements of maximizing benefits and minimizing costs. We ask you to be cognizant of the fact that every industry sector is hurting, struggling with the nation's second highest unemployment rate. Modifications in 2012 are crucial in order to ensure that the program is ready, functional, and efficacious. (CALCHAMBER6)

**Comment:** The California Air Resources Board will vote today on new regulations that will cost energy producers and energy intensive industry millions of dollars if they want to continue to operate in California. This new rule, part of CARB's implementation of a cap and trade system under AB 32, will require large energy users to purchase emission allowances to stay in business and provide the fuels, products, and services essential to our every-day lives. We are not opposed to a well-designed Cap and Trade Program as an element of California's greenhouse gas emissions reduction strategy. However, we have significant concerns that the rule currently contemplated by the California Air Resources Board will increase energy costs and lead to losses of businesses, jobs, and economic activity. This directly contradicts not only the requirements under AB 32 that such regulations must minimize negative economic impacts, but also the Governor and Legislature's stated goal of preserving and creating jobs as the most important means of fueling our State's economic recovery. The rule as written includes an unnecessary 10 percent reduction in the amount of carbon emission allocations for major industries. That means refiners will be required to purchase a ten percent emission at a significant cost. This so-called haircut is unjustified and not needed to meet the cap. By forcing trade exposed industries to purchase up to 10 percent of emission allowances, CARB will be, in effect, imposing a new tax on regulated entities. We believe this tax will lead to a dramatically higher energy cost that will harm virtually every sector of our economy.

Refineries that process mainly heavy high sulfur crude oil, receive crude oil via pipelines from California and both foreign and domestic crude oil by tanker via the Port of Long Beach. Refineries produce a high transportation fuel such as gasoline, diesel fuel, and jet fuel. Other products include fuel-grade petroleum coke. Refineries also produce California Air Resources Board gasoline using ethanol to meet the government mandated OSH ten requirements. Refined products are distributed to customers in

southern California, Nevada, and Arizona by pipeline and truck. With 12 percent unemployment in California, we cannot afford businesses shutting their doors and moving their businesses to another state. Thousands of currently employed people could be affected by losing their job, not to mention the domino effects on small businesses and communities as people become unemployed. (AGIF4)

**Comment:** We rise in opposition to the proposed ten percent reduction in credits. We don't need to provide any encouragement in this industry to encourage refining companies to import finished product. We've already seen the impact of importing finished product on the east coast. There are currently three refineries on the east coast that are up for sale and if they are not sold in the next few months will be closed. We think there is a direct correlation to the level of imported finished product and those refineries futures. We think the reduction of the ten percent credits would only encourage refining companies to import finished products into the state of California. We think it's an economic issue for the State, and we think that the importation of finished product will put jobs in jeopardy. We encourage you to reconsider the 10 percent reduction in credits. I would like to say on my own personal opinion, not speaking from an organization, I was interested in the concept that was mentioned by Dave Campbell who's the Secretary/Treasurer from Local 675 about exploring options for the top ten percent that you're considering eliminating. And I think it's a good discussion to have about possibly finding ways to make sure that those aren't turned into profit and those are turned into meaningful, environmental, and safety changes for the workers in those facilities. (USW6)

**Comment:** The last thing we need is a regulation that will kill even more jobs. Please consider this before voting to adopt a flawed cap and trade rule that will force companies to pay for up to 10 percent of what would otherwise have been free emissions allowances. This multi-billion dollar tax will lead to lost jobs and the flight of businesses and revenues to other states. The other western states that were expected to adopt cap and trade policies have abandoned them in order to protect jobs and their economies. The federal government has likewise determined the economy cannot afford the cost of this new emissions tax. If California insists on going it alone we should do everything possible to minimize the negative impacts of a California-only cap and trade program on our businesses and workers. This means rejecting proposals like the 10 percent "haircut" on emissions allowances. (LESTAGE)

**Comment:** In December 2010, the Cap and Trade Program was adopted with the clear direction from the Board that staff was to evaluate the appropriate benchmark for the petroleum industry. For refining, ARB was to evaluate three options—Simple Barrel (a product based option), the WSPA proposed Energy Efficiency Index (EII) and the EU Complexity Weighted option. Appendix J (December, 2010 Rulemaking package) included an option for a product-based benchmark with a 90 percent allocation as one method to minimize the potential for over allocation. Appendix J (December, 2010 Rulemaking package) included an option for a product-based benchmark with a 90 percent allocation as one method to minimize the potential for over allocation. However, the currently proposed benchmark, as defined in the September, 2011,

Rulemaking package, is the EII option that caps the best performer at 100 percent—ensuring that there can be no over-allocation. For upstream oil and gas production, ARB was considering creation of separate benchmarks based on distinct production processes. While work is still needed to verify data and procedures and validate calculations, ARB appears to be settling on two separate benchmarks—one for thermal oil recovery and another for non-thermal recovery. While WSPA, in general, supports this technical approach, both of these benchmarks for oil and gas production also inexplicably include a 10 percent allocation trimming. WSPA is truly disappointed with the curious and poorly-substantiated decision to limit initial allocations of allowances to certain cap and trade participants despite ARB's own insistence that doing so would endanger California's trade-exposed industry sectors and expose businesses in those sectors to out-of-state competition from companies not burdened with the costs that arise from the Cap and Trade program.

ARB's proposed approach to allocating allowances is even less logical in light of the Agency's and Chair's intent to have a "soft start." While there is room for interpretation as to what exactly constitutes a soft-start, for entities that are trade-exposed and suffering through a prolonged recession, and because of the need to devote limited capital to projects that reduce GHG emissions in the future, any reduction in the initial allowances represents a threat to continued operation at current levels. In fact, while ARB may opt to look at the oil and gas production or refining sectors as a whole when evaluating the program's impacts, WSPA believes that the impacts of the 10 percent reduction are better evaluated when looking at the sources that are immediately challenged at the start of the Cap and Trade program. For those sources in particular, a soft and efficient start must involve allowing them to optimize their resources towards future GHG reductions and not on purchasing of allowances—especially during the early years.

It is even more disturbing that instead of developing policies that encourage existing facilities to plan for the future and implement GHG emission reduction measures, ARB's proposed 10 percent reduction in allowances does exactly the opposite. It appears to force companies to choose between continuing to operate at current levels or investing in required technology in the years ahead.

We believe that limiting allowances at the outset of the program will lead to leakage of goods and/or services to operators outside the State and increase the costs of those goods and services. All of these are outcomes that ARB indicated it wished to avoid. This approach is not needed and is detrimental to launching a successful Cap and Trade program which WSPA supports doing.

WSPA believes that all trade exposed sources should be given their full allocation and that the 10 percent reduction be deleted from the Cap and Trade Regulation. We ask that the ARB Board include in their resolution a requirement to re-evaluate the merits and impacts of a 10 percent reduction on trade-exposed sources in early 2012 and bring the results before the Board to determine if a regulatory amendment is appropriate. (WSPA5)

**Comment:** By forcing trade-exposed industries to purchase up to 10 percent of what were to be free emissions allowances, CARB will be in effect imposing a new tax on regulated entities. In addition to being legally questionable, this tax will lead to dramatically higher energy costs that will harm virtually every sector of our economy. You yourself have been quoted as estimating the amount of this tax will start at \$500 million in the first compliance period and grow to \$2 billion in subsequent periods. We respectfully disagree with your opinion that putting a multi-billion dollar tax on carbon will send the price signals necessary for a successful cap-and-trade program. On the contrary, such an approach will be successful only in killing jobs, driving more businesses out of California and exporting GHG emissions to unregulated regions. Singling out trade-exposed industries by depriving them of the free allowances which are essential to a California-only cap-and-trade program will do nothing to achieve meaningful GHG reductions. The Analysis Group recently cautioned CARB: "With none of California's neighboring states committing to climate targets, emission leakage will continue as a potential risk to the program's environmental integrity."  
(CALCHAMBER5, NAACPSD)

**Comment:** Our most immediate concern now is with this 10 percent reduction in allocation to industry. Everyone from US Secretary of Energy Chu to your own EAAC Committee and staff's own analysis has concluded that industry will be trade exposed when competing against industry that is not similarly regulated. It is our view that in this case staff has ignored their own report that says that 100 percent free allocation to industry is necessary to avoid this leakage. And we're especially perplexed by this action to reduce our allocation because it won't do anything to help the program succeed. Please ask staff to reverse course on their reduction in allocation to our industry and to put in place a real process to evaluate the concerns of industry. (BP3)

**Comment:** We join with others in asking that a ten percent reduction in allocations be removed. Let companies devote precious capital to greenhouse gas emission reduction projects that you have told us will be required in the future. (WSPA6)

**Response:** We understand the commenters to mean that they are conflating the stringency of the benchmarks with the imposition of a 10 percent tax on business. This is not a correct interpretation of the benchmark. Benchmarks were set at the emissions intensity of an efficient producer within California. Please see the response to Comment C-8 in the second 15-day comments and responses (Chapter V of the October FSOR) for more information on benchmark stringency and the response to Comment K-27 in the 45-day comments and responses (Chapter III of the October FSOR) for a discussion of ARB's authority to conduct an auction to distribute emissions allowances. Also see the response to Comment B-19 (of this document) regarding benchmarks.

## Benchmarks

### *General*

**C-5. Comment:** With respect to the benchmark, other than the initial guidelines on how sector benchmarking would identify allowance allocation to various industries, staff has not provided information on the individual protocols. For example, the proposed oil and gas extraction benchmarks are derived from a process that remains a black box to the regulated community. The generation of these benchmark values cannot be duplicated by the public sector. The methods and protocols used by staff should undergo the same scrutiny—final note, if I may—self-generation of—emissions related to self-generation is going to have a substantial impact on oil production. (CIPA3)

**Response:** We conducted an extensive public process to develop the product-based benchmarks, including public meetings, workgroups, and discussions with individual stakeholders. During this process, we attempted to make the benchmark calculations transparent through documentation such as Appendix B to the first set of 15-day changes to the regulation, entitled *Development of Product Benchmarks for Allowance Allocation*.

However we have not, at this time, made all product and energy transaction data used to develop the benchmarks public, due to confidentiality claims on these datasets. We concede that the lack of access to this data makes it challenging for the public to fully duplicate the benchmark calculations. The only way to increase transparency further would be to reach an agreement that would allow for the release of data that some firms currently claim as confidential business information.

### *Paper*

**C-6. Comment:** We ask that the Board direct ARB staff to work with us over the next 12 months to reconstruct the Recycled Boxboard Manufacturing activity benchmark such that it does not include the impacts of early action projects. Graphic Packaging International (GPI) conducted two early action projects that significantly reduced our consumption of natural gas at the Santa Clara Boxboard Mill. First, waste heat from the process was routed through the Hot Air Cap, which is used to dry our boxboard product. This device was rated at 3 MMBtu/hr. This project, which was completed in 2007, saved an estimated 25,344 MMBtu annually in natural gas consumption in 2008 and 2009. Secondly, GPI routed waste heat from the flue gas stack to heat process water. A heat exchanger was installed to transfer heat from the flue gas to the process water stream. This project, which was completed in 2008, saved an estimated 186,540 MMBtu annually in natural gas consumption in 2009 with some additional partial year savings in 2008. ARB staff constructed the proposed benchmark for the Recycled Boxboard Manufacturing activity based on the 2008 and 2009 data from our facility. The result was 0.499 ton GHG/ton boxboard produced shown in Table 9-1. However, these data include the impacts from both early action projects. We estimate that proposed benchmark fails to

consider 7,971 tons of CO<sub>2</sub>e emissions that would have been released had it not been for our early action projects. Because these years were used for the benchmark, the proposed benchmark was lower than if the GPI had waited until 2012 to conduct these early actions projects. The proposed benchmark reduces allowances that would have been provided GPL costing our facility approximately \$ 160,000 per year (at a nominal price of \$20/ton) or as long as the cap and trade operates in California. We discussed this issue with ARB Staff. They noted that they are trying to be fair to all by using the same years for benchmark construction. However, we can separate the effects of these two early action projects, as we have shown above. ARB staff also noted that GPI does not deserve a benefit from its investment in early action projects because ARB removed a requirement for benchmark setting, which had previously required that the benchmark be 10 percent of the average. The action that ARB took to remove the 10 percent criteria was necessary for all groups with one member, as the 10 percent criteria sets up a no-win situation for the lone member in the group. This does not mean that GPI does not deserve a benefit from the investment it made in early action projects. ARB Staff also noted that there are a fixed number of allowances so they cannot change our proposed benchmark. While we understand that the number of allowances is fixed, it does not mean that GPI does not deserve to have a properly constructed benchmark that fairly indicates the baseline of our facility. If there is a shortage of allowances, the shortage should be addressed separately, not in the construction of a benchmark. For the reasons stated above, GPI believes that the proposed benchmark for the Recycled Boxboard Manufacturing activity was unfairly constructed, incorporating early action projects that GPI had performed. We ask the Board to direct ARB staff to work with us to construct a fair benchmark that represents our baseline GHG intensity and is free of early action projects we conducted. We ask that a revised benchmark be presented to the Board for incorporation into the regulation in 2012. (GPI6)

**Response:** We considered the best available data when determining product-based benchmarks, and we believe our benchmarks appropriately recognize early action. We typically relied on emissions data reported under the MRR and consequently used production data voluntarily supplied by facilities for the same years.

The MRR data were first reported for 2008 emissions. In some cases, ARB had conducted industry surveys, or facilities had voluntarily reported to the California Climate Action Registry (CCAR). In those cases, we had alternate emission datasets on which to rely.

The “early action” emission reductions claimed by the commenter relies on a comparison to an emissions baseline in a period prior to the MRR reporting to ARB. Emissions levels prior to these actions were also not reported to CCAR by the commenter. We are not satisfied with the information submitted by the commenter thus far demonstrating that emission reductions have been achieved. In addition, an efficiency benchmark approach inherently rewards early actions because they are more efficient and will need fewer allowances to comply with the regulation than if they did not take early action.

## *Refineries/ Oil and Gas*

**C-7. Comment:** The recent modification of MRR to incorporate federal Subpart W equipment categories has directly impacted the Cap and Trade benchmark determination as these Subpart W equipment categories were not accounted for in the in oil and gas production sector benchmark values. Further, it is unknown how portable equipment, used in the oil and gas production sector and currently subject to an existing ARB program, is addressed in benchmark values. (WSPA5)

**Response:** At this time we do not believe that the modification to the MRR to incorporate federal Subpart W, including the coverage of portable equipment, will require changes to the calculation of the oil and gas extraction benchmark values. However, we will conduct an analysis to examine this issue and make any necessary changes through future rulemakings.

### **C-8. (multiple comments)**

**Comment:** We ask you to review and revise as necessary any portion of the regulation that will eliminate California jobs. Specifically, the reviews should encompass the benchmarking methodology, assesses a 20 percent penalty on some refineries, and of course, the trade exposure issue from imports from states like Washington, Texas, and of course, the foreign imports that are coming in. (CONOCO4)

**Comment:** We ask that you consider the potential for plant closures, leakage of jobs, and the possibility of our imports from our counties, disadvantaging California refining. Benchmarking of refineries creates winners and losers based on refinery configuration. The losers have to pay allocations to CARB for performing as less efficient refineries. Imports are not included in this penalty, giving imports from Washington, India and China a cost advantage and half of in-state refineries \$150 million penalty to share. (MILLERM)

**Response:** Please see the response to Comment C-8 in the second 15-day comment s and responses (Chapter V in the October FSOR) for a justification of benchmark stringency. Board Resolution 11-32 also directs the Executive Officer to continue to review information concerning the emissions intensity, trade exposure, and in-State competition of industries in California. It also directs the Executive Officer to recommend to the Board changes to the leakage risk determinations and allowance allocation approach, if needed, prior to the initial allocation of allowances for the first or second compliance period, as appropriate, for industries identified in Table 8-1 of the cap-and-trade regulation, including refineries and glass manufacturers.

## Glass

### **C-9. (multiple comments)**

**Comment:** GPI opposes the emission benchmarks and the cap adjustment factor that was established by the staff in the regulation; the benchmark for this industry.

The benchmarking cap adjustment factors for the glass container industry don't properly reflect this industry's early actions in reducing the greenhouse gas emissions that have been going on for the last 25 years, and are not adequately minimizing the risk of leakage in this industry. This industry is already competing against China and Mexico in glass containers coming into the state. If CARB does not adjust or have another look at these two items, we're afraid that the California glass plants are going to shut their doors and the 2600 union workers that are employed there will be put out of work. So we'd like you, as you go forward, to take a look at the cap adjustment factor and the benchmark for the glass container industry. (GLASSPI3)

**Comment:** The member companies of GPI worked long and hard with CARB staff in attempting to develop an equitable emissions benchmark for the container glass manufacturing industry. Unfortunately, we do not believe that CARB staff gave appropriate consideration to issues that we have raised. The proposed emissions benchmarks do not recognize the glass container industry's early actions to reduce emissions in California. Equally troubling, the proposed benchmarks appear to ignore the likelihood of leakage from California glass manufacturers to foreign manufacturers. In addition to meeting with staff repeatedly over the past three years, GPI submitted written comments on these concerns May 20, 2011, and again on August 8, 2011, and our individual members also submitted written comments. It is worth noting that there has been no formal response to any of the GPI comment letters, which we believe to be a significant procedural violation on CARB's part that has prevented an adequate public process. As stated in previous letters to CARB, GPI seeks the following changes to better reflect the early actions of the industry in California and to protect the industry from leakage: 1. Adopt a National Benchmark for the Container Glass Industry. The California glass container manufacturing plants are already among the most fuel-efficient facilities in the country. This is attributable to technology advancements and the high use of recycled glass containers (cullet), which significantly reduces both natural gas consumption as well as process-related emissions (from carbonate raw materials) thus resulting in some of the lowest CO<sub>2</sub> emission rates when compared to similar glass container manufacturing facilities in the nation. California's beverage container recycling law is supported by the container glass industry through fees on the industry. In addition, California glass container plants are by far the largest purchasers of recycled glass in the State. Glass can be infinitely recycled in a closed-loop process, making it the most environmentally friendly packaging container in the marketplace. California's glass plants use more cullet than facilities in states without post-consumer glass recycling laws, resulting in CO<sub>2</sub> emission rates that simply cannot be reduced further without jeopardizing production rates. To keep California glass container manufacturers in a sustainable production rate, the use of national data to derive the allowance benchmark should have been employed by CARB in establishment of the benchmark. 2. Averaging of 2005–2007 emission data rather, than a single year of

2009 data in establishing the benchmark. Even if CARB were to persist in using data only from California glass facilities, recognition of early reduction efforts by our industry and concerns about sustainability of the recycling market require using benchmark data supplied to CARB staff in 2009, which covered production and emissions data for the years 2005-2007. Instead, CARB staff has chosen to use a single year to benchmark the operations of the industry. First, the year selected, 2009, was unique because the glass recycling rate reached an all-time high up to that point. For this reason alone, 2009 is not representative and should not be relied on for a benchmark. Also, by choosing just a single, very recent year, the staff has failed to credit the industry for its early and ongoing actions to increase the use of cullet (recycled glass) to manufacture new containers. To capture and give appropriate credit for the industry's early action and to avoid the bias of a single year's results, GPI has suggested that an averaging of 2005–2007 emissions data be used. CARB staff presumably believed the 2005–2007 data was relevant because they have already requested and received GPI members' data for those years. (GLASSPI2)

**Comment:** Container glass uses carbonate raw materials as essential ingredients in glass manufacturing such as limestone (calcium carbonate) and soda ash (sodium carbonate). These ingredients, when melted, give off CO<sub>2</sub>. Similar to the cement industry, which received a special cap adjustment factor due to the inability to make cement without carbonate materials, glass cannot be manufactured without these essential carbonates. In the most recent version of the Cap and Trade regulation, CARB staff has extended the special cap adjustment factors to industries where the process-related CO<sub>2</sub> emissions equal or exceed 50 percent of the total CO<sub>2</sub> emissions. Due to the substitution of recycled glass for some raw materials, the container glass manufacturers in California have been able to reduce their carbonate-based CO<sub>2</sub> emissions to approximately 25 percent of the total CO<sub>2</sub> emissions. We have urged CARB staff to provide a cap adjustment factor which recognizes this unavoidable reality. The current version of the cap adjustment provisions of the Cap and Trade regulation should be revised to provide an appropriate intermediate adjustment factor commensurate with the essential use of carbonates in glass manufacture. These proposed regulations will only exacerbate these cost pressures and could lead to more production from overseas, and the possible closure of glass production in the state. Ironically, the net result could be an increase in GHG emissions due to more production from less efficient facilities and more shipping of containers from other countries. This is the epitome of the leakage concerns, which the legislature insisted that CARB consider in its implementation of AB 32. On behalf of the California glass manufacturing industry and its employees, I ask that the California Air Resources Board direct its staff to develop a more appropriate benchmark and a more equitable cap adjustment factor to protect the California container glass industry from leakage. (GLASSPI2)

**Comment:** As required by AB 32, CARB is charged with developing regulations which both recognize early reduction efforts and protect energy intensive/trade exposed industries. While the regulations currently before the Board acknowledge that container glass manufacture is an energy intensive/trade exposed industry, the regulations fail to adequately address the early reduction efforts by our company and by our competitors

in California and fail to provide adequate allocations of allowances to protect our industry from leakage. Verallia's investments in the Madera facility, which include a state-of-the-art combustion technology, in combination with the plant's voluntary utilization of high levels of cullet (post-consumer crushed glass) result in one of the lowest GHG emission rates per ton of glass produced in the U.S. Verallia, and the other container glass producers in California which have undertaken similar voluntary GHG reduction efforts, should be recognized for these early reduction efforts and not ignored in the development of a regulatory program addressing GHG emissions. What do we need in the Cap-and-Trade program? 1) We need the benchmark for our industry sector to recognize the early reductions in GHG emissions in our industry sector. This can best be addressed by establishing a benchmark based on the inventory provided to CARB staff in 2009, which included extensive data for the years 2005–2007. CARB staff has used data from these years in establishing benchmarks for several industry sectors and should do so for container glass facilities as well. The result of using this data to establish the benchmark for our facilities will increase the energy efficiency benchmark for container glass from 0.264 tons of CO<sub>2</sub>e/ton of glass produced to 0.31 tons of CO<sub>2</sub>e/ton of glass produced. We need this amendment to the regulation prior to its adoption. 2) We need the cap adjustment factor to recognize that 25 percent of our GHG emissions are the unavoidable result of melting limestone and soda ash (essential raw ingredients) and thus cannot be reduced further. While the most recent draft of the regulations carved out a separate cap adjustment factor for industries in which 50 percent of their emissions were unavoidable consequences of melting limestone (such as in cement manufacture), the cutoff point for this separate cap adjustment factor ignores the fact that the glass industry is similarly threatened with leakage and cannot reduce the irreducible. We provided a table showing the 25 percent cap adjustment factor in our September 27 letter to CARB staff. We strongly urge the rule be revised prior to adoption to recognize a separate cap adjustment factor for glass manufacture. (SMITHS3)

**Comment:** As a legislator representing a glass container plant and its employees, I am writing to express my concern over the fact that the proposed Cap and Trade Regulations to implement AB 32, which establish an emissions benchmark for the glass container industry, fails to meet the requirements of AB 32. Specifically, AB 32 required the California Air Resources Board (CARB) to adopt regulations that 1) ensure that entities that voluntarily reduced their greenhouse gas emissions receive appropriate credit, 2) minimize leakage and 3) consider overall societal benefits to the economy, environment and public health. CARB can rectify this situation by revisiting the emissions benchmark established for the glass container industry. Among the proposals that I understand the glass container industry presented to CARB staff, that were rejected, include establishing a national average benchmark and averaging the 2005–07 emission data rather than using a single year. Reconsidering these items would help the glass container industry comply and compete under the cap and trade regulations developed by the Board. (GALGIANI)

**Comment:** AB 32 requires the Board to minimize leakage and we understand the glass container manufacturers have offered solutions that would help in this regard.

Specifically, the industry has sought national benchmarking, which would recognize early actions and energy efficiency of California operations versus competitors elsewhere in the nation. The industry has also asked for averaging emission data from 2005–07 which is a more fair representation of the emission data for the industry, instead of using one year (2009). The glass container industry, though energy intensive, is a "green industry." The industry in California has taken great strides in the last 25 years to reduce emissions, much of which is attributable to California's container recycling law, which the industry helps to support through fees and by virtue of being the largest user of recycled glass. The glass manufacturers in our districts provide one thousand high wage manufacturing jobs. There are thousands of additional jobs in the supply, transportation and recycling industries associated with our glass plants. The State of California needs to be adopting regulations that reward investment in high wage jobs in California not punish and potentially drive these businesses from our State. (CASTLEG2)

**Response:** We considered the best available data when determining product-based benchmarks. We believe our benchmarks are sufficient to prevent leakage and appropriately recognize early action.

In developing the benchmarks, we typically relied on emissions data reported under the MRR and consequently used production data voluntarily supplied by facilities for the same years. The MRR data were first reported for 2008 emissions. In some cases, ARB had conducted industry surveys or facilities had voluntarily reported to the California Climate Action Registry (CCAR). In those cases, we had alternate emission datasets to consider.

For the glass sector, verified MRR data for combustion emissions for 2009 was determined to be the most accurate and representative data year and was used to calculate the benchmark, along with data for process emissions and production provided by the industry. Additional data for years 2005–2007 was collected by a voluntary survey. However, we determined that this information was not of the same quality as the verified 2009 data and could not be used in the benchmark calculation.

Please see the response to Comment C-11 in the second 15-day comments and responses (Chapter V in the October FSOR) for a justification of cap-decline factor decisions.

Finally, we note that we have provided written responses to all formal comment letters, including those from GPI, in this Final Statement of Reasons document.

## *Food*

**C-10. Comment:** We have been working a year-and-a-half now with the staff on coming up with a new benchmark. We've shown them why the old equation didn't work, and we presented new equations there. But we have yet to establish benchmarks for

industry that represent our actual operating procedures out there. The original benchmarks, which are set way too high at 85 percent, are not reflective of California, nor of the nation, which is where this was supposed to be going in the first place. So we need to establish that again. (CALFP5)

**Response:** Based on staff's analysis of existing data, we believe that our energy-based benchmarking approach, applicable in the food processing sector, is of appropriate stringency. This includes the benchmark for steam production efficiency of 85 percent that the commenter refers to.

## Leakage

### *Refineries*

#### **C-11. (multiple comments)**

**Comment:** The United Steelworkers has supported AB 32, even while we were questioning the issue of carbon leakage. I think in my discussions with people from the environmental community, there's some people who say, well, these companies are making plenty of money. And while it's in general true, just like super markets, they look at the performance of each site as return on investment and ask themselves the question: Is this producing the return that we want? So it's possible in the market that we have right now that there are some refineries that are struggling on the issue of competitiveness. And in the past few years, a refinery in Jalandhar, India has come on line. It's a very sophisticated refinery. It's now making 600,000 barrels per day of California Air Resource Board gasoline. Jalandhar, India, owned by a company called Reliant. And, therefore, we're concerned about the issue of possible job threats if some of these refineries that are on the edge of being non-competitive were to be even placed in a worse position. As you know, some of the companies are in relatively good shape in terms of AB 32 compliance. Some are not. And I'm not going to engage in trying to analyze why I think. But on a go-forward basis, there are some companies that want 100 percent allowances. And listening to the environmental side, there are some concern, well, just take the value of that money and run elsewhere with it anyhow. And I think it makes sense if the plan could be amended to say, okay, if we are going to give you the 100 percent allowance, but you—for the extra allowance, you can't trade it. You have to take that money. You have to put it—invest it in that facility on equipment that would help you get to that 90 percent benchmark. (USW4)

**Comment:** The California Labor Federation respectfully requests that when adopting regulations on October 20, the California Air Resources Board provides for a continued process to ensure that the burdens placed on California refineries are spread evenly. We strongly support the attached resolution which requests that the Air Resources Board adopt language to hold a public hearing to review and revise, as necessary, any portion of benchmarking regulation that will eliminate California jobs. We recommend that the Air Resources Board conduct this hearing no later than April 15, 2012, and that all parties, including representatives of organized labor, participate in a discussion of job retention and job creation. We also suggest that ARB include in the discussion of free

allowances and penalty allowances a dialogue regarding the impact on current California jobs that could be eliminated if the principle of fairness is not upheld, monitored and periodically reviewed. We respectfully request that you adopt this resolution at your October 20 meeting:

“Whereas, there may be unintended consequences on California refineries that are trade exposed and regulated under benchmarking criteria from adopting the proposed system of allowance distribution; and

Whereas, there are certain trade exposed industries that are susceptible to import leakages and loss of middle-class union jobs; and

Whereas, the allowance distribution system needs to be integrated with stakeholder participation towards solutions that bypass disparate impacts and offer the option of actual carbon reductions through design, build and investment in projects that will result in jobs created in California; and

Whereas, CARB recognizes a leakage risk of turning refineries into tank farms and thus eliminating thousands of union jobs in California while having an overall global increase in carbon emissions; and

Whereas, there are less than 15 refineries currently operating in California to provide clean fuels to consumers and because of business diversity and products manufactured among these refineries, as well as large consolidated versus smaller multi-location refineries, rewarding certain refineries with free allowances while requiring others to purchase allowances is inequitable; and

Now, therefore be it resolved, that in order to best achieve global carbon reductions, the California Air Resources Board shall conduct a public hearing to review and revise as necessary any portion of this regulation affecting petroleum refineries that would eliminate California jobs through global leakages of carbon emissions and increases in interstate and foreign import. This hearing of the CARB will be conducted no later than April 15, 2012, and that all parties including representatives of the building trades and other refinery worker representatives shall be participants in job retention and job creation discussions and include but not be limited to a discussion of allocation of allowances.” (CFL)

**Response:** As stated in Board Resolution 11-32, we will continue to review information concerning the emissions intensity, trade exposure, and in-State competition of refining in California, and to recommend to the Board changes to the leakage risk determinations and allowance allocation approach, if needed, prior to the initial allocation of allowances for the first or second compliance period.

**C-12. (multiple comments)**

**Comment:** Our biggest concern for this effort for this regulation still remains the same as it did in December. We believe the food manufacturing industry should be moved from a medium to a high leakage risk category due to the international domestic market competition and the inability to pass on costs. That said, Ag Council supports the language in Resolution 11-32, page 11, that allows staff to take a deeper look at food manufacturing. And we look forward to collaborating with staff on that project. (ACC6)

**Comment:** I respectfully ask the Air Resources Board (ARB) to revisit its decision to classify the food processing industry in the "medium leakage" category under the AB 32 cap-and-trade proposal and consider moving the industry to the "high leakage" category. Food processing is an extremely important industry in California, but it has limited ability to mitigate increasing costs and is extremely susceptible to domestic and international trade pressures. The "medium leakage" category does not properly recognize the increased cost pressures foreign competitors have been exerting on California food processors in recent years. For example, canned peach imports from China have more than tripled between 2006 and 2010, reducing already small profit margins for food processors in our state. Any future attempts to pass along costs generated by AB 32 will most likely result in job losses and decreases in economic production for the industry as foreign competitors like China enjoy generous subsidies and low production costs. As a \$50 billion industry in California, food processing is an integral component of the Central Valley's economy. It complements California's \$35 billion agriculture industry well, processing millions of tons of raw fruit, vegetables, nuts and dairy products annually. With more than 3,000 food processing plants calling the Central Valley home, more needs to be done to ensure the industry can compete with foreign companies and continue to bring revenue back to the State. Furthermore, because California's food processors have voluntarily taken measures to reduce greenhouse gas emissions and reduce energy use, ARB regulations should reflect their positive contributions to the environment and the agricultural industry. Reclassifying the food processing industry under the "high leakage" category would incentivize them to continue their efforts. For these reasons, I respectfully request ARB look again at its decision to categorize the food processing industry under the "medium leakage" category classification. (CANNELLA)

**Comment:** The California League of Food Processors echo the concerns of both the Cal Chamber and the AB 32 Implementation Group in terms of the incompleteness of this particular regulation at this particular time. It's best to remember that industries like ours, the medium-size industries, are the job generators for California. We are going to have to generate jobs in order to get out of this recession. If AB 32 continues to go over the next four or five years, we're going to have a very difficult time increasing our processes as well as eliminating this. And it's going to cost us a lot of jobs and a lot of money. That said, I just want to say that the regulation for us is still incomplete, and there still seems to be a misunderstanding how this is going to impact agriculture and food processing. One of the examples is the NAICS code. Food processors are still

lumped together under a three-digit NAICS code. That means you're putting seasonal processors such as fruit and vegetable, lumping them in with meat processors and dairy processors that operate on a 24/7/365 day operation. These are completely different operations, and you cannot lump us all together just in one. You need to understand what the differences are in our industry. (CALFP5)

**Comment:** We've been set at a medium leakage risk. This means we are going to be increasing our costs for each compliance period. You've got to remember, we operate in some of the highest unemployment areas in the state. These people are not facing 12 percent unemployment. They're facing 18 to 24 percent unemployment. These are communities of 5,000, 15,000 people where if we end up throwing hundreds of thousands of dollars away on allocations means that end up losing 50, 100 people. And that ripples down to those communities. The food processing industry represents less than one-half of one percent of the total emissions in California. And that's based on the most recent data that's just been posted by here. And we feel that you need to understand our industry, and you need to understand the impacts of AB 32 and specifically of the cap and trade on us before you roll us into this. It may be a better idea to move us into this on 2015 as we have one of the largest natural gas users here. This will give us time to understand the industry and what the impacts are going to be. Finally, I would like to thank the Board because you will be taking up another study to study our industry. And we are appreciative of that. It just goes to show that really you need to understand the industry before you put us into this. (CALFP5)

**Response:** As stated in Board Resolution 11-32, we will initiate a study to analyze the ability of the agricultural industry, including food processors, to pass on regulatory costs to consumers, given domestic and international competition and continually fluctuating global markets. If necessary, regulatory amendments will be made through future rulemakings.

## D. AUCTION

**D-1. Comment:** I oppose the part of the plan that will put a tax on emission allowances, and am particularly concerned with the auctioning process. I've been to several auctions. I see how things go. People act irrationally. Things become interesting. I'm particularly concerned about that environment and how that works. (RILEY)

**Response:** We recommended that allowances be distributed through auction, rather than relying entirely on direct allocation, to prevent recipients from obtaining windfall profits and to ensure that allowances are properly priced when they enter the market. Individuals may act irrationally at auctions, in part due to the multiple-round format many live auctions use. We recommended a single-round, sealed-bid auction so that each entity has the incentive to base its bids on their own value for the allowances. The uniform price format reduces the risk to an entity that it may overbid, since all winners pay the price of the last bid awarded. Also see the response to Comment C-4 of this document.

### D-2. (multiple comments)

**Comment:** Modify the GHG Cap-and-Trade Rule Proposed Resolution Text as follows:

BE IT FURTHER RESOLVED that the Board directs the Executive Officer to evaluate the operation of the market if one-third or more of the ~~all~~-allowances are sold from ~~any tier of~~ the allowance reserve, to report to the Board on the reasons the reserve is being depleted, and to make recommendations prior to any subsequent auction ~~within six months~~ for any corrective action that is required to ensure that the cap-and-trade program's cost containment mechanisms remain robust. (PGE6)

**Comment:** Mitigate the price containment through an allowance price containment reserve contingency plan. (PGE7)

**Comment:** While we applaud the creation of a cost containment reserve, we share the concern about the market we're creating. The Regulation does not create a mechanism for refilling the reserve if it's exhausted. The Adaptive Management Program does not reach market issues. (SCPPA9)

**Response:** In Resolution 10-42, the Board directed staff to monitor depletion of the reserve and make recommendations to modify the program if the reserve is depleted. No further response is needed because the comment addresses program operations, not the regulation.

## E. COMPLIANCE OBLIGATION

### Military

#### E-1. (multiple comments)

**Comment:** We've provided detailed comments on the unique issues this regulation raises with military facilities, so I won't belabor that point, except to say that any future discussions with staff will have to be consistent with the issues we have raised in those correspondences. You've also heard from Navy's leadership in D.C. on this important matter. We remain committed to work with California to demonstrate reductions from federally mandated greenhouse gas and energy reduction mandates. These exceed those called for in this regulation. The DOD also demonstrates tremendous leadership in the development of alternative energy sources and renewable energy development. Despite your warning, we would like to thank your staff for their hard work in crafting a temporary solution to concerns. We look forward to working with them and the Board on a long-term program that reflects the military's commitment to this issue as well as the limitations we face with the current program. (USDON2)

**Comment:** Currently, one installation in the State exceeds the applicability threshold of the Cap and Trade Program. This is the Marine Corps air ground combat center at 29 Palms. This base is a vital national security asset as demonstrated by the fact that 95 percent of marines require training at this base before deploying overseas. Now, in the military, we have a special challenge. We need to meet our national security requirements and the national security strategy which itself is dictated by Congress and President, while at the same time meeting a broad range of environmental mandates. Many of these mandates require reductions in greenhouse gases. For example, President Obama issued Executive Order 13514 in 2009. In the case of the combat center, they have a comprehensive plan to meet those mandates. They are on track to reduce greenhouse gases by 34 percent by 2020, which exceed the goals of AB 32. Some of the ways they will be achieving this is by the use of greater renewable energy. Currently, they get about five percent of their electricity through PV. They also have one cogeneration or combined heat and power plant. And next year, a second one will come on line. When this comes on line, the base will be essentially independent of the grid, which will be important for the base to meet its energy security goals. And also very noteworthy is with the second CHP plant, the base will produce about half as many greenhouse gas emissions as power purchased from the grid. As currently designed, the Cap and Trade Program does present legal obstacles to participation by the Department of Defense. Those obstacles we have described and comments we have previously submitted to the Board. We are very appreciative of the dialogue of the past year with the Board and the staff to work through those things. We do look forward to working with you to establish a framework for ensuring that the military reduces greenhouse gas emissions in a way that is consistent both with our national security mission and the goals of AB 32. (USDOD4)

**Response:** As part of the second 15-day changes to the regulation, section 95852.2(c) was added to the regulation to exempt emissions from military

facilities from holding a compliance obligation through December 31, 2013. The Department of Defense (DoD) has raised several legal and practical issues related to its participation in the cap-and-trade program. While we do not agree with all of DoD's assertions, we will continue to evaluate options related to DoD's ability to reduce GHG emissions. We also recognize that the military does not produce a product, and is, therefore, unable to pass the carbon cost on to a consumer or end user. These reasons combine to support a temporary exemption. This exemption allows ARB and DoD to work together to craft a direct regulation for military facilities that would achieve the equivalent GHG benefits of participation in the cap-and-trade program without potential ramifications to national security interests.

We look forward to coordinating with the military to better understand their written concerns and implications for national security. Any alternative direct regulations will be designed to ensure that the military also reduces its GHGs, as other facilities are required to do under the cap-and-trade program.

### **Waste-to-Energy Facilities**

**E-2. Comment:** We would appreciate you directing staff to work on additional flexibility for the procurement of biomethane resources to achieve the zero GHG treatment these resources deserve during the initial implementation of the program. (SMUD5)

**Response:** Section 95852(b)(5) requires that electricity generated from biomethane, in order to receive a zero emission factor, must meet reporting requirements pursuant to the MRR. This is added to ensure that claims for electricity from biomethane are supported by the reporting of all data necessary to demonstrate that the electricity is not subject to a compliance obligation.

**E-3. Comment:** ARB should also address resolution language from previous resolution not addressed in the past year, including the shift on waste-energy by staff despite Mayor Loveridge's resolution amendment. (CCEEB5)

**Response:** We are committed to working with all stakeholders on issues related to waste diversion, including the waste-energy sector, as detailed in the Board resolution. Both resolutions related to the cap-and-trade regulation are still applicable. Board Resolution 11-32 directs the Executive Officer to continue to work with Cal/Recycle and other stakeholders to characterize lifecycle emissions reduction opportunities for different options for handling solid waste, including recycling, remanufacturing of recovered materials in state, composting and anaerobic digestion, waste-to-energy facilities, landfilling, and the treatment of biomass. The Executive Officer shall identify and propose regulatory amendments, as appropriate, so that AB 32 implementation, including the cap-and-trade regulation, aligns with statewide waste management goals, provides equitable treatment to all sectors involved in waste handling, and considers the

best available information. The Executive Officer shall report to the Board on progress in summer of 2012.

**E-4. Comment:** There is a recent change to the proposed regulations that raises concerns for the SFPUC and wastewater treatment agencies across the State. Section 95852.2, Emissions without a Compliance Obligation in the proposed regulations posted on July 25, 2011, under the category Fugitive and Process Emissions, previously included the following line item: (5) CH<sub>4</sub> and N<sub>2</sub>O from municipal wastewater treatment plants. This language was removed without explanation from the September 12, 2011 proposed regulation. The SFPUC opposes this deletion and urges the Board to reinstate it in the future as part of a separate regulatory action. The deletion of this language means that municipal wastewater treatment plants, many of which already capture CH<sub>4</sub> biogas to the extent possible and combust it or generate renewable electricity, or may have N<sub>2</sub>O emissions from efforts to better protect water quality, now may have a compliance obligation based on un-captured process emissions. To our knowledge there were no negative comments regarding this particular provision in the comments for the July 25 posting, and we urge the Board to restore the compliance obligation exemption. In the City and County of San Francisco's comments submitted in response to the July 25 posting, we urged the Board to adopt additional incentives to expand renewable electricity generation through biogas-fueled combined heat and power systems instead of the flaring of wastewater treatment plant digester gas. Those incentives might include the streamlining of offset protocols for municipal wastewater treatment plants to be paid to increase biogas capture and renewable energy generation. To date, these suggested incentives have not been included in the proposed regulation. Saddling municipal wastewater agencies with a compliance obligation, instead of using the substantial resources available through offsets, will reduce public funds available for other important programs that protect and improve water quality. Again we urge the Board to restore the compliance obligation exemption for process emissions of CH<sub>4</sub> and N<sub>2</sub>O from municipal wastewater treatment plants and instead make it easier for wastewater agencies to receive funding through offsets to capture more CH<sub>4</sub> and N<sub>2</sub>O. (SFPUC4)

**Response:** We removed Subsection (5) CH<sub>4</sub> and N<sub>2</sub>O from municipal wastewater treatment plants under Section 95852.2, Emissions without a Compliance Obligation, in the proposed regulation posted on July 25, 2011, because emissions from CH<sub>4</sub> and N<sub>2</sub>O from municipal wastewater treatment plants are based on emission factors and not actually measured. These emissions are not required to be reported under the MRR, so they were taken out as a general cleanup of provisions under the cap-and-trade regulation.

**E-5. (multiple comments)**

**Comment:** CARB's own analysis completed for the Renewable Energy Standard concluded that Waste-to-Energy ranked number one among renewable sources for greenhouse gas benefits above solar and wind. CalRecycle concluded the greatest degree of GHG reductions from the waste and recycling sector is achieved by maximizing energy recovery from waste. The European Union Emission Trading

Scheme (EU-ETS), the European Environment Agency, federal GHG bills sponsored by Senator Boxer and by Congressmen Waxman and Markey, and the Clean Development Mechanism under the Kyoto Protocol all recognize and encourage Waste-to-Energy for its Climate Change benefits. CARB points to the RGGI (the Regional Greenhouse Gas Initiative) as an example of a Cap and Trade program not supporting Waste-to-Energy, but under RGGI Waste-to-Energy is excluded because the facilities generate electricity from municipal solid waste and RGGI has no mechanism to account for the lifecycle benefits of Waste-to-Energy. A RGGI approach is the approach Waste-to-Energy supporters recommended to the agency. (WM5)

**Comment:** CARB staff in July 2011 said they supported a lifecycle analysis that concluded Waste-to-Energy is a GHG benefit. This summer CARB excluded Waste-To-Energy based on a lifecycle approach that followed accepted regulatory approaches. A discussion draft of the regulation fully exempted the existing permitted Waste-to-Energy facilities in the state from compliance obligations. However, CARB staff later decided to rely on unverified models to support a decision to include Waste-to-Energy in the Cap and Trade Program. Facility closure will increase transportation and its impacts on energy consumption and the environment, increase disposal costs, and make meeting recycling goals more difficult. Waste Management urges CARB to reconsider imposing a compliance obligation on California's three existing WTE facilities. (WM5)

**Comment:** There is no other greenhouse gas program in the world that regulates waste to energy as CARB is proposing to do without considering the life cycle assessment of it. We would just urge you to keep the door open for further discussions and hopefully we can work with you to come up with a reasonable solution to keep existing waste to energy facilities operating and working in California. (WM6)

**Comment:** I'm here to talk about the Waste-to-Energy issue that we've spent the better part of three years talking about. Seventy-two cities, unincorporated areas of L.A. County, a bipartisan group of legislators, international experts and, for a short time, even CARB staff supported an exclusion for these facilities. The U.S. EPA, CalRecycle, international experts and, for a short time, even the CARB staff supported the analysis that came to this conclusion. Last December, Mayor Loveridge introduced a Resolution that had three actions in it. The first action was to find a mechanism to satisfy the risk of emission leakage. Staff has been working on this with us very diligently, but it's not completed. Find a mechanism to satisfy all compliance obligations. This has not happened. Report back to the Board on all the progress of this. This has not happened. Consequently, there is a lot of undone work here as part of the original Resolution. Staff said in the presentations that we're part of the electrical sector. We are not. We're waste management facilities.

A by-product of being waste management facilities is doing what we've been asked to do over the years, produce renewable energy. It goes to the goal that Chairman Nichols talked about, reducing reliance on fossil fuels. We're doing what we can as to that end. But I think we're being penalized unfairly. Staff in the current Resolution is asking for a comprehensive Waste Management Plan. This really can't happen

because by including us in the cap and trade sector, they've already picked the winners and losers in this game. That's not fair. We need to continue the work that started and come to more equitable solution. I'm asking that you re-insert the original language that Mayor Loveridge introduced in December. That work has not been done. I'd like to see that go back in and continue to work with that. And also there is a current Resolution in the package, which is asking for this comprehensive solid waste management overview. We'll go ahead and support that. We think there should be a comprehensive analysis. But there has to be time certain on this. This is open ended. This is an issue that needs to resolve now, not two or three years in the future. So we request it be time certain, this be completed by the end of next year, but also that there be at least quarterly reports back to the Board so you could figure out where the status of this is. (LASD6)

**Response:** There are important policy reasons to include waste-to-energy facilities in the cap. The cap-and-trade regulation is designed to both place an enforceable and declining cap on greenhouse gas emissions and to send a price signal to encourage more efficient use of energy. As part of this program, it is important to create a level playing field in order to send a consistent price signal. If ARB were to remove waste-to-energy facilities from the cap, it would inappropriately incentivize electricity generated by these facilities, since they would not be subject to the price signal.

Generators of electricity are not eligible for free allocation of emissions allowances because we believe that the cost of allowances can be passed on to the consumers of the electricity. Free allocation of emissions allowances is only for sectors at risk for emission leakage. We do not believe, and data has not been provided, that shows that the three waste-to-energy facilities are at risk for emissions leakage.

We did not modify section 95852.2 to provide a full exclusion from compliance obligations for waste-to-energy facilities. However, we continued excluding the biogenic fraction of MSW in section 95852.2(a)(7). We also modified this section to remove restrictions on the exclusion when the biogenic fraction of MSW is converted to a clean-burning fuel.

By including these facilities under the cap-and-trade program, the facilities will have an incentive to reduce fossil-fuel emissions, either through new technology or increased use of biomass-derived fuels. The commenters have not demonstrated that GHG emissions from waste-to-energy facilities are lower than GHG emissions from diversion of the waste to landfills. Also, from an equity standpoint, we include all electricity generation sources in the cap-and-trade regulation.

Board Resolution 11-32 directs the Executive Officer to continue to work with Cal/Recycle and other stakeholders to characterize lifecycle emissions reduction opportunities for different options for handling solid waste, including recycling,

remanufacturing of recovered materials in state, composting and anaerobic digestion, waste-to-energy facilities, landfilling, and the treatment of biomass. The Executive Officer shall identify and propose regulatory amendments, as appropriate, so that AB 32 implementation, including the cap-and-trade regulation, aligns with statewide waste management goals, provides equitable treatment to all sectors involved in waste handling, and considers the best available information. The Executive Officer shall report to the Board on progress in summer of 2012.

## F. CO-POLLUTANTS

**F-1. Comment:** Breathe California and Coalition for Clean Air are writing to express recommendations for strengthening the proposed Adaptive Management Plan to protect public health. We appreciate the commitment in the Plan for ongoing monitoring and evaluation of the cap-and-trade program. The cap-and-trade program is unique in that it is a flexible compliance mechanism that requires additional strong oversight, monitoring, and evaluation to protect against unintended consequences to local and regional air quality and public health. We support and appreciate CARB's commitment to ongoing monitoring and evaluation of the cap and trade program. While greenhouse gas emissions are global in their nature, the same sources that emit greenhouse gases are more often than not also emitting toxic and criteria pollutants (co-pollutants). Given the flexible compliance options that are afforded by the cap and trade program, it is imperative that these co-pollutants are also monitored to ensure the program is not unintentionally resulting in their increase. We acknowledge the difficulty of accurately monitoring, evaluating and adequately responding to potential unintended consequences to local and regional air quality and public health. (CCA5)

**Response:** See the response to Comment F-1 in the 45-day comments and responses (Chapter III of the October FSOR) and response to Comment F-2 in the first 15-day comments and responses (Chapter IV of the October FSOR).

### Environmental Justice

**F-2. Comment:** There has to be a better way to start the Cap and Trade program instead of causing such an increase in fees for minority communities and small businesses. I don't think you considered lower income groups when you decided to do this. (AWSINC2)

**Response:** See the response to comments F-1, F-4, and C-36 in the 45-day comments and responses (Chapter III of the October FSOR) and response to comment H-6 in the first 15-day comments and responses (Chapter IV of the October FSOR).

**F-3. Comment:** The public support from low-income communities and communities of color are the reason that AB 32 survived the attacks from big oil companies last November and they are watching. Greenlining looks forward to working with you to ensure there is an equitable distribution of economic and environmental benefits and burdens of climate change as well as our efforts to combat it. (GREENLINING3)

**Response:** We look forward to working with you as well. Comments on your specific concerns can be found in the response to Comment F-1 and C-36 in the 45-day comments and responses (Chapter III of the October FSOR) and the response to Comment H-6 in the first 15-day comments and responses (Chapter IV of the October FSOR).

**F-4. Comment:** We strongly oppose the regulation adoption as shown in our specific comments. You heard from our many dozens of community members who drove all night from all over California last August to oppose cap and trade. They also protested the severe adverse impacts in communities of color suffered due to the extreme air pollution in California that is not being addressed as required in which CARB has acknowledged could be made even worse by the regulation. The regulation certainly does not maximize the reduction of co-pollutants as required by AB 32. So we're here again today, and despite promises, the cap and trade regulations have not gotten any better. They already failed to address harmful and ineffective offsets, fraud, over-allocation, banked credits in early years causing failure to reduce greenhouse gases in later years and many other issues, one of which was brought up earlier today. Staff has added exemptions, the worst possible benchmarks for oil refineries using secret data and changes to the definition of permanent reductions, so that permanent now means a finite time period. I did want to thank Supervisor Roberts for bringing up the problem of taking money from local refineries and using that money to pay for offsets projects outside California. If CARB instead chose to clean up air pollution right here, we'd get massive public health improvements and create local jobs. For example, if CARB required that oil refineries replace old boilers and heaters, that would create scores of great union jobs, reduce millions of tons per year of greenhouse gases, and substantial co-pollutant reductions as well. This is a straight-forward plan the EJ community has repeatedly asked for. Ditch cap and trade. Require local refineries and other industries to clean up and modernize equipment here in California and keep and create jobs here. Instead, ten days ago, staff proposed this new Adaptive Management Plan, which has been schlepped into the regulation hiding gaping deficiencies with a completely inadequate ten-day notice period. This plan is apparently supposed to take place of actual mitigation for the potential negative air impacts CARB has acknowledged might occur due to cap and trade. The plan is a plan to plan later for the purpose of fixing cap and trade in an unidentified way after a third-party consultant is hired to figure out what to do and after CARB has a conversation with local air districts about how to develop the plan. But you can't adopt an idea as mitigation. Just to finish, CARB in its own document quotes the fact it may not be able to determine if there is an increase in pollution. And it may not be able to determine whether it was caused by cap and trade or other purposes. So we really urge you to re-think this. You've added a year on to your enforcement. You have the time to re-think this. Many people have asked you to do so. (CBE5)

**Response:** We appreciate the time and effort that community members invested to come to the Board meeting. However, a considerable amount of their concerns pertained to existing direct regulations, not the cap-and-trade program. As stated in the response to numerous comments (F-1, F-4, F-5, and B-13 in the 45-day comments and responses in Chapter III of the October FSOR; the responses to Comments F-3, F-4, and L-38 in the first 15-day comments and responses in Chapter IV of the October FSOR; and the response to Comment F-1 in the second 15-day comments and responses in Chapter V of the October FSOR) we describe our responses to these assertions about the cap-and-trade program.

**F-5. Comment:** I'm here today to express our opposition to the Board's approval of this regulation. I stand here in solidarity with my union brothers and sisters in our opposition, even if we have different perspectives on our concerns with this rule. The environmental justice movement has long advocated for direct regulation at the emission's source because those regulations create good union jobs. They promote California's green economy and create the situation for a just transition. They also pave the path for corporations to be good neighbors and protect jobs and public health in communities where they are located. The risks that working people and people of color will suffer as a result of this program have not been addressed. And we have given you our best. We have shared with you our personal testimony about the severe health realities our communities face every day. We have provided you some of the best, most cutting edge data and research about cap and trade's failures in every jurisdiction where it has been implemented. Failures not only to reduce emissions, but also to protect communities most vulnerable to localized pollution impacts. We provided information as to how a trading program will fail to maximize co-benefits to California's green economy. At every step in this process, you have dismissed those concerns. (CRPE5)

**Response:** We have listened to your concerns and taken them into account throughout the regulatory development process. However, as described in the response to Comments F-1, F-4, and F-5 in the 45-day comments and responses (Chapter III of the October FSOR), we disagree with your assertions regarding the "failures" of the cap-and-trade program.

**F-6. Comment:** The proposal, as proposed, will exacerbate disparate impacts of pollution on communities of color. You know, I think, and we believe it's proven beyond dispute, that pollutants do disparately impact some communities in our State. In particular, refinery emissions of GHG co-pollutants, like particulate matter, disparately expose low-income people of color at refineries in the State. That's proved. And California refinery emissions are the extreme high among U.S. refine regions, even on average. Your staff on the record has acknowledged that fact. So that higher emission intensity, when it's lower elsewhere and refineries are staying in business, that's unnecessary. Therefore, allowing continued emissions at that level, as your plan would do, would cause disparate impacts, whether or not the emissions increase. (CBE6)

**Response:** See the response to Comment F-1 in the second 15-day comments and responses (Chapter V of the October FSOR) and response to Comment F-1 in the 45-day comments and responses (Chapter III of the October FSOR).

**F-7. Comment:** We believe we proved that the emissions are very likely to increase and by amounts so large that you really can't ignore them. Refinery emissions are driven mainly by crude quality. Your staff has also acknowledged that's a driver. Your staff has also acknowledged that crude quality is changing quickly in the refining sector now. We believe we've shown that your proposal by giving free emission credits now—emissions credits that are cheaper than the price discounts on dirtier cheaper oil later

and then benchmarks that actually encourage retooling, adding capacity, making refineries more complex to refine the dirtier oil, that's almost a done deal. We've actually done a lot of peer reviewed research. I've done a lot of peer reviewed research. Why? Because ARB and other agencies, our groups, and the environmental justice community had to do it. So we can predict with great specificity how dirty it will be. It depends how dirty the oil gets more than anything else. We're talking about something in the range of 20 to 50 million tons per year of increased emissions due to your plan. It won't fix the climate. That will overwhelm everything else you talk about doing if you let that happen. It won't work, and it will violate environmental rights. Please, we urgently ask you—and it's not too late yet. Rethink this. Do not adopt this flawed, illegal, unjust plan. (CBE6)

**Response:** See the response to Comment F-1 in the second 15-day comments and responses (Chapter V of the October FSOR).

## G. DEFINITIONS

**G-1. Comment:** The Proposed Regulation’s definition of “additional” is stated as the “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.” There is no way to reach an objective (and therefore verifiable and enforceable) determination concerning what would constitute a “conservative business-as-usual scenario.” (WILLIAMSZ9)

**Response:** We conducted a thorough analysis of the business-as-usual scenarios for currently accepted offset protocols. “Business-as-Usual Scenario” is defined in the Regulation as the set of conditions reasonably expected to occur within the offset project boundary in the absence of the financial incentives provided by offset credits, taking into account all current laws and regulations, as well as current economic and technological trends. We cannot make the definition any more objective at this point because each additional protocol must have its business-as-usual scenario evaluated on a case-by-case basis as each protocol is developed through a public process. Once the business-as-usual scenario is determined for a given offset project, those conditions become the standard for additionality for that project type and are the reference for project implementation and verification.

The definition of “Additional” is flexible enough to allow for the inclusion of future offset projects, or for additional protocols which ARB could consider in future rulemakings. Should problems arise with the current definition of “Additional,” the definition could be amended to address these circumstances.

**G-2. Comment:** The Proposed Regulation’s use of a “reasonable assurance” standard in the definitions of “Adverse Offset Verification Statement” and “Less Intensive Verification” is further confirmation that the “verification body” is not being provided with an objective standard against which to compare the project and therefore cannot make a determination that that the project meets the Integrity Criteria. Establish a project baseline that reflects a conservative estimate of business-as-usual performance or practices for the offset project type. (WILLIAMSZ9)

**Response:** Each protocol requires the quantification of the reductions or removals achieved by the offset projects. In regard to quantifying GHG reductions, ARB will only issue offset credits when there is a high level of confidence that reductions actually occurred. The regulation employs a principle of conservativeness in the quantification of emissions reductions. This method ensures that the accounting will underestimate rather than overestimate any reductions when there is a high level of uncertainty. Each protocol provides clear criteria to support the generation of offsets that meet the AB 32 offset criteria. There is no subjectivity left to verifiers to assess whether or not the project meets

the AB 32 criteria. If the project is shown to meet the requirements of the protocol, then the resulting offsets do meet the AB 32 criteria. The commenter may be confusing the ARB protocol requirements with the CDM protocols, where the verifiers are allowed much more subjectivity in their review of the offset project data.

**G-3. Comment:** The use of the term “estimate” in the definition of “Project Baseline” inserts another acknowledgement of best guess subjectivity, rather than an objective, enforceable standard. (WILLIAMSZ9)

**Response:** The commenter is referring to the term “estimate” in the definition: “Project Baseline means, in the context of a specific offset project, a conservative estimate of business-as-usual GHG emission reductions or GHG removal enhancements for the offset project’s GHG emission sources, GHG sinks, or GHG reservoirs within the offset project boundary.” Even though the term “estimate” is used in the definition, each protocol includes very specific and objective equations to calculate the baseline conditions for an offset project. Those calculations are clear and enforceable.

## H. ECONOMIC IMPACTS

### Monitor

#### H-1. (multiple comments)

**Comment:** We are very concerned with the potential adverse economic and jobs impacts of overall AB 32 implementation. We ask that the adopting resolution for the Cap and Trade regulation incorporate instructions to the EO and staff to work with CEC, finance experts and stakeholders on measures to track and evaluate economic and jobs impacts of the Cap and Trade program. It is also of critical importance to identify economic indicators, such as changes in the consumer price index and energy (electricity, natural gas, and transportation fuels) supply and price volatility that will allow ARB and the state to evaluate and react to potential energy impacts of the program; and to evaluate and report on the impacts of the operation of the market from the sale of allowances from the reserve account and to ensure that cost containment mechanisms are robust. (WSPA5)

**Comment:** We note that the bifurcation that was noted by staff earlier this morning is not well founded. You need a comprehensive review of all the issues, not simply environmental, but you need environmental and economic issues analyzed. (WSPA6)

**Comment:** We ask that the ARB work with other agencies to monitor whether and to what extent the overall state economy is affected by the Cap and Trade Program. We close by stating the obvious: that continued employment in California is important, not only to maintain jobs in California for Californians, but also because jobs and facilities operating in California will ensure that AB 32 emission reductions will occur. (WSPA6)

**Response:** AB 32 requires the State Board to adopt greenhouse gas emission limits and emission-reduction measures that minimize leakage (*leakage* is defined as reduction of emissions in California offset by emissions increases outside the State). As part of the regular program monitoring, we will monitor for potential economic and emissions leakage. We will conduct evaluations sufficiently in advance of the end of each compliance period to allow for sufficient time to adjust the cap-and-trade program, if warranted, before commencement of the next compliance period. If we determine during the periodic review that the cap-and-trade program is not achieving the objectives as defined by AB 32, or if substantial, unanticipated adverse economic or environmental effects are identified (e.g., substantial leakage), we will recommend revisions for the operation and/or design of the program accordingly. Furthermore, we will contract with the University of California to perform additional leakage and market simulation analysis and provide consultation on market rules and oversight.

## General Economic Impact

### H.2 (multiple comments)

**Comment:** The fees being charged to the energy and oil companies will be passed down to small business and consumers and will have an adverse effect on their finances. There has to be a better way. (SBCC)

**Comment:** In our area, we have 16.2 percent unemployment. We live in an area that leads the nation in our air resources and we have alternative energy in our solar. But our main income and job producers is the petroleum industry or agriculture. Either way, you're going to be impacting us. I travel across the nation, and I look at things like diesel prices. And if you impose this 10 percent—and I buy my diesel in Oklahoma, you're going to be charging me 95 cents a gallon more, because every one of these costs are going to be passed onto me as a consumer. And I cannot afford one penny more in anything. I cannot help support one more homeless shelter. I cannot help one more unemployed family. I'm taxed out. And I just don't understand why people don't seem to get it. One-hundred percent of nothing is still nothing. When these jobs leave California because I filled up my truck over in Nevada or Arizona and I came over and I picked up my load of fruits, nuts, veggies, whatever, I had 200 gallons of gas. And I didn't have to get gas again until I got back into Nevada. So I didn't pay this precious tax. So I'm just speaking as a consumer. I know this is a job killer. And until we get these folks back to work, the young men, the veteran this morning said, we need jobs for our veterans. We need jobs for our veterans bad. We need jobs for everyone. And losing them to other states, while it may keep everything okay nationally, it's not helping California. California is destitute without doing something. I feel like the solution to the problem is let the business owners run their businesses, make a profit. Profit is not a dirty word. Incentivize the individuals who make those profits. And tell the young woman or man who's getting the hand-out or temporary assistance, look what you can achieve if you try. It's available. (MAPLES)

**Comment:** Our goal at the Chamber is to foster a healthy economic climate for our businesses. And also very important is to be able to provide responsible growth opportunities for our Chamber members. With the current state of California's economy, our mission to foster that type of climate has been more challenging than it's ever been before, specifically in my last 11 years as part of the Chamber of Commerce. As a small business owner myself, I can honestly say that my business, much like many of the other members of our Chamber of Commerce, we simply can't afford an arbitrary price on carbon. We're concerned because even if we, as small businesses, don't have to pay directly for greenhouse gas emissions, we do know that these costs are going to come from the higher energy costs that will be associated with the costs of producing products that we then have to sell to our customers. We're also concerned because oftentimes in order to stay in the black to remain profitable, these large companies that will be responsible for paying these added costs, we believe that more than likely they are going to have to cut back on a lot of the purchases of products and services they get from our Chamber members. We're very concerned because it's those products and services that we provide to the larger companies that often are the key elements

that help our businesses stay profitable and allow us to keep our employees and even hire more employees. Right now, the number one priority in the state of California should be protecting and creating jobs, especially protecting those businesses that create those jobs. I'm very concerned, because quite frequently, I've been getting a lot of requests and I've seen a trend from other states, like Nevada, for example, to attract businesses to take them from California to their state, always claiming that their business climate is friendlier and, hence, more conducive to profit. We respectfully urge you to correct a serious flaw in your cap-and-trade regulation before putting even more jobs at risk. (SBLC)

**Comment:** I'm particularly worried about the cap-and-trade regulation, because it's clear that the emissions allowance tax, there will be much higher energy prices and that businesses will be passing those prices onto their customers. That means I'll not only be paying more directly for the utilities and gas, I'll also be paying more for things I use every day. I want AB 32 to succeed, but not by reducing my businesses carbon footprint to zero because the costs would really put me out of business. Now, I have somewhat of a unique business in that I don't have to transport anything. Most of the waste that I recycle goes by Fed Ex right out of the state. There is some carbon footprint there, but it's not from me as a small business person. In the one thing that I want to emphasize is water. I hear a lot of talk about water. And one of the biggest use of water is the utility companies. There is a new technology out called atmospheric water generation. At some point in time, I hear people talking about cap and trade. We need a cap on the tap, because eventually people are going to start revolting because of the price of water going up. And I think that if there was a way, a demand put on water districts and water companies to generate drinking water atmospherically, it wouldn't cost \$550 per acre feet to transport water from one location to another. So I think that we are on the horizons to some things that are going to occur in the next couple years. And it's already happening in Davis and Stockton where the cities no longer can afford to keep up with the price of water. Therefore, we're going to have to figure out a better way atmospherically to provide and generate water to those people in those communities that can't afford it. (AWSINC3)

**Comment:** Our veterans are very concerned, both in businesses and others. Most of the veterans live in regions that have high unemployment rate. Now, the regulation being proposed now would require California manufacturers to pay CARB tens of millions of dollars throughout the years. This money could cause companies to stop hiring or even lay off employees. That's why the veterans are really worried. They're coming from Iraq fighting our wars and now looking at unemployment lines as it is now. And with this, they may be looking at more. We have a lot of veterans working for manufacturers. CARB does not need to take allowances for manufacturers in 2013. They have the necessary reductions included in the declining cap. We, as the veterans and the local community, ask you to re-think taking money from California manufacturing sector and redirect this money, as it were, to private venture capital into the businesses that would not survive without subsidies. (AGIF3)

**Comment:** In L.A., we're already feeling the effects of AB 32. Through the laws and policies, we have seen a substantial increase in energy costs. The Los Angeles Department of Water and Power already faces enormous costs to comply with the renewable portfolio standard. For example, we already have high rates right now in Los Angeles, and they're asking for higher rates because they need to comply. Those costs get passed down to us, to the consumers. We simply can't afford a new emissions allowance tax on top of everything. This is not a case of just basically taxing the large emitters. But those costs travel down to the consumer, to small businesses, and our communities and our families. Some will argue that they need to put a price on the use of carbon as a conservation measure. But we say and I say representing thousands of businesses in Los Angeles and in the country that we don't need any such regulation or tax to pull back and to conserve. We operate on such thin margins. The economy is so tight right now that we're trying to do everything that we can to cut down on the costs so we can survive, so we don't have to down size, so we can keep goods and services in the community. And you know, we have a stake in these issues. I know we've come here. I've come here in the past, and it almost seems like it's a ho-hum status quo. I really implore to you that we have a stake. We have real people and real guidance communities that are looking to you for your and direction. You know, this is not a concept where the whole the whole world is participating. It's country, California by itself. And you, yourself, have acknowledged in the past that cap and trade cannot succeed without a regional effort. And clearly, California is doing it by itself. And it's making our community, our state business unfriendly. We're asking you, please, take a look at us. Just don't take us as a group of people coming in and trying to plead our case. As a representative of the California Hispanic Chambers, we represent over 600,000 businesses and hundreds of thousands of family members and millions of consumers. So I ask you to eliminate this tax. And we see it as an unaffordable increase. And I want to thank you very much for your patience. (LAHISPCHMBR2)

**Comment:** By putting a price on emission allowances, you are, in effect, imposing a multi-billion dollar energy tax, not just on the regulated entities, but all businesses and consumers in the state, small and minority owned businesses, which make up the minority of our businesses, will suffer the most as they operate on very narrow margins. As my colleague said previously, on very narrow margins to begin with, because of this new energy tax, they are likely to have to lay off workers, who in turn will lose the wages and benefits upon which their families depend. This agency has always maintained that to be effective, a Cap and Trade Program must be part of a regional multi-state effort, but the other states in the Western Climate Initiative have decided not to go forward at this time in order to protect their economies. This will put our businesses at even a greater competitive disadvantage than we are already at. The Scoping Plan acknowledges that California, acting alone, cannot materially impact worldwide climate change. Under the circumstances, forging ahead with a California-only cap and trade policy that includes arbitrary fees for emissions allowances will be a little more than expensive, but an effective gesture that will further harm our businesses, our communities, and our economies. The California Hispanic Chambers of Commerce urges you to eliminate these superfluous costs before finalizing a cap and trade policy. (CAHISPCMBR2)

**Comment:** I'm concerned about how these emission taxes and, in general, how this will have impacts on our families, in particular the impacts on the higher energy costs that will be incurred and then consequently what will happen to our jobs as well as to all the impacts, residential and commercial. I'm deeply concerned especially in this environment of the already large losses that are incurred on this economy, what the further onset of higher energy costs and therefore layoffs will have on our environment as it stands now and particularly going forward. And worse yet, how this plan in general looks at energy growth and not just sustaining where we're at, but becoming a global economy, which we should be thinking about ever more so and the impacts of what we have and how we do things, not just here, locally, or statewide or even nationally but globally. (RILEY)

**Comment:** We urge you to revisit the economic impacts of this proposal and eliminate provisions such as the emissions tax before finalizing the regulation. (GORDON2)

**Comment:** We just want a level playing field to give our companies a chance to be competitive so that we could maintain our jobs. And when you sit and think about this law, think about us. Just think about us. We want to be part of the solution, not a problem. But we do want to still have opportunity to earn a good living for our families. (SIMMONS)

**Comment:** I just hope that the companies and the Board and this bill, I just hope we can come together and come to a resolution and re-think this or come up with a better plan. I'm not saying we're against it. We're for it. But give us a chance to react to it in a timely manner. And most of all, I believe blue. I believe red, white, and blue. And please don't bring the east coast to the west coast. (VINES)

**Comment:** If this impacts us economically, no other state will buy into it. No other nation is going to buy into it. (ITZIGHEINE)

**Comment:** Having heard a lot of the conversations that go back and forth, I'd like to give you some economic numbers that go with this. I represent 80 members. If the 80 members lost their job because we've been told if we were no longer be able to make a profit, we will cease to run the refinery. With 80 members losing their job would cost the State \$761,000 in State taxes in the first year. Every ten weeks, you would lose approximately \$1.2 million of income in the local economy. That would be gone. If you multiply that times ten, that's what you'll get if ConocoPhillips leaves this State. Your unemployment rate would then go to \$36,000 a week in the Santa Maria area. And in a year, you would pay \$936,000 in unemployment. If consumers drive the economy, and they're 70 percent of the economy, you've just taken two-thirds of the economic spending of these people and replaced it with the cost to the State. That doesn't sound like very good business. You talk about reducing California refining costs or petroleum. We just heard that you're going to drive the EPA standard to 50 or 55 miles a gallon in 2025. In 14 years, you're going to get most of what you want to do in two years without the chaos that it will cause. (SWADER)

**Response:** The cap-and-trade program is a key element of an overall strategy to reduce California's GHG emissions to 1990 levels by 2020. This market-based program is used to supplement, rather than replace, direct regulation approaches. It is also designed to work in concert with other measures, such as standards for cleaner vehicles, low-carbon fuels, renewable electricity, and energy efficiency.

We understand the concerns raised by these commenters, and we recognize that there will be price increases from the cap-and-trade program. However, we do not believe that these price changes will result in large negative impacts to the state economy. Table N-3 and Table N-7 of the Staff Report highlight estimated changes in energy prices and resulting economy wide estimates of impact. The estimated impacts show relatively small changes in economic growth and employment when compared to growth otherwise expected over 2007 to 2020. Please see Chapter VIII and Appendix N of the Staff Report for additional information about our economic analysis of the cap-and-trade regulation.

The cap-and-trade program does not specify how or where emissions reductions will be made. Reductions will be made by covered sources if the cost of making reductions is less than the cost of acquiring allowances, thereby minimizing price increases. Further, free allocation to some covered entities at the beginning of the program will assist with transition and reduce the potential for economic leakage. The regulation is also designed with cost-containment mechanisms such as banking, limited use of offsets, and an allowance price containment reserve.

For non-covered sectors of the economy, individual households and businesses are not expected to make rapid or extreme changes in their purchase decisions of energy-consuming devices (e.g., appliances or automobiles). Devices have useful lifetimes and have to be replaced at some point. The responses to cap-and-trade will be to slightly shorten the useful lifetime of the devices. Therefore, individuals may replace the devices sooner and may choose devices with higher efficiencies than they would have otherwise chosen.

Our economic analysis evaluated the impacts of the regulation on both small businesses and individual consumers. Based on analysis of data from Dun and Bradstreet, we found that the small business sectors with the greatest percentage of their revenues spent on electricity and natural gas were primarily service-related and serve local markets. Out-of-state businesses cannot serve these markets. As a result, most California small businesses are not likely to face competitiveness issues relative to out-of-state businesses. Under the likely range of allowances prices, most small business sectors experience less than a 2 percent change in the share of revenue spent on energy.

There are existing programs that will help households and business identify

energy-saving opportunities and provide assistance in making efficiency improvements. Finally, auction revenue could be used to reduce or eliminate negative impacts to most individual households.

## **Free Allocation for Leakage Protection**

### **H-3. (multiple comments)**

**Comment:** There is concern that this rule is seriously flawed. The decision to eliminate up to 10 percent of free emission allowances will have the effect of increasing energy costs. This is of critical interest to small and minority-owned businesses and communities of color since we spend a higher percentage of our budgets on energy and can least afford even small increases in any cost, especially those for utilities and fuel. We'll be hard hit when the cost of food, transportation, clothing, and other necessary items goes up as cap and trade costs are passed along because we are the end users. Our small businesses are worried that in order to pay the bills under this regulation, we'll have to lay off workers. Families are worried about losing paychecks and health care benefits, at the same time, the cost of living will be going up under cap and trade. Small and minority owned businesses are worried about losing customers who can no longer afford to buy their products and services because of cap and trade-related costs increase. It doesn't appear that the economic ramifications have been sufficiently explored. Throughout the AB 32 regulatory process, stakeholders have been told, "Don't worry. There will be no cost or economic pain." I'm here to tell you that we are worried, and we would like to see you modify this rule to eliminate sources that create the pain such as the emission tax. (SBCC2)

**Comment:** Our company is a job provider. We just purchased a Los Angeles-based company for \$770 million, 2900 employees. And they purchased my little company back ten years ago for a nice figure. As an entrepreneur, I had a nice chance to grow my business. I had 19 employees. And I think that is what's at stake here. It's kind of troubling to me to see that the carbon offsets that we're going to be debating and the haircut I keep on hearing about, that these boats that come into the Long Beach harbor and L.A. to be off-loaded, they don't have the constraints. They don't deal with the same issues that we do. We need to keep our domestic production and our domestic energy policy to help the economy of Bakersfield and of California. We are the highest generating revenue base in the state through fuel taxes and local, State and local taxes and city taxes. When you put your fuel in the car, I know everyone knows here that we are also supplementing the green technology. We pay for one of the largest wind farms in the Tehachapi area in northern Kern County. We also have one of the largest geothermal facilities just north of us at the China Lake Naval Weapons Center, geothermal project. We are very, very conscious of what's going on. We want to be in support of growing California, growing jobs. (WSPA7)

**Comment:** We are members of the AB 32 Implementation Group and endorse their comments regarding the elements of the rule that would unnecessarily raise costs on manufacturers, put them at a competitive disadvantage, and lead to economic and environmental leakage. I especially want to highlight how those new costs will impact

the future of California manufacturing. We have already difficulty attracting manufacturing investment into the State. We have data from a national survey firm that tracks level of investments in new or expanded manufacturing facilities across the country. Between 2007 and 2009, the average rate of investment across the country was \$1,335 per resident. But in California, we were only able to track \$235 per resident. This is far less than our fair share. We have 11 percent of the U.S. manufacturing force, but we attract only 1.3 percent of new U.S. manufacturing investment. If we want to retain manufacturing jobs, we need to improve this rate of investment. We can't count on venture capital investment to make up the difference. Since 1995, we have been getting more than 45 percent of the country's venture capital. But this has not been translating into manufacturing jobs and investment in California. We believe that the high cost and the difficult business climate is the reason for the low rates of manufacturing investment. Additional burdensome costs from an overly expensive cap and trade will further discourage new investment just when we should be sending a strong signal that California wants manufacturing jobs and investment. We recommend that CARB not approve the rule until issues that would raise costs on State manufacturers are resolved. (CMTA4)

**Comment:** I support continuous improvement of our State as an environmental world leader in emissions reduction. I have even put solar panels on my house. However, I don't support jeopardizing my jobs for what will likely be a net negative effect on climate change. In calculating the effectiveness of AB 32, the agency cannot take credit for the emissions improvement as a result of a California refinery getting shut down. The loss of production means that we need to make up the difference with foreign fuel from other states and countries that don't have our strict environmental regulations. That's what I mean by negative effect on climate change. A refinery with some of the lowest emissions in the world gets shut down and its production gets replaced by gross polluters elsewhere in the planet. A loss of a refinery in California due to AB 32 must reflect as a black eye on the agency and in no way a victory due to the calculated emission reductions from the refinery being shut down. Proposition 23 didn't pass because environmental groups slandered us by saying that we're Texas big oil showing pictures of big black smoke billowing from the refinery. You know we don't operate our refineries like that. We're just California citizens desperate to keep our jobs in a collapsing economy. I'm a single mom, and know jobs like mine just aren't out there. If AB 32 is so onerous it causes California refineries to leave, it is a negative impact on the environment and the California economy. I, like my co-workers, am scared. I wish that more of the USW was here. We're scared you're going to regulate our employers right out of business and our families and communities dependent on our industry will suffer for nothing. Regarding the comment ConocoPhillips made \$14 billion last year, why can't it invest some in reducing emission and saving jobs? Just at the Benicia refinery, we've put in more than a billion dollars just to invest to get in compliance with CARB regulations. Refineries in California are money pits. Companies can keep dumping their profits in these money pits as they already have to comply with California environmental regulations, or they can pull out of California and invest in refineries elsewhere where they're not penalized and are more profitable. That's what we're all afraid of. (BATEMAN)

**Comment:** Our refinery is safe. It's clean. And even though we've been there for 60 years, I run into people all the time that don't even know we're in their neighborhood. What about your jobs when you get rid of the refining out of California? I want clean air, too. I want to protect the planet. But making fuel overseas and tankering it to California does nothing to save the planet. (WESTK)

**Comment:** My concern is if ConocoPhillips and other companies like Conoco are forced to close or move elsewhere overseas and begin refining overseas, well, obviously, we'll lose those jobs. (VILLAREAL)

**Comment:** It's getting to a point to where you are going to put people out of work. A perfect example is you take the glass industry back in the early 1980's, there were 19 glass plants in this State. You guys probably remember that. It employed 20,500 union employees which were skilled jobs with benefits and living wages. Now, we have five glass plants in the State, and we're down from 20,500 jobs to 2700 jobs. So this industry and this economy, we are having a hard time competing. We have glass coming in from China. We have glass coming in from Mexico. And then the fiberglass operations. And you turn on the news and all you hear is about green, green, green. That's good. You got green jobs right here in this State in different areas of manufacturing that you're jeopardizing. And you take the glass manufacturing, for example, you know, the recycling effort that this industry does. (WCPL)

**Response:** Industrial facilities are being provided allowance value for the purposes of transition assistance and leakage protection. We believe that benchmark stringency should reflect the emissions intensity of highly efficient, low-emitting facilities within each sector. The allocation strategy will minimize leakage by incentivizing continued production and improved emissions efficiency from all facilities in California. We do not agree that this will result in significant adverse impacts for California businesses.

We arrived at the 90 percent of average product-based emissions efficiency benchmark after careful analysis of data and approaches used in other successful cap-and-trade programs. We are balancing the need for providing adequate transition assistance and minimization of leakage while meeting the emission reduction goals of AB 32. To develop each benchmark, we began by analyzing the average emissions intensity of each sector and constructed benchmarks set at 90 percent of this average. "Best in class" benchmarks were developed, exceptionally, for any sector where the "90 percent of average" benchmark would be more stringent than the emissions intensity of any existing California facility in that sector.

Within each sector, the most efficient facilities with efficiencies better than the benchmark will be receiving more allowances than they will need, and can sell their excess allowances. Less-efficient facilities will need to purchase allowances to fulfill their compliance obligations. Beyond the initial allocation period, the

level of free allowances will decline through the use of a cap declining factor and an assistance factor. Because allowances can be traded, the program provides incentives for those with the most cost-effective reduction opportunities to reduce emissions quickly. This is an incentive we built into the system for industrial sectors to choose innovation for reducing GHG.

## **Linkage with Other Jurisdictions**

### **H-4. (multiple comments)**

**Comment:** I'd like to commend and your staff on your efforts with respect to implementing AB 32. This is a monumental task, and your actions will have far ranging impacts throughout the California economy. That is why extreme care must be taken to ensure that the Cap and Trade Program you adopt does not have a price tag that will make California dire economic situation worse and ultimately doom the policy to failure. As you know, other U.S. states in the Western Climate Initiative, as well as the federal government, have decided to postpone action on cap and trade because the cost to businesses and consumers would be too high. There seems to be a significant disconnect between this conclusion and the direction of the California-only cap and trade proposal. Since California is going it alone, we should do everything we can to make cap and trade as affordable as possible. With all respect, the proposed emissions allowance fees would do the opposite by adding the arbitrary costs that does nothing to directly take into account the investment that providers and users of that energy would have to make in order to comply with the cap and pass along to their consumers along with the emissions allowance fee. As is the case with any regressive tax, the emissions fee will hit hardest those least able to afford it. As I said earlier, I wear two hats: The business hat of the Chamber and the business and nonprofit hat of TELACU. In both situations, I represent a significant segment of the community that suffers from disproportionately high unemployment and faces unique economic challenges. With the state budget growing by the hour, there is no pressure—there is more pressure for higher taxes, while at the same time there are fewer and fewer resources available in the social safety net, which is increasingly strained. This is not the time to impose dramatically higher energy costs. As proposed, that is what this cap and trade regulation will do. We hope you will seriously consider doing away with the emission allowance fee to create a fair less costly policy. (CAHISPCMBR3)

**Comment:** California cannot afford to go it alone. CARB's AB 32 Scoping Plan observes that "California cannot avert the impacts of global climate change by acting alone," and anticipates a regional cap-and-trade program in coordination with states in the Western Climate Initiative. However, no other states in the WCI are pursuing cap-and-trade policies, nor is the federal government. California would be going it alone, to the severe detriment of our competitiveness and economy. With the second-highest unemployment rate in the nation, California simply can't afford to go it alone on cap-and-trade. CARB staff has been quoted as estimating the amount of this tax will start at \$500 million in the first compliance period and grow to \$2 billion in subsequent periods. I respectfully disagree with your opinion that putting a multi-billion dollar tax on carbon will send the price signals necessary for a successful cap-and-trade program. On the

contrary, such an approach will be successful only in killing jobs, driving more businesses out of California and exporting GHG emissions to unregulated regions. Singling out trade-exposed industries by depriving them of the free allowances which are essential to a California-only cap-and-trade program will do nothing to achieve meaningful GHG reductions. The Analysis Group recently cautioned CARB: "With none of California's neighboring states committing to climate targets, emission leakage will continue as a potential risk to the program's environmental integrity." California ratepayers and businesses are already facing the burden of higher utility costs associated with existing laws and regulations mandating a transition to lower-carbon and renewable energy sources. In view of the fragile state of California's economy, this is the worst possible time to impose yet another new energy tax on struggling businesses and consumers, especially since not even the other Western Climate Initiative states are willing to risk their own economies on costly cap-and-trade programs. In summary, the imposition of a new tax on business or other "price signals" are not necessary to achieve the emissions reduction goals of AB 32, and will serve only to further cripple our economy, increase unemployment and impair our competitiveness. I strongly oppose such taxes in any form, and urge you to modify the cap-and-trade program to avoid the economic consequences they will bring. (GORDON)

**Comment:** We're all ConocoPhillips employees. My employer is in my neighborhood. That employer allows me the opportunity to take care of my family. But what we see is that everything was not particularly looked at. And some of the impacts from this bill can put us out of work. We are in an economy where we have a need to take care of our families. With ConocoPhillips remaining in our local neighborhoods, it provides taxes that pay for things that one day I hope to be able to utilize. What we're asking is you take the time, give our employer an opportunity to see what they can do to meet your regulations. That's all we're asking. We're not saying disappear. We're saying give us some leeway, because we're talking about not affecting companies, but all these people in these blue shirts you're looking at, they have children. To apply to what's being asked in such a short time frame, we're hitting a block wall. There are going to be plenty of people out of work and we don't want to see that happen. I can tell you right now the United Steelworkers, we're very serious about keeping people employed and where people can sustain their own livelihood without government assistance. (USW3)

**Response:** We understand the concerns raised by these commenters. We evaluated the potential economic impacts of the cap-and-trade regulation and found that the program would have a very small impact on economic growth. Table N-3 and Table N-7 of the Staff Report highlight estimated changes in energy prices and resulting economy-wide estimates of impact. The estimated impacts show relatively small changes in economic growth and employment when compared to growth otherwise expected over 2007 to 2020. See Chapter VIII and Appendix N of the Staff Report for additional information about our economic analysis.

The California cap-and-trade program has been designed to be part of a regional trading system. The program design allows linkage with programs established by partner jurisdictions in the Western Climate Initiative (WCI) to create a regional market system. The goal of the regional program is to enhance individual jurisdictions' actions through collective action to reduce GHG emissions. We continue to work with other WCI partner jurisdictions toward linked programs to advance this goal.

## **Cost Containment**

**H-5. Comment:** We believe that critical design features of the Cap and Trade Program, such as allocating allowances for the benefit of electric utility customers, the use of high quality offsets, and the presence of an allowance price containment reserve will support and complement AB 32 goals to achieve real emission reductions while containing cost to Californians. We will continue to work with ARB and its stakeholders to ensure that these types of cost control mechanisms play a robust and critical role in the Cap and Trade Program moving forward. And we appreciate the Resolution item that touches on that. (PGE7)

**Response:** Thank you for your comment. We agree.

**H-6. Comment:** We are concerned that the cost containment measures in this regulation are not strong enough. In fact, a price floor of \$10 per allowance we think is counterproductive to some of these efforts. (ACC6)

**Response:** We chose the \$10 reserve price for two reasons. First, we are concerned that recessionary economic conditions or a forecasting error in the cap-setting procedure may accidentally lead to the creation of excess allowances. Throughout the regulatory process, we heard concerns that the cap would be unintentionally set too lax—a condition sometimes referred to as *oversupply* or *over-allocation*. The over-allocation condition occurs if too many allowances are supplied to covered entities relative to expected business-as-usual emissions levels. If the cap is set too loose, prices will be lower than expected, and a weakened incentive to reduce emissions will be created. The reserve price mechanism would correct this condition by transferring excess allowances to the Allowance Price Containment Reserve, where they will be available in times of high prices. Second, we are adapting the approach used in the federal Waxman-Markey proposal (HR 2454), which proposed a reserve price of \$10 with an inflator mechanism of five percent per year plus inflation.

The auction reserve price is one of the components of a linked regional market program for which consistency across the individual programs is especially important. For this reason, we will work closely to evaluate this issue with other WCI jurisdictions when evaluating their programs for possible linkage. We may propose an adjustment to the reserve price as part of changes made to link California's program with the programs established by WCI partner jurisdictions.

## I. ELECTRICITY

### Combined Heat and Power (CHP)

**I-1. Comment:** My comments are related to language that was in the Resolution 10-42 that directed the Executive Officer to review treatment of combined heat and power facilities in the Cap and Trade Program, to ensure appropriate incentives are provided for increased and efficient use of cogeneration. We would ask the Board to adopt language moving forward that ensures that staff conducts workshops and addresses these problems prior to the first auction that happens in the State of California. Otherwise, these facilities will be hard-pressed to continue to operate under the circumstances. (CACCC4)

**Response:** Although we did not adopt the recommended language, we will continue to review CHP issues and work with other agencies to ensure appropriate incentives. In Resolution 11-32 the Board also directed the Executive Officer to work with the CPUC and the Publicly Owned Utilities to reflect the finding of the Board that if allowance value provided to the electric distribution utilities for ratepayer benefit is returned directly to customers, it is consistent with State efforts to promote energy efficiency and energy conservation. Also see the responses to Comments I-117, I-118, and I-123 in the first 15-day comments and responses (Chapter IV of the October FSOR).

### Imported Electricity

#### I-2. (multiple comments)

**Comment:** LADWP has concerns with amendments to the definition of electricity importer. As both a regulated provider and a transmitter of energy for others, we are concerned that the shifting of the compliance obligation from the entity that owns the electricity that's being imported to the entity that's physically scheduling the power has broader implications if possible unintended consequences for specified resources. (LADWP6)

**Comment:** I'm here to bring to your attention issues that we have identified with regards to the definition of electricity importer and the consequences that has on how electricity imports are treated. The second 15-day package, there were some revisions to the definition that shift the point of regulation from the owner of the electricity to the scheduler or the transmission provider. This change seems contrary to the point of regulation that was recommended to ARB by the CPUC and CEC, which was the first deliverer point of regulation is the entity that owns the electricity as it is delivered to the grid in California. The point of regulation was vetted at the Energy Commission for over a year, and they rejected proposals that made schedulers the point of regulation and went with making the owner of the electricity the point of regulation. For the past three years, during development of the cap and trade regulations, everything has been designed around the first deliverer approach based on ownership. It seems strange that it would be changed at the very last minute like this. Changing the definition of

electricity importer by deleting three words, "holds title to" and substituting "delivers" make all the difference when it comes to who is responsible for reporting the import and satisfying the compliance obligation. Here are a few examples of issues created by this change: Allowance allocation. Allowances were allocated to each utility on behalf of their customers. If utilities are not responsible for reporting their own imports, some utilities will be over-allocated and other entities will have to cover those emissions. The cap and trade regulation requires each utility to be in compliance with the reporting regulation in order to receive their annual allocation. If electricity is reported by another entity, it is outside the control of the utility. And if that other entity is not in compliance, could that prevent the utility from receiving their annual allocation? These are just a few of the problems created by the revision to this definition. In addition, this change was proposed during the second 15-day package and was not vetted before it was incorporated into the final version of the regulation. LADWP asked the Board to direct staff to either stick with the original point of regulation that was recommended to ARB by the CPUC and CEC or work with stakeholders to fully explore the consequences of changing the point of regulation before changing it. Keep the door open to fix this issue next year. (LADWP7)

**Response:** See our responses to Comments I-2, I-10, I-19, I-24, and I-28 in the second 15-day comments and responses (Chapter V of the October FSOR). In addition, Board Resolution 11-32 directs the Executive Officer to continue discussions with stakeholders to identify and propose, as necessary, during the initial implementation of the cap-and-trade program, potential amendments to the Regulation including, but not limited to the following area: Definition of Resource Shuffling to: (a) provide appropriate incentives for accelerated divestiture of high-emitting resources by recognizing that these divestitures can further the goals of AB 32; and (b) ensure changes in reported emissions from imported electricity that serves California do not result merely in a shift of emissions within the Western Electricity Coordinating Council region, but reduces overall emissions.

## Qualified Exports

### I-3. (multiple comments)

**Comment:** Section 95852(b)(5)(A) of the Cap-and-Trade Rule allows for an adjustment to a PSE's emissions obligation for times when that PSE imports and exports electricity in the same hour (QE Adjustment). Powerex supports ARB's proposal to include a QE Adjustment. Unfortunately, as currently drafted, the QE Adjustment has substantial potential to distort the underlying power markets. We direct the Board to Powerex's September 27 comments for suggested modifications to the QE Adjustment's calculation method that will improve its ability to prevent unnecessary wheel through transactions in which power moves through the state rather than incurring compliance obligations for electricity that was not consumed in California. (POWEREX3, POWEREX4)

**Comment:** The Cap-and-trade Regulations and Reporting Regulations, when taken together, provide unique and favorable treatment to a single importer, the Bonneville Power Administration (BPA), by assigning an emission factor that is 1/5 of the default

factor applied to all other unspecified sources of imported energy. This discriminatory treatment is counterproductive to CARB's GHG emissions reductions goals, fosters "resource shuffling" and GHG emission "leakage" which CARB has sought to avoid, and unfairly creates a competitive advantage for BPA at the expense of all other obligated entities within the electric sector. The Cap-and-trade Regulation creates a special class for a single electricity importer, the Bonneville Power Administration (BPA), and then the Reporting Regulation affords BPA favorable treatment in the calculation of GHG emissions associated with imported power to California by applying a default emissions factor that is 1/5 of that applied to all other unspecified imports. Not only does this language favor BPA in comparison with other importers, but the unique treatment afforded BPA may favor BPA versus in-state electric generation assets and contribute to the "leakage" that CARB and AB 32 sought to avoid. Moreover, this favorable treatment will create opportunities for "resource shuffling" where importers will seek to sell their power through BPA because BPA has such a low emissions factor. This result is counter-productive to CARB's emission reduction goals. Providing a "regulatory carve out" for a single entity such as BPA is effectively discriminating against all other supplies. The CARB Board should direct staff to eliminate this unique and favorable treatment, thereby treating all obligated entities in a comparable and non-discriminatory manner when calculating GHG emissions for specified and unspecified imports. (IEPA4)

**Response:** See our response to Comments I-13 and I-16 in the second 15-day comments and responses (Chapter V of the October FSOR).

## **Coordination with the Renewable Portfolio Standard Program**

### **I-4. (multiple comments)**

**Comment:** We would appreciate continued consideration of greater conformance with the cap and trade and the State's RPS, particularly the 33 percent RPS that was passed by the Legislature. As the cap and trade regulations stand, there's a potential for new renewable development in the RPS, eligible for the RPS that would provide zero GHG benefit to the purchasing entity. That's something we want to continue talking about with you and your staff. (SMUD5)

**Comment:** As we move into program implementation, we look forward to continuing our work with ARB, particularly working with staff to address some of the seams issues between the Cap and Trade Program and the recently codified 33 percent RPS program pursuant to Senate Bill 2. (CPUC)

**Comment:** Powerex understands that the Renewable Portfolio Standard (RPS) Adjustment provisions are critical to ensure that the zero-emission components of renewable energy are properly counted under the RPS, the MRR and the Cap-and-Trade Rule. Powerex supports the inclusion of some form of RPS Adjustment in the Cap-and-Trade Rule. However, as currently drafted, the RPS Adjustment is at risk of legal challenge on two grounds. It may impermissibly intrude upon the jurisdiction of FERC, and the restriction of the RPS Adjustment to California load serving entities

makes it vulnerable to a Commerce Clause challenge. We direct the Board to Powerex's September 27 comments for specific, simple changes that would make both rules less vulnerable to court challenges. (POWEREX3, POWEREX4)

**Response:** We look forward to continuing work with CPUC regarding the RPS and cap-and-trade programs. See our responses to Comments I-29 to I-35 in the second 15-day comments and responses (Chapter V of the October FSOR) for reasons why the RPS and cap-and-trade programs need to differ in exactly how renewable electricity is treated. For Powerex's concerns, see our response to Comment I-36 in the second 15-day comments and responses (Chapter V of the October FSOR).

## Resource Shuffling

### I-5. (multiple comments)

**Comment:** We ask that the resource shuffling provisions in the regulation provide greater clarity so it reflects our mutual interest to incentivize early divestiture of high-emitting sources. In particular, LADWP would like certainty that divesting its ownership interest in the Navajo generating station in Arizona will be treated as an emission reduction and not be considered resource shuffling. We appreciate the language that's in the Resolution right now that provides directive for us to continue to work with the Executive Director and with the staff to ensure that the regulation does not discourage an early transition from coal, but that we are able to come up with something that works for all of us. (LADWP6)

**Comment:** The Resource Shuffling provisions require additional clarification. Powerex appreciates that ARB revised the definition of "resource shuffling" in response to the concerns raised by stakeholders in comments on ARB's first set of proposed 15-Day Modifications. However, the newly proposed definition is sufficiently vague that the regulated community does not have certainty as to what ARB would consider legitimate imports of electricity and what it would consider to be illegal "resource shuffling." Accordingly, Powerex urges ARB to clarify the scope of the resource shuffling provisions of the Cap-and-Trade Rule. We direct the Board to Powerex's September 27 comments for specific proposed changes that will provide the clarity needed to guide the regulated community. (POWEREX3)

**Comment:** We second the calls of many today to commend the Resolution 11-32 and its specific calls for a number of regulatory refinements and also the call that those be done early in 2012 so the program will be ready to launch full implementation in 2013. In particular, in Resolution 11-32 at page 10, we support the call to continue discussions with stakeholders to identify potential amendments to the regulation. And in particular, the first one up that is mentioned is to address resource shuffling. (POWEREX4)

**Comment:** The prohibition in the regulation on resource shuffling as written could adversely affect the wholesale electricity market. It could create uncertainty and a loss of liquidity in that market. We appreciate the direction to the Executive Officer of

page 10 of the Resolution that you'll be considering today to continue discussion with stakeholders about amending the resource shuffling provisions. (SCPPA9)

**Comment:** Greater definitional clarity will be necessary to ensure market participants clearly understand what does and does not constitute resource shuffling. (CPUC)

**Response:** See our response to Comments I-20, I-26, and I-27 in the second 15-day comments and responses (Chapter V of the October FSOR). In addition, Board Resolution 11-32 directs the Executive Officer to continue discussions with stakeholders to identify and propose, as necessary, during the initial implementation of the cap-and-trade program, potential amendments to the Regulation including, but not limited to the following area: Definition of Resource Shuffling to: (a) provide appropriate incentives for accelerated divestiture of high-emitting resources by recognizing that these divestitures can further the goals of AB 32; and (b) ensure changes in reported emissions from imported electricity that serves California do not result merely in a shift of emissions within the Western Electricity Coordinating Council region, but reduces overall emissions.

## Long-Term Contracts

### I-6. (multiple comments)

**Comment:** Calpine is in the position of holding some pre AB 32 long-term contracts. In our case, these are for combined heat and power for either sales of electricity and/or steam to private parties. These are not CPUC jurisdictional. These are not contracts within Edison, SCG&E, or PG&E. These are with private parties. In some instances, they're receiving free allowances for the emissions, yet we're the obligated party. In others, they're not, because the other party is too small. These contracts were drafted in the 1980s, and we would like to resolve that issue and work with the Board before the first auction. We need certainty. And the Resolution currently doesn't have a time frame. (CALPINE5)

**Comment:** We would appreciate you directing staff to work on modifications to remove disincentives for cogeneration contracts during the initial implementation of the program. We heard a lot about this today where the GHG allowance costs fall on one party and they're not easily able to be passed on in the contractual relationships. (SMUD5)

**Comment:** PEB and other cogeneration providers have worked diligently with ARB throughout this rulemaking to highlight the concerns of "stranded" cogeneration facilities that cannot recover the costs of Cap and Trade allowances under the terms of long-term contracts that lack an effective pass-through mechanism. The contractual bar which prohibits PEB and other similarly situated facilities from recovering (or passing through to the end user) the cost of these allowances has created a uniquely inequitable situation. As noted above, PEB provides a larger percentage of its generated energy in the form of steam relative to other cogeneration facilities. In fact, at PEB, thermal energy delivered to UC-B has a priority of dispatch over the generation of electricity. Given PEB's unique attributes in this regard, attempts by ARB to work with the

California Public Utility Commission (PUC) to increase electric sector allowances to include emissions attributable to electricity production at CHP facilities would not alone address PEB's circumstance (assuming such measures are effective). To avoid unfairly imposing these costs, ARB should provide PEB (and other similarly situated facilities) with the necessary and appropriate relief that adequately compensates for the Cap and Trade allowance burdens imposed upon both the electric and thermal requirements of such facilities. To this end, PEB recommends that: 1) The Board revise the Cap and Trade Regulation as shown in Attachment 1 to provide such equitable relief (or its equivalent) to similar cogeneration facilities stranded with these types of long-term contracts; or 2) In the alternative, if the Board does not revise the Cap and Trade Regulation as provided in Attachment 1, the Board should include the language provided in Attachment 2 (or its equivalent) as part of its resolution adopting the Cap and Trade Regulation. (PEB13)

**Comment:** There is substantial support in the administrative record for ARB to provide relief to PEB and similar cogeneration facilities stranded with Legacy Contracts. Throughout this rulemaking, ARB staff has been advised of—and to a certain extent has recognized—this important issue, but has chosen not to provide the appropriate remedy to such CHP facilities. Significantly, ARB's Initial Statement of Reasons (ISOR) for the Cap and Trade Regulation recognizes that "Some generators have reported that some existing contracts do not include provisions that would allow full pass-through of cap-and-trade costs. These contracts pre-date the mid-2000's and many may be addressed through the recently announced combined heat and power settlement at the California Public Utilities Commission. Staff is evaluating this issue to determine whether some specific contracts may require special treatment on a case-by-case basis." However, the settlement described in the ISOR addresses only the electricity—not the steam—portion of a CHP facility such as PEB and is also term-limited such that it may not extend through the full life of certain project agreements. The Board appears to have attempted to address this concern through language in ARB Resolution 10-42: "BE IT FURTHER RESOLVED that the Board directs the Executive Officer to review the treatment of combined heat and power facilities in the cap-and-trade program to ensure that appropriate incentives are being provided for increased use of efficient combined heat and power." In Attachment B to Resolution 10-42, ARB staff committed to "work with interested stakeholders to ensure proper treatment under the regulation of combined heat and power facilities with pre-AB 32 long-term contracts that do not allow for pass through of costs associated with greenhouse gas emissions." In the revised Cap and Trade Regulation released on July 25, 2011, ARB took an initial step toward addressing this issue by increasing the allocation of allowances to the electric sector from 89 million metric tons to 97.7 million metric tons in order to increase electric sector allocations to include emissions attributable to combined heat and power electric production. However, increasing the allowances available for the IOUs to provide at auction does not incentivize the IOUs to negotiate PPA modifications to provide cost recovery for the qualifying facilities in recognition of their new GHG compliance burden. Similarly, in most cases, this step does nothing to resolve the problem caused by the requirement to purchase allowances in connection with the thermal energy portion of such a project. Further, Section 38562 of the Health and Safety Code requires ARB, to

the extent feasible and in furtherance of achieving the statewide greenhouse gas (GHG) emissions limit, to design the regulations, including distribution of emissions allowances where appropriate, in a manner that is equitable, and seeks to minimize costs and maximize total benefits to California. (PEBI3)

**Comment:** Other commenters have submitted written comments indicating that the bilateral negotiations were not successful and expressed skepticism whether they would be successful in the future, without a backstop regulatory provision from ARB. Despite its apparent understanding of this issue and these extensive public comments, the Cap and Trade Regulation makes no allocation of allowances to CHP facilities subject to Legacy Contracts that do not allow for recovery of the costs associated with a mandated purchase of allowances. Indeed, the Cap and Trade Regulation fails to provide transitional assistance to such generators until such time as their existing Legacy Contracts expire or are substantively amended. Almost a year ago in December 2010, several commenters, including the California Cogeneration Council (“CCC”), submitted written comments asking ARB to resolve this issue prior to the adoption of the Cap and Trade Regulation. Throughout this rulemaking, ARB staff has neglected to propose any regulatory provisions that would alleviate the extreme economic burden imposed upon CHP facilities that cannot recover allowance costs from their customers. Rather, without any apparent recognition that certain contracts may not provide for the necessary modification, ARB staff simply noted in its Notice of the First 15-Day Amendments that this problem should be resolved through bilateral contract negotiations. (PEBI3)

**Comment:** As described in its prior comment letters, PEB operates pursuant to energy supply agreements that were executed in 1987, almost 20 years prior to California’s adoption of AB 32, and could not possibly have contemplated the application or recovery of any form of greenhouse gas tax or similar regulatory program. PEB’s existing contract to supply steam to UC-B does not provide for recovery (or allow for the necessary modifications to address) of the costs to comply with the Cap and Trade Regulation. In addition, there are no change-in-law or tax and regulatory cost recovery provisions that will provide PEB with the leverage necessary to allow for renegotiation of its agreement with UC-B. PEB will soon be forced to bear an unrecoverable economic cost that risks a potential shut down of the facility—a result that is clearly at odds with the goals of the Cap and Trade Regulation. In an attempt to provide constructive comment, we have read with interest proposals from a variety of interest groups and believe the proposal from Wellhead Electric (modified to reflect the needs of a thermal energy Legacy Contract) may achieve the appropriate level of relief (see attachment 1).

Attachment 1: PEB recommends that ARB amend the Regulation to provide transition relief for GHG emissions attributable to the generation of electricity and/or thermal energy by cogeneration facilities with long-term contracts that do not directly or indirectly provide for or refer to recovery of GHG emissions-related costs, were fully executed before approval of AB 32 (September 27, 2006) or such earlier time, as the Executive Officer deems equitable and proper, and have not been renegotiated by the long-term contract parties to address such costs. Modify section 95834(a) as follows:

(a) There are two types of participants in a beneficial holding relationship, an agent and a principal:

(45) In the event that there is a long-term contract for the sale of electricity at wholesale to an electrical distribution utility which and the long-term contract:

- A) does not directly or indirectly provide for or refer to GHG costs either explicitly or through a CPUC authorized pricing basis that includes GHG costs;
- B) was fully executed before the final approval of AB 32 (September 27, 2006), or such earlier time as the Executive Officer deems equitable and proper; and
- C) has not been renegotiated by the long-term contract parties and approved by the appropriate regulatory authority as of January 1, 2012 to address GHG costs, then, a beneficial holding relationship is deemed to exist pursuant to section 95834(a)(1) (A) without further action. Until such time as the long-term contract for the sale of electricity at wholesale to an electrical distribution utility has expired under its then existing terms, the electric distribution utility party to that long-term contract shall, as agent, purchase and hold allowances for the eventual transfer to the other party to the long-term contract (the principal) for the sole purpose of supplying that other party the principal with compliance instruments to cover emissions resulting from deliveries under the long-term power supply contract. (PEBI3)

Add a new subsection 95870(f) (Disposition of Allowances) as follows:

(f) Transition Allowances for Cogeneration Facilities with Long-Term Contracts for the Sale of Thermal Energy: Allowances available for allocation to cogeneration facilities with long-term contracts that do not directly or indirectly provide for or refer to GHG costs, were fully executed before approval of AB 32 (September 28, 2006) or such earlier time as the Executive Officer deems equitable and proper, and have not been renegotiated by the long-term contract parties to address GHG costs, shall be equivalent to the annual reported greenhouse gas emissions attributable to the production of thermal energy. The Executive Officer will transfer these transition allowances to a "Thermal Energy Holding Account."

Add new subsection 95890(c) (General Provisions for Direct Allocations) as follows:

(c) Eligibility Requirements for Cogeneration Facilities with Long-Term Contracts for the Sale of Thermal Energy. Cogeneration facilities with long-term contracts that do not directly or indirectly provide for or refer to GHG costs, were fully executed before approval of AB 32 (September 28, 2006) or such earlier time as the Executive Officer deems equitable and proper, and have not been renegotiated by the long-term contract parties to address GHG costs, shall be eligible for direct allocation of California GHG allowances if they have complied

with the requirements of MRR and have obtained a positive or qualified positive emissions data verification statement for the prior year pursuant to MRR.

- (1) The Executive Officer shall transfer allowances from the Thermal Energy Holding Account to the cogeneration facility that satisfies the requirements of §95890(c).

In the alternative, if the Board adopts the Cap and Trade Regulation without including such modifications (or its equivalent) to the Cap and Trade Regulation, we have provided below a proposed Board Resolution utilizing, in part, language from the comment letters from other CHP facilities. If ARB adopts the final regulation order as proposed and does not incorporate PEB's proposed amendments provided in Attachment 1, PEB requests that ARB include the proposed Resolution language provided below:

WHEREAS the Executive Officer recognizes the importance of providing appropriate incentives for increased use of efficient combined heat and power, recognizes that the proposed Cap-and-Trade Regulation makes no allocation for generators subject to long-term contracts that do not allow for recovery of the costs associated with purchasing allowances, and recognizes that the proposed Cap-and-Trade Regulation provides no allocations to such generators so as to avoid or otherwise mitigate the adverse financial impact of the mandatory purchase of such allowances until such time as their existing contracts expire or are substantively amended.

BE IT FURTHER RESOLVED that the Executive Officer, after consultation with generators subject to long-term contracts that do not allow for recovery of the costs associated with purchasing allowances, shall adopt amendments to the Regulation by February 1, 2012 that provide free allowances to contract generators with long-term contracts where costs cannot be recovered due to a contract that (1) was executed before the passage of AB 32, or such earlier time as the Executive Officer deems equitable and proper, and (2) has, by its terms, no ability to permit the generator to recover such GHG allowance costs. In instances where the generator does not receive free allocations, the Executive Officer shall adopt amendments to cause the compliance obligation to reside with the end user. (PEB13)

**Comment:** Wildflower requests that ARB either provide for direct allocation of allowances to the generators with pre-AB 32 contracts, or amend the regulations to specifically address pre-AB 32 contracts (e.g. require a beneficial holding relationship when a pre-AB 32 long-term contract is not renegotiated despite the best efforts of the generator). If ARB does not address pre-AB 32 contracts, then Wildflower, which originally entered into long-term contracts to stabilize the California electric market in 2001, will suffer a potentially devastating penalty for its commitment to long-term contracts and stable pricing.

Wildflower is the owner of Larkspur Energy and Indigo Generation, two natural gas-fired generators operating in Southern California (hereinafter "facilities"). On January 17, 2001, Governor Gray Davis proclaimed a State of Emergency to exist due to the energy shortage in the State of California. Subsequently, on February 8, 2001 and on March 7, 2001, Governor Davis issued Executive Orders D-26-01 and D-28-01, requiring the Energy Commission to invoke the emergency siting procedures in Public Resources Code section 25705 to expedite the licensing of all new renewable and peaking power plants that could be available for service no later than September 30, 2001. In these orders, Governor Davis declared that all reasonable conservation, allocation, and service restriction measures will not alleviate this energy supply emergency and that new generation was needed to avert an immediate threat to public health and safety. Larkspur was the first facility licensed under this emergency siting process and Indigo was similarly licensed under this process.

At that time, the State strongly encouraged execution of long-term power purchase agreements for these emergency facilities, in order to avoid some of the spot-market fluctuations that exacerbated the energy crisis. Wildflower's facilities entered into long-term tolling contract with a third-party power marketer through 2021 which does not provide any mechanism for cost recovery of GHG compliance costs. The marketer that purchases power under this contract has declined to renegotiate to address these substantial and previously unforeseen GHG costs. Consequently, Wildflower has no ability to recoup the GHG compliance costs starting July 2012, when the first cap-and-trade auction occurs.

The facilities have played an important role in meeting intermittent market demands and in emergency situations such as the recent fires in San Diego. Moreover, Wildflower's long-term contractual agreement reflects a long-term commitment to California for a stable and reliable energy market. Wildflower has never sought to renegotiate the contract for added benefits when market conditions were more favorable. This long-term tolling agreement was entered into long before AB 32 was signed into law and currently does not have any mechanism available for recovery of GHG costs.

Wildflower is unique among generators operating under pre-AB 32 contracts because Wildflower's pre-AB 32 contract is a tolling agreement and the counterparty is a third-party power marketer, rather than a utility. Even though the electricity ends up serving end-use customers in California, the fact that the purchasing party is a marketer adds a layer of complexity because the marketer has full dispatch control over Wildflower's facilities. Since Wildflower cannot control how much the facilities run, the quantity of GHG emissions produced along with the quantity of allowances needed for compliance, are out of Wildflower's control. Thus, as it currently stands, Wildflower would have to bear the significant economic burden of complying with the cap-and-trade program, but has no ability to mitigate those costs. The significant unrecoverable costs of this new regulation could immediately impact debt coverage ratios and other covenants in financial documents that without assistance from CARB may result in default. Instead of being rewarded for a long-term commitment to California and helping California avoid another energy crisis, Wildflower now finds itself in a situation where unrecoverable

GHG compliance costs from a pre-AB 32 long-term contract could force curtailment or cessation of operations.

The current economic climate mandates tight cost controls, particularly with respect to major capital expenditures. Leaving this issue unresolved significantly impacts the ability to make even near term plans for operation and maintenance. Wildflower cannot accurately budget these unknown regulatory costs in the 1 to 5 year business plan. Because these facilities' budgets are approved and reviewed before committing significant operational costs, there must be reasonable certainty regarding the precise scope and nature of the new requirements and its impact to the economic viability of Wildflower. The economic impact of a potential closure of these facilities goes well beyond the direct impact to Wildflower. The operation of each of these facilities is important to the economic wellbeing of the communities where they are located. In addition to the direct benefit of providing high-paying jobs, the plants also provide second-level benefits by supporting local industrial companies and businesses, and providing significant property taxes that directly support the local communities. The potential closure of these plants will trigger long-lasting harm to communities that are already struggling with some of the highest unemployment levels in Southern California.

In addition, not only would the communities be harmed and the generator left without any ability to recover its costs, but failure to address pre-AB 32 contracts would allow the marketers to receive windfall profits resulting from the cap-and-trade. This is because the vast majority of in-state generators and power imported into the state are not subject to pre-AB 32 contracts. Consequently, these power sources would be able to pass on their GHG compliance costs at wholesale, and the market price for wholesale power will include GHG cost assumptions. Thus, a marketer would be able to sell power from a pre-AB 32 contract at a price that assumes the marketer bears GHG costs, even though this is not the case. This behavior by an off-taker contradicts the State's GHG emission reduction goals because the marketer, under a pre-AB 32 contract, would realize an economic benefit by running the facility more because the costs of complying with the GHG regulations are not addressed by the marketer. The issue is exacerbated in the case of Wildflower's facilities that operate under a tolling agreement, where the marketer has full dispatch control of the facility and would be economically encouraged to maximize the dispatch of the Wildflower facilities, under the aforementioned scenario. Hence, the intent of ARB policy that GHG costs be directly considered in the economic dispatch of generating resources and for ratepayers to see the carbon price signal of generation purchased by a marketer or utility would be undermined by not addressing the pre-AB 32 contracts.

Wildflower understands that the ARB Staff would like to see this issue resolved in bilateral negotiations between the off-taker, marketer or utility, and the generator. However, the proposed regulation does not address the circumstances when generators with pre-AB 32 contracts face counterparties unwilling to negotiate the issue of allowance allocation or GHG compensation. In such single-issue negotiations, the marketer or utility ("off-taker") can demand significantly disproportionate concessions from the generator, since the generator has little negotiating leverage. The generator

has to meet GHG compliance obligations, irrespective of any allocations or compensation from the off-taker, while the off-taker has a contractual right to require the generator to operate. Typically when parties to a power purchase agreement renegotiate their agreements, the renegotiations are major restructurings of contracts that include many more issues than just a single item like GHG compensation. Issues that have been addressed in the restructuring of agreements include the conversion of facilities from simple to combined cycle operation, the termination of some contracts while extending other contracts, and the assignment of agreements from one entity to another. Wildflower is not aware of any successful bilateral negotiation pertaining solely to GHG compliance costs being assumed by the off-taker in a pre-AB 32 long-term contract with a generator.

As mentioned earlier, the marketer to a pre-AB 32 contract has no motivation to agree to a renegotiation. The marketer can simply require the generator to operate and sell that power in the market, creating a windfall profit. Without some regulatory equality, the affected generators will not be able to recover their GHG compliance costs and most will likely eventually cease operations. This is especially true for generators that face up to 10 years of meeting uncompensated GHG compliance cost, prior to the expiration of their pre-AB 32 contracts.

Until the ARB specifically addresses the unique situation of this small group of pre-AB 32 contracts, these generators face an untenable economic situation between the contracts they entered into for the stability of the State and the new regulatory requirements that are imposed upon them. At the October 20th, 2011 Board Hearing, the Board should consider the attached Attachment 1 draft Resolution on pre-AB 32 contracts. There are multiple ways that the inequity created by these new regulations can be resolved by the ARB, including:

1. Directly allocate allowances to operators of projects subject to pre-AB 32 contracts like Wildflower; or
2. Under the structure currently put into play by the ARB, deem contracts like Wildflower's to be in a "beneficial holding" affiliation for the benefit of the generator with the entity that has the ultimate transactional relationship with end users of the power produced by the generator; or
3. Allow a narrowly tailored exemption for those few facilities licensed pursuant to Executive Orders D-26-01 and D-28-01 (the 2001 California energy emergency orders) and still operating under pre-AB 32 contracts. (WILDFLOWER2)

**Comment:** One matter that was identified early on and has not yet been resolved is the treatment of certain generators with power contracts that do not account for costs of compliance with AB 32 because they were executed before AB 32. These pre-AB 32 contracts do not contemplate the significant compliance costs of this regulation.

The contracts of concern to us are long-term contracts. Staff's August Fifteen day package encouraged parties to renegotiate the contracts. While most generators are able to pass through their costs by selling power at the wholesaler through an

assortment of avoided costs, this limited group of generators with these pre-AB 32 contracts will not be able to.

While some of the pre-AB 32 contracts have been re-negotiated as part of portfolio restructurings, some counterparties do not have an incentive to renegotiate because they can sell or use power from a Pre-AB 32 contract more cheaply. These affected generators have submitted several proposals during the 15 and 45 day comment periods for this regulation. These proposals would resolve the current situation. And we are asking the Board and Staff to work with the handful of generators to obtain a resolution at least 2 or 3 months before the first auction next year.

These contracts of concern to us were our long-term contracts entered into during the emergency crisis in 2001. The State, at that time, strongly encouraged long-term contracts. We are finding ourselves for our long-term contract of the State being in a potential detrimental situation. This pre-AB 32 contract was identified early on in the Market Advisory Committee's June 2007 report the PUC and CEC's October 2008 recommendations to ARB, as well as the Initial Statement of Reasons and Resolution 10-42 for this regulation. Just recently, staff's August 15-day package encouraged parties with these pre-AB 32 contacts to re-negotiate.

However, outside of large contract restructuring or portfolio restructuring, there is really little incentive for the counterparties to renegotiate with a generator, because they can sell and use the power from a pre-AB 32 contract generator more cheaply. These affected generators have submitted several proposals during the 15-day and 45-day comment periods for this regulation. These proposals would resolve the current situation. We are asking that the Board and the staff work with this handful of generators to obtain resolution in the first quarter of 2012, before the first auction occurs next year. I hope we can have the resolution early next year. (WILDFLOWER3, WILDFLOWER4)

**Comment:** The Cap-and-trade Regulation fails to address the treatment of GHG allowance costs associated with IPPs (including Combined Heat and Power, i.e. CHP) operating under pre-AB 32 contracts that have no reasonable means of cost recovery. By not responding to the Board's December 2010 Resolution on this issue, the Cap-and-Trade Regulation imposes a regulatory burden on a limited subset of IPPs that is not shared by our competitors, particularly utility-owned electric generators (UOG). Furthermore, to exacerbate this situation, utilities are being provided free allowances on the assumption they are incurring GHG costs for services purchased under these IPP contracts when in fact no such costs are incurred. No policy or legal justification exists for marooning these in-state IPP generation assets operating under these contracts, nor providing windfall profits to the contract counterparties.

Since adoption of AB 32, IEP has been steadfast in raising its concerns that a limited number of IPPs, including CHP operators, may not have a reasonable means of cost recovery of GHG allowances required to achieve compliance with the CARB's GHG emissions reduction program. As noted in IEP's previous comments, failure to address

this issue is discriminatory and inconsistent with the policies underlying the Cap-and-trade Regulation. Indeed, we proposed in our comments a number of solutions to this problem. Despite numerous stakeholder comments and meetings, the Cap-and-Trade Regulation remains stubbornly silent on the treatment of existing, long-term contracts that have no reasonable means of cost recovery of GHG allowances. Rather, these IPPs are expected to renegotiate their contracts with counter-parties that have no incentive to do so and, indeed, may have lots of incentives to avoid renegotiation even though they have the means to pass those costs to the ultimate energy consumer through rate-base or the market.

In contrast, other obligated entities in the electric sector (as well as the industrial sector) are provided their allowances directly or indirectly at no cost even when they have a reasonable means of market-based and/or rate-based cost recovery. When a utility-owned generator (UOG) enters an auction to purchase allowances to meet its compliance obligation, the expenditures it makes as an electric generator are recovered through ratemaking on a dollar-for-dollar basis. Furthermore, the revenues associated by the UOG allowance purchases flow back to the same utility in its function as an electrical distribution utility, which originally received the auctioned allowances for free based on its expected costs under the Cap-and-trade Regulation. Thus, the utility as owner of the UOG asset is indifferent to the GHG cost increase associated with UOG operations. Yet, this is not the case for the IPP, which is in competition with the UOG, as the IPPs cannot rate-base their allowance purchases. We find the explicit refusal of CARB to address this issue as unreasonable, unfair and discriminatory.

To supplement the Board's December 2010 directive to remedy the fact that the Cap-and-trade Regulation fails to address or even acknowledge the limited set of IPP electric generators (and CHP operations) operating under pre-AB 32 existing contracts without an ability to pass-through the costs of GHG allowances, the CARB Board now should direct the staff via resolution to address this matter immediately, prior to the first auction of GHG allowances, so these IPPs are treated in a practical, reasonable and comparable manner to all other obligated entities in the electric sector from the perspective of cost recovery of GHG allowance costs. The options to achieve this outcome include the following:

- Shifting the compliance burden to the contract party that can recover compliance costs through the market or via ratemaking; or
- Provide free allowances in the case that neither party can effectively recover costs through the market. (IEPA4)

**Comment:** In addition to the letter that IEP submitted to the Board and the public record (dated October 10, 2011) we would also like to submit for your consideration the following Resolution language addressing long-term contracts without a means for GHG cost recovery:

WHEREAS, certain California facilities subject to the Cap-and-Trade Rule entered into long-term, contracts before the passage of AB 32 and before the parties could reasonably have anticipated AB 32's requirements;

WHEREAS, in some cases such long-term contracts may not allow the seller to pass on the costs that will be imposed on them to purchase allowances under the Cap-and-Trade Rule;

WHEREAS, section 38562 of the Health and Safety Code requires ARB to the extent feasible and in furtherance of achieving the statewide greenhouse gas emissions limit design the regulations, including distribution of emissions allowances where appropriate, in a manner that is equitable, seeks to minimize costs and maximize total benefits to California;

WHEREAS, in Attachment to Resolution 10-42, staff committed to "work with interested stakeholders to ensure proper treatment under the regulation of any electricity generators or combined heat and power facilities with pre-AB 32 long-term contracts that do not allow for pass-through of costs associated with greenhouse gas emission:"

WHEREAS, in the Initial Statement of Reasons for Adoption of the Cap-and-Trade Rule, Board Staff recognized the importance of protecting parties to long-term contracts, noting that some of those contracts, entered into before the mid-2000s, "do not include provisions that would allow full pass-through of cap-and-trade costs," and may therefore "require special treatment" under the Cap-and-Trade Rule (ISOR at II-32, n.22; Appendix J at J-16 n.15);

WHEREAS, in the notice accompanying the first 15-day changes to the proposed regulation, Staff acknowledged that many parties were seeking to resolve this issue through bilateral contract negotiations, but that, should renegotiation not be possible in all cases, Staff would consider whether special treatment was warranted;

BE IT FURTHER RESOLVED that the Board directs the Executive Officer to work with interested stakeholders to develop and adopt amendments to the Cap-and-Trade Rule by June 2012 to provide transitional relief to covered entities who are parties to long-term contracts that do not allow the recovery of the costs of purchasing GHG emissions allowances. (IEPA5)

**Comment:** I would like to make a couple observations about the issue of the treatment of the pre-AB 32 existing contracts. We're not talking about the entire electric sector here. By definition, we're talking about certain entities that are entered into these early contracts that do not have a reasonable means for cost recovery under the terms of the contract or pass through of the costs, like other obligated entities. This is a relatively small group, we believe. But unfortunately for this group, it's very, very important that they be recognized for the situation they find themselves in. You can imagine that if you are losing money every hour that you're operating, that creates a huge operational problem. Shut down risk. And unfortunately, we know that economic theory will tell you, you can't make that up in value. So we have a problem here. And the solution on

the table so far has been that these parties should bilaterally renegotiate these transactions. We would support that if that were practical. But unfortunately, it's two parties to the deal and the counterparty, the buyer in these transactions, is lucky to be getting a windfall that we don't support—but will be getting a windfall that will make it foolish for them to renegotiate these on a voluntary basis in most respects. We believe we have to deal with this. And our members need regulatory certainty. I want to emphasize that, because these issues have been on the table for a long time. And we would like some clarity on when this is going to get resolved. I just want to make the treatment of these primarily in-state generation resources that serve combined heat and power and so forth. I want to contrast this to what's happening to some other out-of-state treatment facilities. I'm going to point the finger at the treatment for Bonneville Power Administration, which is an exporter/importer into California. There was enough attention to their problem that they have a special carve-out in these regulations in our view, which we think is going to foster contract shuffling and leakage, which were two goals that the Board I think has been opposed to. So we have this juxtaposition, which is somewhat striking that in-state generators may be faced with a problem of cost recovery while there is special treatment for some out-of-state importers. We think it's now time to direct attention to these issues. (IEPA6)

**Comment:** We are interested in addressing concerns with those generators operating under legacy contracts signed before AB 32 went into effect or before AB 32 was adopted and which do not allow for GHG pass-through. (CPUC)

**Comment:** There is this nagging problem of pre-AB 32 contracts. In addition to the utilities receiving allowances for costs they do not incur, a windfall profit, there's two related problems that I want the Board to be very aware of that are directly tied to this.

First is that because the utilities are not seeing the cost of these greenhouse gases, there would not be the transparency of the pass-through of costs and therefore the price signal for these contracts to be impacting consumer behavior. Second, the absence of this greenhouse gas price signal could well result in higher emitting greenhouse gas resources being dispatched, because a lower emitting resource would have a greenhouse gas cost, making it more expensive. Economic dispatch would thus result in higher than necessary greenhouse gas emissions.

Wellhead has proposed some very specific changes that would eliminate this problem and would do so without the changing the balance of benefits or burdens under the contracts. We understand that your Resolution has identified this as an issue. What we would like to ask is that in the Resolution you ask for a time frame to make it clear that if the negotiations are not making progress, or successful, within a very limited time frame, I think it should be as short as 60 days, the Executive Director be required to report back and step in and there be positive movement on going back into the regulations to do two things: 1) ensure that the allocation of free allowances does not result in a windfall; and 2) ensure that the cost of GHG compliance is transparent to consumers and the utilities. The time frame is critical. As we're going into 2012, people are starting to make plans. It's a significant financial commitment exposure uncertainty

that's there. We understand that the PUC and ARB would both like this to be resolved and go away through bilateral negotiations, but the proposed regulations are already giving the utilities the free allowances. They already have it. So now they're being asked to give it up. And I think that's a problem for renegotiations. (WEC4)

**Comment:** We urge the Board to take caution in reopening power contract agreements that have already been negotiated with a broad set of parties. These contracts balanced many issues on both sides of the transaction that were important to all these parties. And we hope the Board wouldn't step in to address one issue that is on one single side of the party—of the contract. Reopening these negotiations we feel would be a real problem, a real challenge, and won't really help us to continue the reliable service here in California. There are other elements that we agree need to be continued to be worked on. We understand that the Board is considering an amendment process and new rule making. We simply urge you to begin this rulemaking as soon as possible. Certainly, these contracts include language that allows for the pass through of the compliance costs. That was part of the negotiated agreement. I think that's one of my key points. And that is one element that's already in this agreement. Whenever you design these types of contracts and you engage in these transactions, there are a variety of different elements that each side of the transaction is looking—a variety of different goals each side of the transaction is looking to achieve in this contract. And so in these contracts that I'm referring to, the ability to pass through the GHG costs is present there in the contracts I'm referring to. There are certainly a number of elements that both sides had to agree to accept that perhaps they would have preferred not to accept. And so reopening the contract on the basis of one of those concerns we feel doesn't really support the power procurement practice that we engage in here in California. (SCE5)

**Response:** See our responses to comments I-103, I-104, and I-105 in the 45-day comments and responses (Chapter III of the October FSOR) and our responses to Comments H-1, I-9, I-117, I-118, I-119, I-120, and L-34 in the first 15-day comments and responses (Chapter IV of the October FSOR). See also our responses to Comments I-20, I-26, I-27, I-50 in the second 15-day comments and responses (Chapter V of the October FSOR). Furthermore, Board Resolution 11-32 provided this direction to staff:

BE IT FURTHER RESOLVED that the Board 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.

We note the CPUC's comment indicates a commitment to address concerns with "legacy contracts signed before AB 32 went into effect or before AB 32 was adopted that do not allow for GHG pass-through."

We did not make the regulatory changes recommended by PEB for the reasons provided in our responses to PEB's and others' comments listed in this response and in other responses included under the subheadings "Combined Heat and Power" and "Long-Term Contracts" in the Electricity sections of Chapters III, IV, and V of the October ISOR.

We acknowledge that the situation faced by Wildflower differs from that faced by most other parties to long-term contracts. We will continue to work with Wildflower and its counterparty, as well as others (e.g., the utility(s) that purchase from the counterparty) that may be able to facilitate successful bilateral negotiations. We note that Wildflower indicates that its generators are necessary to serve load in California utility service areas; given such a necessity, it may be that Wildflower and similar generators may have some degree of leverage in contract renegotiation.

With regard to IEP's comments, we note that ARB has continued, and will continue, to work with stakeholders to address the long-term contract issues. We continue to believe that bilateral negotiation and work within the appropriate CPUC proceeding (for contracts involving IOUs or in which the electricity generated is ultimately sold to California IOUs) is most likely to solve issues where costs cannot be passed through, and where there is reason to believe that GHG costs were not tacitly considered by parties entering contracts. While the regulation does not directly address the shrinking group of generators that have been unable thus far to find solutions through bilateral negotiations, we are committed to providing support by facilitating discussions between parties.

Regarding IEP's specific comment about BPA, see the response to Comment Q-1 of this document.

## **Allocation**

### *General*

#### **I-7. (multiple comments)**

**Comment:** NCPA supports the proposed changes and cost containment and provisions that facilitate electrical distribution utilities in their ability to meet their obligations under the program, and also further the objections of AB 32 more broadly. Particularly, NCPA supports the finalization of the allowance allocation methodology for electrical distribution utilities, the metric upon which that allocation is based was thoroughly evaluated by a broad range of stakeholders, as well as CARB and the Cal/EPA staff, not just the electric utilities. As CARB and others have repeatedly concluded, it's the electrical distribution utilities that have the most direct link to all

California residences and businesses and provide the most cost effective and efficient vehicles for delivery of that value of the allowance value back to the residents and businesses while advancing the objectives of AB 32. While we've heard the concerns of the Water Contractors, we believe those concerns are addressed by the return of the allowance value to all the customers, which is done thorough the electrical distribution utilities. (NCPA5)

**Comment:** We would appreciate continued direction to your staff to consider how allowance policies could be modified to account for the growth of electric transportation, a topic that has not been included in the regulations to date and, thus, remains from your Resolution in December of last year as something for staff to work on and discuss and address. (SMUD5)

**Comment:** The University supports the goals of AB 32, and we've never sought an exemption from the Cap and Trade Program. However, the University believes that public entities that are regulated under the cap and trade should be treated no worse than industrial facilities or the utilities companies. The University has a proposal that we would still like to be considered. In exchange for a free allocation of allowances, CARB would require our regulated U.C. campuses to invest a sum commensurate to 125 percent of the market value of freely allocated allowances in the abatement projects. U.C. will commit to reducing the regulated emission by 7 percent by 2020. This is in line with the overall statewide emissions reductions that CARB is targeting with its Cap and Trade Program. (UC5)

**Comment:** We are keenly interested in addressing a number of issues related to the sectoral allowance allocation; in particular, to address indirect emission cost exposures faced by the emission-intense trade-exposed industries. (CPUC)

**Response:** We appreciate NCPA's support of the allowance allocation methodology for EDUs. See our response to Comment I-17 in the 45-day comments and responses (Chapter III of the October FSOR) regarding the electrification of transportation. With regard to UC5's comment, see our responses to Comment I-1 and I-52 in the first 15-day comments and responses (Chapter IV of the October FSOR). In addition, Resolution 11-32 finds that "State universities serve an important public service in providing affordable higher education" and directs the Executive Officer to "develop recommendations for the appropriate use of auction revenue that "consider the Board's direction in Resolution 10-42." Although the regulation does not provide special treatment by allocating allowances directly to UC, as a customer of IOUs and POUs, UC campuses may be allocated funds or services that make use of allowance value provided to the electric distribution utilities for ratepayer benefit. Finally, we appreciate CPUC's interest in addressing issues related to indirect emission cost exposure faced by EITEs, and look forward to working with CPUC on these issues.

**I-8. (multiple comments)**

**Comment:** I'm here on behalf of the Water Authority to talk about the treatment of both the State Water Project and the Metropolitan Water District under this plan. This plan is going to have an impact on the water rates of the San Diego County rate payers who have in the last three years faced a 60 percent increase in their rates. And it will do that without any corresponding benefit in terms of water supply, water supply reliability. So that is a concern we have. And mitigating the cost to the rate payer of this through the electrical companies rebating, accrediting doesn't sync up very well, because water customers and electricity customers aren't necessarily the same. And as an example, a farmer who uses a great deal of water and very little electricity would not be receiving the rebate to the extent that somebody that uses a very large amount of electricity and very little water would receive. So the two don't sync up well. I understand that this is the final version and that it can't be changed here today. I would join with the others who have suggested that the Board do start working on and seeking amendments to resolve these problems in this final document as soon as possible, preferably within the year. And again, I'd like to reiterate that this will have a strong impact on rate payers in southern California and the San Diego area in particular. There's been an article in the Union Tribune yesterday and also an editorial this morning that indicate what the impacts will be. And so I hope you take that into consideration as we go forward in the coming years to make amendments to the regulatory scheme. (SDCWA2)

**Comment:** Desert Water Agency supports the requests by the State Water Contractors for the Board to direct the Executive Officer to allocate an allowance in the future to the State Water Project in recognition of the potential cost impacts of water consumers. Desert Water Agency is a customer of Southern California Edison, but also a customer of the State Water Project and therefore deserves consideration of an allowance on the basis of fairness and equity. As a public agency, Desert Water is not allowed to profit from this enterprise. Therefore, any savings resulting from a savings from the State Water Project will necessarily benefit its customers. (DWA)

**Comment:** As a public utility providing an essential resource to the residents of San Diego County, we have become concerned with not only the program's current design, but with the process as well. By including MWD as essentially an electricity retailer for purposes of the program but not affording them allowances of free allocations that more typical electricity retailers are being provided, an inequitable arrangement has been created that will result in higher costs to MWD. As MWD has stated to you, they will be compelled to pass on these higher costs to its ratepayers, which includes the Water Authority. For the same reasons as MWD, we will need to pass these costs onto our member agencies, resulting in higher water rates to the end users.

The program, by its design, will cost our water customers additional money. We understand an estimate of this amount is \$5 million. We are concerned that the method by which ARB will mitigate these additional costs to the water customer is to provide a rebate or credit on the SDG&E (electric) bill. This approach is flawed in that water and

electric customers are not one and the same. For example, a grower uses a high amount of water but not electricity. Growers would therefore be significantly impacted while others would not. In fact this concept may be a net benefit to the low water, high electricity users. The only other viable and equitable alternative to exempting MWD from the program would be to provide MWD with the same free allowances that the public electric utilities are being afforded in your program. The customers of a utility providing the essential public resource of water deserve the same cost relief as the customers of a utility providing an electric resource. We understand that staff from the State Water Project has been working with your staff in developing an allocation approach that would provide this relief while minimally affecting the other utilities that are currently included in the allocation formula, as well as being a non-material change to the program.

We should also note our concern with what seems to be a flawed process in developing the currently proposed allocation strategy. We understand that the water sector, unlike those in the electricity sector, was excluded from many of the meetings that ARB staff conducted in crafting the approaches for allocating the free allowances. This may be a reason that the current proposal is detrimental to MWD and its member agencies. This would, of course, violate the rights of those of us in the water sector as well as the customers we serve. (SDCWA)

**Comment:** The members of our association receive water from the State Water Project. We distribute that water throughout the state of California. In return, we pay for all the costs that are associated with that. The primary mission of the State Water Project is the delivery of water. When you look at it from the electric side, it's the equivalent of the sixth largest electric utility in the state of California.

As a consequence, it's fallen under the cap and trade regulations. Before the Board adopted the regulations in December, there was a group of utilities that got together to decide how to allocate emission allowances amongst themselves. We weren't included in that. As a consequence, the allocation didn't take into consideration the fact that 90 percent of our costs are incurred in Southern California. When the emission allowances were granted to the utilities, they received an equivalent of only about 60 percent of that cost equivalent. Conversely, when you look at Northern California, you have just the reverse that's occurred. Ten percent of our costs are incurred in Northern California and around 40 percent of the value of the emission allowances was provided to Northern California. When you look at this, the result is essentially a wealth transfer from customers in Southern California to Northern California. We have in comments that we've submitted identified a number of other concerns that this type of misalignment between our costs and how the value of the allowances were provided. What we've provided is an allocation that we think addresses the concern that we've raised. We think that it's also a way that the Air Resources Board can achieve the objectives that it has under the cap and trade regulation. We think that it is an allocation that's very consistent with what the Board adopted in December of last year. It doesn't allocate any additional allowances than what were allocated and it doesn't regulate any fewer emission sources throughout the State of California. As you deliberate today,

we'd like you to take those things into consideration and adopt the allocation that we've proposed. (SWC5)

**Comment:** Metropolitan should be exempt from the cap and trade regulations for the following reasons. First, Metropolitan is a consumer of imported electricity. We import electricity for the sole purpose of delivering Colorado River water to our consumers within our service area. Second, Metropolitan is not an electricity utility. We're not a marketer. We don't sell energy. We are not a retail provider. We do not generate or produce electricity. The third thing I would like to mention is we are, of course, very concerned about our rates and the rates where the regulations regulating Metropolitan now as an electric utility and later as a water utility would result in duplicative regulatory requirements and unnecessary cumulative costs on a water rates, which we feel are unreasonable for our rate payers. Also, I would like to mention that Metropolitan would be required as a public agency to compete against the private for-profit entities in the carbon market. We do not think this is an appropriate place for the public agency. And finally, our greenhouse gas emissions, which have been assigned to our imported electricity, are already well below 50 percent of what they were in the 1990 levels. (MWDSC6)

**Comment:** This cap and trade regulation if passed as it's being proposed will essentially take millions of dollars from the poorest community in California and transfer that to communities in northern California: San Francisco, Sacramento, others. This can easily be remedied. We're talking about 1.5 percent of emission allowances that are available to be allocated to the State Water Project. It's the right thing to do. And also it's not very easy for us anymore to raise water rates, would be the national outcome of this regulation. (SWC6)

**Comment:** Without the change in these allocations, it's estimated that this will cost my agency upwards of \$2 million a year in additional costs. When I relate that to my water rates, that's roughly a 5 percent increase in my water rate just to cover this one cost. I don't think that's fair. (SWC7)

**Comment:** I strongly urge ARB to modify its regulations to correct the inequities that have been mentioned by providing carbon allowances to the Department of Water Resources for the State Water Project. Left unchanged, cap and trade amounts to no more than a bait and switch for millions of State Water Project customers. (SWC8)

**Response:** See the response to Comments G-21, I-35, and I-36 in the 45-day comments and responses (Chapter III of the October FSOR). See also responses to Comments G-12, I-139, I-140, I-141, I-142, I-143, I-145, and I-146 in the first 15-day comments and responses (Chapter IV of the October FSOR) and our response to Comment I-54 in the second 15-day comments and responses (Chapter V of the October FSOR.). Also, in Resolution 11-32, the Board directed the Executive Officer to continue discussions with stakeholders to identify and propose, as necessary, during the initial implementation of the cap-and-trade program, potential amendments to the regulation for distribution of

allowance value associated with cap-and-trade compliance costs from using electricity to supply water, and the expected ability of allowance allocation and other measures to adequately address the incidence of these costs equitably across regions of the State.

*Miscellaneous*

**I-9. (multiple comments)**

**Comment:** We support the option for publicly-owned utilities to directly surrender allowances to ARB for compliance. This will save the administrative cost of consigning to auction and purchasing back the same allowances with no environmental benefit. (LADWP6)

**Comment:** We support the administrative allocation of allowances to the electric utilities. The allocations combined with the existing State mandates and goals for coal transition, RPS and energy efficiency will set parameters for LADWP to transition its resources and dramatically reduce its greenhouse gas emissions in a manner that is much more sensitive to our local rate payers, many which come from low-income communities. (LADWP6)

**Response:** We appreciate the support of these regulatory provisions.

## J. ENFORCEMENT

**J-1. Comment:** The Yurok Tribe fully supports robust ARB enforcement of cap and trade regulations. Section 95975(l)(l) as drafted, however, seemingly would allow punitive damages against federal, State, local and Tribal governments. By law this cannot happen for the federal government, State government or political subdivisions thereof. It is the Yurok Tribe's understanding that ARB will not seek punitive damages, in Tribal waivers of Sovereign Immunity. This is true in the same way such damages are not applicable to federal, California, and local governments. Otherwise the regulations would be discriminatory against tribal governments. Staff has given assurances that tribes will be treated the same as all other governments and that punitive damages will not be required in tribal limited waivers of sovereign immunity. They gave the further assurances that a language change was not necessary. The Yurok Tribe appreciates the complicated nature and ARB's time considerations in adopting these regulations. Given these factors, the Yurok Tribe submits this comment to make clear our understanding based on conversations with ARB staff that punitive damages will not be required in tribal government waivers of Sovereign Immunity. (YUROKTRIBE2, YUROKTRIBE3)

**Response:** We agree with the commenter's understanding and believe that the language in section 95975(l)(1) provides for robust enforcement consistent with existing laws. To the extent punitive damages are inapplicable to government entities, ARB will treat Tribal governments consistently with other government entities, and will not seek punitive damages from Tribal governments through the limited waivers of sovereign immunity. ARB is committed to providing equitable treatment under the regulation and protocols and appreciates the support of the commenter.

## K. LEGAL

### General

**K-1. Comment:** The regulatory provisions regarding the creation of offset credits far exceed ARB's statutory mandate. Fundamentally, under California law, an agency does not have the discretion to promulgate an administrative regulation that is not authorized by or is inconsistent with or enlarges the scope of an act of the Legislature (see *Sabatasso v. Superior Court*, 84 Cal. Rptr. 3d 446 (Cal. App. 4th Dist. 2008), as modified, (Oct. 22, 2008); *In re J.G.* 159 Cal.App.4th 1056, 1067, 72 Cal.Rptr.3d 42 (2008); *Slocum v. State Bd. Of Equalization* 134 Cal.App.4th 969, 974, 36 Cal.Rptr.3d 627 (2005). Here, under the guise of AB 32, ARB has created a massive new regulatory scheme regarding the creation of offset credits and ceded to itself vast discretionary power to determine whether proposed offset projects would occur in the course of "business-as-usual." The Legislature has clearly limited the ARB's legal authority in this area. AB 32 states that any regulation adopted by the ARB "must ensure" that any claimed GHG reduction "is in addition to any greenhouse gas emission reduction otherwise required by law or regulation, and any other greenhouse gas reduction that otherwise would occur" (AB 32 section 38562(d)). Under ARB's scheme in the Regulation, "ARB offset credits" must be "additional" (section 95802(a)(12)). In order to be "additional," reductions underlying offset credits must "exceed any greenhouse gas reductions or removals that would otherwise occur in a conservative business-as-usual scenario" (section 95802(a)(3)). The Regulation provides no further guidance on how one can objectively analyze conditions that are "reasonably expected to occur." The Regulation places the chief responsibility for making this standardless determination on either the offset project operator, which is the entity responsible for implementing the offset project (section 95082(a)(179)), or the operator's agent (the "authorized project designee" (section 95082(a)(22)) and the offset verifier. Thus, this key, inherently governmental function has been delegated to private industry. Once a request to create an offset credit is submitted to CARB, CARB must make a decision within 45 days (section 95981(c)). Through this process, then, the public is provided no opportunity to weigh in on the determination made by the project developer and the private independent verifier on the determination of what is "reasonably expected to occur," compounding the prospect of erroneous or inconsistent determinations of what may reasonably be expected to occur. This unauthorized, behind-closed doors process regarding this key element of offset creation has no statutory basis, and therefore does not meet the requirements of California law. (WILLIAMSZ9)

**Response:** ARB disagrees with the commenter about the scope of ARB's authority. Health and Safety Code section 38571 requires the Board to adopt methodologies to quantify voluntary reductions in greenhouse gases, and states that ARB shall adopt regulations to verify and enforce any voluntary reductions authorized by the Board for compliance purposes. All offset protocols must be specifically adopted by the Board pursuant to the Administrative Procedure Act (APA). The development of the protocols is not limited to ARB staff and offset providers; the public is specifically included through the rulemaking process.

Although the public may still comment on the quantification methodologies included in the offset protocol, this is the only portion of the adoption of offset protocols that is exempt from the APA.

**K-2. Comment:** ARB has failed to demonstrate that Environmental Performance Standards are legally infeasible. In response to our comments that environmental performance standards would help protect forests from adverse or unintended impacts from the forest protocol, the staff response states that such standards are legally infeasible. "With regard to consideration of Environmental Performance Standards, the commenter recommends their use for the Forest Offset Protocol and expresses concern regarding ARB's conclusion that they would be infeasible as applied to the Cap-and-Trade Regulation. The FED explains on page 370 why the use of Environmental Performance Standards is not feasible. The reasons are both practical (i.e., inability to cover the spectrum of potential sites and circumstances for Forest Offset projects) and legal (i.e., the potential for California-defined environmental standards to be inconsistent with the laws and regulations of other jurisdictions). Further, in California, defining Environmental Performance Standards is not necessary because criteria are established by existing environmental protection laws and regulations." However, ARB has failed to demonstrate that Environmental Performance Standards are legally infeasible. Ideally, Environmental Performance Standards would exceed the minimum requirements of California and other jurisdictions. Offset projects are voluntary; if ARB chose to do so, it could dictate standards that exceed current regulatory requirements, which would in fact be entirely consistent with AB 32's requirement of maximizing environmental co-benefits. The establishment of Environmental Performance Standards thus would not "conflict" with various jurisdictions' laws regulating forestry; rather, such an approach would simply hold participants in a voluntary market to a single, high standard that both bolsters offset project quality and helps to maximize environmental co-benefits in accordance with AB 32. Embracing minimum regulatory standards, in contrast, whether those of California or other states, does neither. Furthermore, the fact that many of the potential data sources identified in the adaptive management plan with respect to forest impacts are not available for lands outside of California will significantly limit the ability of an adaptive management plan to detect adverse forest impacts. The potential options for addressing forest impacts in jurisdictions outside of California may similarly be limited. (CBD6)

**Response:** ARB chose not to pursue the development of Environmental Performance Standards (EPS) for several reasons. Both practical and legal constraints, as noted in the FED, made EPS unworkable. ARB is not required, under either the APA or CEQA, to show that it is "legally infeasible" to incorporate a performance standard into the protocols before such standards are omitted. We did not make the suggested changes to the Forestry Protocol to include EPS because of the constraints noted in the FED and because existing requirements within the protocol require the projects to be in conformance of all local and federal environmental laws.

## APA Procedures

### *Adaptive Management Plan*

**K-3. Comment:** ARB plans to consider approval of a “Proposed Adaptive Management Plan” at the October 20 hearing. ARB has not followed any APA procedures in adopting this plan and no version of the proposed plan was publicly available until the plan was posted on ARB’s website ten days before the hearing. ARB claims the plan is integral to the cap-and-trade scheme, but if this is the case, ARB should allow sufficient time for commenters to adequately analyze and comment on the plan before it is submitted to the Board for potential adoption. The 10-day period between when the Plan was released and its planned adoption by the Board on the 20th does not provide adequate notice and is not consistent with the deliberative process required by the APA. WSPA also requests that CARB defer action on the proposed Adaptive Management Plan (AMP). We further suggest that in the Board Resolution on the Cap and Trade rule, the Board direct staff to provide a meaningful opportunity for public review and comment on the proposed AMP followed by Board action at a duly noticed public hearing. We suggest that ARB conduct this process over a period of approximately 120 days. (WSPA5)

**Response:** The Adaptive Management Plan did not follow the Administrative Procedure Act because it is not a regulatory action. The Adaptive Management Plan explains in more detail how ARB will address unanticipated impacts that could result from the Regulation related to two specific areas discussed in the FED. The Adaptive Management approach was described in the FED prepared for the regulation that was circulated for 45 days for public comment with the ISOR. ARB also subsequently solicited comment on the proposed Adaptive Management approach. The written Adaptive Management Plan released ten days before the October 20, 2011 hearing explains in more detail the Board’s commitment to the process recommended in the FED. There is no legal requirement to make that written plan available for public comment. ARB rejects the proposal to continue to review the Adaptive Management Plan for an additional 120 days. See the response to Comment B-12 in the second 15-day comments and responses (Chapter V of the October FSOR).

### *FSOR*

**K-4. Comment:** In terms of the administrative process, ARB informed the public that it does not intend to include “written responses to comments submitted in connection with the October 20, 2011, Board hearing” in its final statement of reasons (FSOR) for the regulation. This is a clear violation of the California Administrative Procedures Act (APA) which requires that the FSOR include “a summary of each objection or recommendation made regarding the specific adoption, amendment, or repeal proposed, together with an explanation of how the proposed action has been changed to accommodate each objection or recommendation, or the reasons for making no change.” Gov. Code 11346.9(a)(3). This provision encompasses all comments

submitted in response to the adoption of the regulation which clearly includes comments submitted in connection with the October 20 Board hearing. Thus, ARB is required under the APA to include responses to those comments in the FSOR. In order to address these concerns, WSPA respectfully requests that ARB include in the FSOR responses to all comments submitted in response to the October 20 Board Hearing.

We find ARB's notice that it does not intend to include written responses as especially curious given that the Notice of Public Hearing states that "written and oral comments will be considered by the Board and will be part of the administrative record," however, "the Board will not have the option of making changes to the regulation as part of [the] rulemaking action."

It is unclear how the Board can meaningfully take comments into consideration when it "will not have the option" of amending the proposed cap and trade regulation. The APA requires that an agency explain "how the proposed action has been changed to accommodate each objection or recommendation, or the reasons for making no change." Gov. Code 11346.9(a)(3). As the Board feels that it does not have the option to change the proposed rule to accommodate comments, the comments are effectively worthless, negating the goal of public participation inherent in the APA.

Further, nothing in the APA suggests that it is appropriate for an agency to be limited to options to adopt or decline to adopt a regulation without the option to modify the regulation based on comments received. This process is in direct conflict with the APA's purpose to "establish basic minimum procedural requirements" which provide for transparent decision-making and allow the public to shape rulemaking. Gov. Code 11346.

ARB has not completed an array of public participation measures that it committed itself to completing in adopting the cap-and-trade regulations. ARB initially stated that it would hold multiple stakeholder meetings and intimately involve the public and affected parties in crafting the regulation because of the complex and novel issues at hand. Instead ARB is pushing through a regulation which is incomplete and highly controversial, and cutting procedural corners in violation of the APA, all in an apparent attempt to avoid having to re-notice the cap and trade rulemaking. WSPA further asks that the Board direct staff, within the same 120 day period, to engage with stakeholders and interested parties regarding potential amendments and revisions to the Cap and Trade regulation in order to fulfill ARB's initial promise to intimately involve the public in crafting all its rules and regulations. (WSPA5)

**Response:** The commenter is incorrect in its interpretation of the requirements of Government Code section 11346.9(a)(3). The commenter appears to believe that the language of section 11346.9(a)(3) means that any verbal or written comments received during the one-year rulemaking period, regardless of the manner and specificity with which notice was provided, require a response in the Final Statement of Reasons. This interpretation of section 11346.9(a)(3) does

not forward the public process, and it is not supported by standard rules of statutory interpretation.

The notice of the October 20, 2011, hearing was drafted to ensure compliance with the Bagley-Keene Open Meetings Act (Bagley-Keene). Bagley-Keene requires that all meetings of government agencies be held in the open and that the public have the opportunity to participate. (Gov. Code section 11125.7.) The Legislature, in adopting Bagley-Keene, specifically invited the public to participate in each and every open meeting held by a state agency. Members of the public may comment on any matter before the agency, including those not on the public agenda. However, if the statute is interpreted to require responses to comments received pursuant to Bagley-Keene, agencies would likely hold fewer public meetings, and would eschew any other process that could be construed as providing a forum requiring additional written responses. This result ill-serves stakeholders and the public, and thwarts the public purpose of not only Bagley-Keene, but the APA.

However, in the interest of government transparency and public information, ARB has responded to participants' concerns received in writing before the October 20, 2011, Board hearing and those concerns raised at the hearing itself.

## L. MARKETS

### Monitoring

**L-1. Comment:** It is important in the upcoming months that the public, especially compliance entities, are engaged and informed on the process leading up to the initial surrender and auction. CCEEB believes that it is prudent for the staff to provide monthly updates at each Board meeting that will also allow public comment. These updates should also include updates from entities that are being contracted to provide oversight and essential services for the market. (CCEEB5)

**Response:** The contracts with entities that are providing oversight and essential services for the market will include a schedule of deliverables, such as testing and status reports. Staff will be providing periodic Board updates where stakeholders will be able to provide public comment.

**L-2. Comment:** NCPA supports the direction for ongoing monitoring of the markets and urges the Executive Officer to act promptly if the market manipulation or volatility is discovered. The success is contingent of the efficacy of the program structure, including the cost containment provisions contained therein, such as the reserve account. NCPA also supports the Resolution's direction to have the program reviewed by an independent monitor and for market simulations prior to the January 1, 2013, enforcement of the program. We would urge a slight modification that would require a report to the Board prior to the launching of the first auction. And that if shortcomings or concerns are identified in the simulations, that the first auction be postponed until those concerns are addressed. (NCPA5)

**Response:** As part of any rulemaking, we will work to ensure all the critical pieces are in place to implement this program. If, for unforeseen reasons, the implementation timing or a program element must be adjusted, we will make appropriate recommendations to the Board.

**L-3. Comment:** The decision to defer the start of the program to 2013 provides valuable time for ARB to conduct market stimulation and system testing prior to the start of program. Those are efforts we very much support. In particular, we are pleased to see ARB will work with stakeholders and an external entity to market simulations. We think those will be extremely valuable and allow ARB to make any necessary modifications to the regulations. We encourage ARB staff to continue to develop active market monitoring and establish a market surveillance committee. (PGE7)

**Response:** We are coordinating interagency agreements with the University of California on market simulation and establishing a market surveillance committee.

**L-4. Comment:** Modify the GHG Cap-and Trade Rule Proposed Resolution Text as follows:

BE IT FURTHER RESOLVED that the Board directs the Executive Officer to contract with an independent entity with ~~appropriate~~sufficient -market experience ~~use~~ (the "Market Monitor") that will monitor and provide public reports on the Operation of the market, including auctions and reserve sales, on a quarterly basis and recommend appropriate action, which could include taking corrective action prior to the next auction, adding future allowances to the allowance reserve or future auctions, increasing the overall supply of offsets and use of offsets as compliance instruments, or temporarily suspending trading in the market. In its review of each auction, the monitor shall, within seven days following each auction, also review associated calculations for such auction, participant and group behavior, and assess other potentially manipulative or fraudulent behavior and certify the results of each auction prior to the auction transactions. (PGE6)

**Response:** We have issued a Request for Proposals from entities currently providing market monitoring services. The respondents' experience and technical capacity will be considered during selection. The monitor will address market supply conditions, including the supply of offsets. We expect the monitor to review bidder activity at the auction to search for collusion and manipulation. These comments are unrelated to the regulation and seek modifications to the Board Resolution and, therefore, need no further response.

**L-5. Comment:** Modify the GHG Cap-and-Trade Rule Proposed Resolution Text as follows:

BE IT FURTHER RESOLVED that the Board directs the Executive Officer to report to the Board no later than ~~March 31~~July 31, 2014~~2~~, on the progress being made ~~on implementing~~toward completion of the following essential elements of the cap-and-trade program prior to the first auction including: ~~information on the status of the following:~~

- Release of a cap-and-trade implementation plan, including a detailed master timetable, enumeration of tasks for completion prior to the full launch of the market and the start of compliance obligations and a stakeholder engagement plan.
- Implementation of a market tracking system, and a schedule for initial deployment of the system and making training available for covered entities and others that will need to register in the system and use it for participating in the program
- Implementation of an auction system
- Implementation of an offset ~~registry tracking system~~, and information on any entities that have indicated an interest in applying to become third-party ~~registries~~ offset registries under the cap-and-trade regulation
- Work with other agencies and other interested parties on market oversight, including any market simulation efforts

- Efforts to solicit expert advice on the design of the market to ensure that it is protected and ensure the ongoing proper operation of the market.

BE IT FURTHER RESOLVED, that the Board directs the Executive Officer to contract with an external entity to develop and complete simulation exercises for the market, and to work closely with regulated entities and other stakeholders such that the simulations evaluate potential market conditions, trading dynamics, adequacy of the reserve and other key design features of the program. The Board directs the Executive Officer to complete these market simulations with sufficient time to take corrective actions, if any, necessary to address potential market design or other issues prior to the first auction. (PGE6)

**Response:** We are coordinating two interagency agreements with the University of California to obtain market simulation analysis and to establish a market surveillance committee. The scheduling for delivery of the tracking, auction, and financial services systems will be contained in the contracts signed with these service providers. These comments are unrelated to the regulation and seek modifications to the Board Resolution and, therefore, need no further response.

**L-6. Comment:** Modify the GHG Cap-and-Trade Rule Proposed Resolution Text as follows:

BE IT FURTHER RESOLVED, that the Board directs the Executive Officer to appoint a committee of external market experts (a "Market Surveillance Committee") to provide an ongoing, independent assessment of the functioning of the market and any recommendations for modifications to the design and operation of the program and/or amendments to the regulation. This committee shall be made up of no fewer than five members, with one of its members nominated by the California Independent System Operator, and at least three of the members having significant and direct commercial experience with commodities or emissions credit trading. This committee is directed to provide a report and recommendations to the Board on a semi-annual basis, or whenever it deems modifications or adjustments to the program are needed. (PGE6)

**Response:** We are coordinating an interagency agreement with the University of California to establish a market surveillance committee (MSC). We have recommended that the MSC be composed of academic experts on markets, based on the same model as the committee operated by the CAISO. We believe the group will have both the expertise and the objectivity needed to identify potential market problems and recommend solutions. We have also recommended that the MSC have three members, but it will have the ability to consult additional experts as needed. These comments are unrelated to the regulation and seek modifications to the Board Resolution and, therefore, need no further response.

## Holding Limit

**L-7. Comment:** Because of our size and the investment we made in California, we're not afforded the same flexibilities that other market players are with regards to banking, which is a huge cost containment mechanism. Right now, I heard staff earlier today say they had a holding limit and they put that in place for fear of market manipulation. Yet, the six million allowances that you're allowing any party to hold, including bankers and brokers who have no obligation, that's it. You're not tying the holding limit to the size of an obligated entity's emissions. So we are not afforded the same flexibilities. We will have to over-comply and retire allowances earlier. Again, we urge certainty. We urge the Board and staff not to just look at and monitor these issues. We actually urge them to take action, provide a certainty before the first auction, good, bad, or indifferent. (CALPINE5)

**Response:** Covered entities are allowed to hold far more than six million allowances. They have an exemption from the holding limit for a number of allowances that will always exceed their cumulative emissions obligations. The six million ton limit referred to in the comments is the limit on speculative holdings. That is, it is a limit on the number of allowances held for the purpose of resale. In this sense, all entities with holding accounts face the same absolute limit on speculation.

## M. OFFSETS

### Ensuring Offset Quality

#### M-1. (multiple comments)

**Comment:** The offset credit provisions of the proposed Regulation, and the four Offset Protocols incorporated by reference therein (see proposed Regulation incorporated by provisions found at p. A-199, Livestock, ODS, Urban Forest and U.S. Forest Protocols), fail to meet the AB 32 Integrity Criteria and should be removed. All provisions of any revised version of the Regulation must comply with the AB 32's Integrity Criteria (see AB 32 section 38562(d)). (WILLIAMSZ9)

**Comment:** CARB should give special scrutiny to the integrity of offsets because of the urgency of taking effective actions to prevent the very serious impacts that are anticipated from a failure to reduce emissions. The National Science Foundation reported that Methane Emissions indicated that the East Siberian Arctic Shelf has begun leaking large amounts of methane and that further releases of methane through the shelf could "trigger abrupt climate warming." Three reports issued in 2010 indicate that "climate change is already occurring and poses significant risks." The reports recommend "prompt and sustained efforts to promote major technological and behavioral changes" are needed to avert additional climate impacts (National Academy of Sciences Report Press Release, May 2010). In the August 2009 NY Times article titled Climate Change Seen as Threat to U.S. Security, by John Broder "US military and intelligence analysts anticipate that climate change will contribute to serious security risks to the United States in the coming decades." MIT scientists found that new information indicated that, without "rapid and massive action" climate change impacts would be twice as severe as modeling showed six years prior. Experts are seeing extensive tree death in millions of acres of US Forests as a result of beetle infestations and drought, due in part to climate change. The loss of these trees will make it even more difficult to control global warming (NY Times Tree Death, 2011). In a May 30, 2011, News Report, "Global emissions of greenhouse gas emissions hit their highest level ever in 2010," both the chief economist of the International Energy Agency and the UN Climate Change Secretariat made statements indicating that it would be difficult in light of this trend to keep global warming below 2 degrees Centigrade, the target previously set by at the international climate talks in Cancun last year. Health experts, government officials and scientists at a British Medical Journal meeting in London warned of "grave and escalating threat to the health and security of people around the globe and must be tackled urgently" (EscienceNews.com, Act now to tackle the health and security threat of climate change, say experts, October 17, 2011). (WILLIAMSZ7)

**Comment:** Given the urgency of effective actions to address climate change, the adoption of a compliance mechanism that lacks integrity poses huge risks. Since California's actions are anticipated to be a model for the nation and the international community, it is extremely important that regulations and protocols adopted under AB 32 meet the integrity criteria found in that statute. As shown in the attachments incorporated in this comment, prior experiences in Europe under the European

Emissions Trading Scheme (“ETS”) and Clean Development Mechanism (“CDM”), indicate that it is either difficult or impossible to assure the integrity of greenhouse gas offsets and many experts, including those interviewed by the U.S. Government Accountability Office, believe that it may be impossible to achieve such integrity, because it is nearly impossible to know whether the offset projects are “additional” to what would have happened absent the offset program. (WILLIAMSZ7)

**Response:** We do not agree with the statements above regarding additionality or that the requirements of AB 32 have not been met. We believe that the Compliance Offset Protocols, in conjunction with the strict and thorough requirements in the regulation regarding offsets, meet the requirements of AB 32. The Compliance Offset Protocols adopted under the cap-and-trade regulation have been established with multiple levels of review, use conservative methods to account for uncertainty and emissions leakage, and establish the additionality of offset projects in setting project baselines. To assure offset quality, the program includes rigorous oversight and audit procedures for all ARB-accredited offset verifiers, offset project developers, and Offset Project Registries. In addition, the registry system for compliance instruments is being designed to provide strong enforcement capabilities, including mechanisms to prevent double-counting, public disclosure requirements, and methods to clearly define ownership. Moreover, the offsets currently approved in the program may only result from GHG reductions or sequestration in the United States. We have not approved any offsets from other countries and have not approved any offsets developed under the Clean Development Mechanism (CDM). Our offsets program is designed very differently than the CDM, relying on standardized assessments of additionality established by ARB through a public process and not relying on project-specific assessments done by the project developers themselves.

To ensure that reductions or removals credited as offsets are real, the regulation requires that all Compliance Offset Protocols address activity-shifting and market-shifting leakage. Each protocol incorporated by reference, including the forest protocol, accounts for leakage in the quantification of the reductions or removals achieved by the offset projects. In addition, when uncertainty exists in quantifying GHG reductions, ARB will only issue offset credits when there is a high level of confidence that reductions actually occurred. The regulation employs a principle of conservativeness in the quantification of emissions reductions. This method will ensure that the accounting will underestimate rather than overestimate any reductions when there is a high level of uncertainty.

**M-2. (multiple comments)**

**Comment:** The scheme for approving “Early Action” offsets lacks any mechanisms for attempting to assure that these projects meet the integrity criteria of AB 32. The most blatant truncation of a necessary review process is found in section 95990 (Recognition of Early Action Offset Credits: Approval of Early Action Offset Programs). To qualify as an Early Action Offset Program, either the Executive Officer shall issue an Executive

Order pursuant to section 95986(k) or the program must demonstrate to ARB that it (among other criteria) occurred between January 1, 2005, and December 31, 2014. The process of approval of Early Action Offset Credits allows the Executive Officer to approve such offsets with no public notice or transparency and without making any required findings regarding AB 32's Integrity Criteria. (WILLIAMSZ9)

**Comment:** The inclusion of early action offset credits under climate action reserve protocols and other programs violates the integrity standards. The "Early Action" provisions of the Regulation create a mechanism to retroactively approve and issue offset credits for projects which started before, sometime several years before, the enactment of AB 32 and the promulgation of offset protocols. Examples of these provisions include the definition of "Early Action Offset Credit" and the Early Action Offset Project Commencement Date. The definitions and rules in the Early Action Offset Credits section allows offset credits from programs that have been ongoing, in some cases as early as 2001. Alleged emissions reductions that occurred between 2001 and 2004, are eligible to be part of a forest buffer account. In addition, offset credits can be provided for alleged emission reductions that occurred between January 1, 2005 and December 31, 2014. The grandfathering of such "reductions" is contrary to the requirement that reductions must be beyond what would have occurred absent the implementation of AB 32. The early action programs are ongoing programs in the voluntary offset market and, by definition, are not "additional" as a result of the offset program created by the proposed Regulation. (WILLIAMSZ9)

**Response:** We disagree with the commenter's statements regarding the requirements for early action offset credits and Early Action Offset Programs. Recognizing existing offset projects supports the requirements of AB 32 to ensure that voluntary reductions receive appropriate credit. Section 95990 of the cap-and-trade regulation provides the requirements that early action offset credits must meet to be eligible for compliance use.

The commenter states "To qualify as an Early Action Offset Program, either the Executive Officer shall issue an Executive Order pursuant to section 95986(k) or the program must demonstrate to ARB that it (among other criteria) occurred between January 1, 2005, and December 31, 2014. The process of approval of Early Action Offset Credits allows the Executive Officer to approve such offsets with no public notice or transparency and without making any required findings regarding AB 32's Integrity Criteria." This interpretation of the regulatory language is incorrect. Section 95990(a) lists the requirements that an Early Action Offset Program must meet in order for any of the early action offset credits issued under it to be eligible for inclusion in the compliance offset program. The approval of the Early Action Offset Program and the approval of the early action offset credits are two separate and distinct processes within the regulation. While an executive order can be issued to approve an Early Action Offset Program, one may not be issued to approve any early action offset credits, as suggested by the commenter. Furthermore, sections 95990(b) through (i) lay out all the requirements that reductions achieved as early action offset credits must

meet before they can be eligible for compliance. These include the following requirements:

- The emission reductions must meet all of the criteria specified in section 95990(c), including that the reductions must occur between January 1, 2005, and December 31, 2014, after which all projects must transition to ARB Compliance Offset Protocols;
- As specified in sections 95990(d), (e), and (h), those seeking compliance offsets must register and submit attestations to ARB. In addition, the early action offset projects must be listed on a publicly available website to ensure transparency;
- The emission reductions must meet all the requirements for regulatory verification as specified in section 95990(f). The requirements for regulatory verification must be met to ensure that the early action offset credits meet the requirements in AB 32 that all offsets must undergo regulatory verification. All emission reductions achieved by early action offset projects must be verified by an ARB accredited third-party verifier, and the verifier must be different than the one that performed the original verification under the Early Action Offset Program. This ensures that all offset credits allowed in the program meet the same verification requirements and ensures that the offset project be subject to an independent review that is completely unbiased;
- Conflict-of-interest requirements, as specified in section 95990(g), that ensure that the verification body does not have a conflict of interest with the project operator or the largest holders of the early action offset credits;
- Issuance requirements that require ARB to review and make a determination based on all the above criteria, including an independent ARB accredited third-party verifier review, whether the early action offset credit meets the requirements of the regulation and can be used for compliance. If ARB determines that the early action offset credit meets the requirements of section 95990, it will require that the Early Action Offset Program provide proof of permanent retirement of the early action offset credits in its system, and ARB will then issue ARB offset credits for the reductions.

We also disagree with the commenter's statements regarding additionality. Regulatory additionality is assessed based on the regulatory environment at the time of implementation of the offset project. At the time of initial crediting in the voluntary program, the early action projects had to meet the additionality requirements of the voluntary offset protocol and the early action program. Once an early action offset project transitions to ARB, it must meet the additionality requirements of the Compliance Offset Protocol and regulation. The early action credits that would be eligible to be issued ARB offset credit for the early action protocols are additional. In addition, ARB will only allow early action offset credits to be eligible for use in the cap-and-trade program if they have not been retired or used to meet another obligation.

The regulation only allows for emissions reductions beginning in 2005 to qualify as early action. The statement that credits issued between 2001 and 2004 are eligible to be part of the forest buffer account is incorrect. Sections 95990(i)(1)(D)(1.) (a.) and (b.) clarify that the credits with vintages from 2001 through 2004 that are released to ARB by the Early Action Offset Program may only be retired by ARB in the event of a reversal. It further clarifies that these vintages may not be used to satisfy ARB's Forest Buffer Account requirements under this section. This provision is included because these credits will still be considered voluntary credits, and not compliance offsets. ARB cannot allow voluntary credits to be used for compliance purposes. Retaining these credits in ARB's Forest Buffer Account will ensure that in the event of a reversal the atmosphere is made whole by retiring all voluntary and compliance offsets issued to the project.

### **Offset Supply and Additional Offset Protocols**

#### **M-3. (multiple comments)**

**Comment:** While end-use efficiency represents an excellent mitigation opportunity, and a cost-effective means for meeting an emissions cap, caution should be used to assess any offset or set-aside mechanisms associated with efficient use of energy from capped sources of electricity, natural gas and fuel oils to ensure that it does not allow for double-counting of reductions (for example, eliminating double counting potential by requiring retirement of such offsets). Even if such an offset strategy might benefit some efficiency businesses, threats to the integrity of the cap and trade system is in reality not to the benefit of our State and its citizens. (CEEIC2)

**Comment:** We encourage ARB staff to continue to develop offset protocols, given their significant cost containment benefits. (PGE7)

**Comment:** While your program has been designed to achieve success, there is some potential pitfalls that we'll be addressing I hope next year. There may not be an adequate supply of offsets. We urge you to move aggressively next year to approve additional offset protocols to assure that the market will have an adequate supply of offsets. (SCPPA9)

**Response:** See the response to Comment M-40 in the 45-day responses (Chapter III of the October FSOR).

**M-4. Comment:** We've heard a lot about offsets today. I think one of the most important things is not, in fact, the cost containment mechanism, although that is very important. But these are real emission reductions that occur at unregulated sources throughout the economy. And offsets give you that opportunity to go after those places where you're not going to regulate or simply cannot regulate and actually achieve real emission reductions. I think that's an important point to always remember. We've also heard some comments about offsets supply and we have some experience in this

regard. We've done our own projections based on the projects in our system. I can tell you from our projections we believe that the four protocols alone are sufficient to meet demand in the first compliance period. Now, that said, I think for robust supply and for varied supply, we certainly urge you to adopt additional high quality standardized performance-based protocols that have gone through a public process. One of the key things I really want to talk about today is program integrity. And we talk a lot about the importance of integrity of emission reductions. We view ourselves as an environmental organization. And I make these comments jointly with the verified carbon standard association with whom we've had some relationship. Offset registries provide the on-the-ground experience to oversee and review both projects and verifiers. It's our job to actually make sure that what is occurring is real. And in that regard, we believe that registries should be held to a very high standard. In fact, as high a standard as verification bodies themselves, if not higher. In particular, we think that ARB can and should actually improve the regulation, strengthen the regulation to ensure that registries meet very high financial, competency and conflict of interest standards. (CAR6)

**Response:** In regard to additional protocols and adding additional offset supply, see the response to Comment M-40 in the 45-day comments and responses (Chapter III of the October FSOR).

In regard to the requirements for Offset Project Registries, we disagree that the requirements in the regulation need to be strengthened. We would also like to clarify that ARB retains the authority and responsibility for oversight of the offset project developers, offset verifiers, and approved offset project registries. Any "oversight"-type activities conducted by an approved registry are supplemental to the oversight activities that will be conducted by ARB of the compliance offset program. The regulation requires that ARB will only approve registries that meet a high standard under the regulation. We provide registries some flexibility in how they structure themselves to be responsive to offset project developer needs, ensure that the registry can provide the registry services at the level dictated in the regulation, and to allow for each registry to develop a business model that can provide registry services at a competitive cost to offset project developers. We believe the regulation strikes the right balance in providing a high standard for approval as an offset project registry while allowing for an open and transparent process for more than one entity to be approved and support a competitive market for registry services. The registry staff will be required to demonstrate practical knowledge of the protocols approved by the Board. The regulation contains requirements for regular information-sharing between the registries and ARB. The regulation allows for ARB to request information or discussions with registry staff at any point. As with many of ARB's regulations, program implementation training will be available—and in this case, required—to ensure that the highest qualified personnel are on staff at each approved registry.

## **Sector-Based Crediting**

**M-5. Comment:** Potential Future Approval of Reduced Emissions from Deforestation and Forest Degradation (REDD): By including offset credits for REDD, the proposed Regulation provides a future road map for project developers to create an imaginary baseline of degradation and then permits such projects to create offset credits for achieving less deforestation and degradation than that imaginary baseline. This allows California to participate in a program that allows for ongoing degradation, while calling it “additional” emissions reductions. (WILLIAMSZ9)

**Response:** The regulation does not include offset credits for REDD; it provides a framework for potential future inclusion for REDD credits. All offset protocols used in the compliance program must be adopted by the Board after undergoing a full regulatory process, including an ARB stakeholder process, in accordance with the Administrative Procedure Act and an environmental review. The details surrounding any new offset project types for which ARB adopts an offset protocol, including REDD, will be addressed under that specific rulemaking.

## **Buyer Liability**

**M-6. Comment:** We urge you through your resolution that you actually do away with buyer liability for offsets. No other program in California that is basically managed by a California air agency requires a secondary verification of product in terms of impacting its usability. The agency itself manages that very effectively, and we believe that buyer liability is a necessary extra layer of liability. (BGCEBS2)

**Response:** See the response to Comment M-88 in the first 15-day comments and responses (Chapter IV of the October FSOR).

## N. PROTOCOLS

### U.S. Forest Projects Protocol

**N-1. Comment:** The proposed U.S. Forest Protocol would provide offset credits for three different types of projects: reforestation, improved forestry management practices, and avoided conversion of existing forests. Each project type fails to meet one or more of the AB 32 Integrity Criteria described below. (We incorporate by reference all of our prior comments, including our comments submitted on Dec. 13, 2010, Aug. 10, 2011, Sept. 27, 2011, Oct. 18 and 19). Evidence of failure to meet integrity criteria include:

1. All three types of projects covered by the U.S. Forest Protocol are already happening, without the added incentive of greenhouse gas offsets from the AB 32 program.
2. The proposed protocol's tests will include non-additional projects. The proposed U.S. Forests Project Protocol will necessarily include non-additional projects that count activities that are ongoing and would have happened without the AB 32 offset credit incentive. However, it will be impossible to know what percentage of the projects would have happened with or without that incentive, given the nature of the tests that verifiers and the Air Resources Board would apply. As a result, the proposed Protocol fails to meet the AB 32 integrity criteria and should not be approved.
3. Leakage completely undercuts the ability of avoided conversion projects to generate additional reductions.
4. Impacts from Climate Change – Increases in Forest Death and Wild Fires: Increased prevalence and future likelihood of both forest death and forest fires as a result of climate change creates such high risks of project failures that such projects fail the integrity criterion of permanence, notwithstanding the Forest Buffer Account created by the U.S. Forest Projects Protocol.
5. Subjectivity and Complexity of Standards will make Additionality Unenforceable: Many aspects of the U.S. Forest Protocol are highly subjective and are, therefore, both unenforceable and would allow claimed GHG reductions or sequestration which would happen anyway, without an offset incentive.

The net result of the problems described above is that, if the proposed U.S. Forest Projects Protocol is approved non-additional projects will receive AB 32 offset credits. This in turn will result in California's "capped" sectors emitting greenhouse gases above the alleged "cap" on their emissions. As noted in our earlier comments, since the least additional projects will generally be the cheapest, the flaws in the U.S. Forests Protocol will open the door to non-additional offset credits that will undermine the integrity of the AB 32 program. The Protocol should not be approved. (WILLIAMSZ10)

**Response:** Please see the responses to similar Comments N-31, N-32, N-33, N-34, N-54, and N-55 in the 45-day comments and responses (Chapter III of the October FSOR).

**N-2. Comment:** We submit an article published by the Harvard Kennedy School of Government that provides additional evidence that the project-by-project approach in the U.S. Forest Projects Protocol will include non-additional projects that fail to meet the AB 32 Integrity Criteria (cited in our prior comments). We conclude that project-by-project accounting, as under the Clean Development Mechanism of the Kyoto Protocol, is fundamentally flawed due to problems with additionality, leakage, and permanence. ([International Forest Carbon Sequestration in a Post Kyoto Agreement](http://belfercenter.ksg.harvard.edu/files/PlantingaWeb3.pdf), by Plantinga and Richards, Harvard, Kennedy School of Government, October 2008. <http://belfercenter.ksg.harvard.edu/files/PlantingaWeb3.pdf>) (WILLIAMSZ11)

**Response:** The cap-and-trade program does not allow CDM program offset credits for use in the California market program. The ARB Forest Project Protocol addresses leakage, provides a mechanism for permanence, and uses a performance test for additionality. The ARB program is designed to prevent the types of issues often cited by CDM program critics.

**N-3. Comment:** The forest protocol fails to accurately account for GHG emissions associated with the soil carbon pool and lying dead wood. In previous comments we have raised the issue that the forest protocol fails to accurately account for GHG emissions associated with the soil carbon pool and lying dead wood. See CBD comment letter to ARB, August 11, 2011. Subsequent modifications to the forest protocol have not addressed these inaccuracies. The result is that offset credits from some forest projects could substantially underestimate the GHG emissions, leading to a substantial overestimation of GHG benefit. In some cases, these fundamental accounting errors in the forest protocol could lead to the generation of significant amounts of offset credits from forest projects that in reality are net emitters of GHG. A coalition of conservation organizations submitted a proposal to address these accounting errors prior to the adoption of the forest protocol in December 2010. See comment letter December 13, 2010. Also, at the time of the hearing, the Climate Action Reserve ("CAR") issued a number of white papers that identified the accounting errors in the forest protocol. We have previously submitted to ARB those white papers and our comments to the Climate Action Reserve. The CAR white paper on soil carbon found that "[h]igh disturbance site preparation activities, such as plowing, deep ripping, etc., will have significant negative effects on soil carbon, with potential losses as high as 30 percent, and should be avoided." Considering that "[s]oil carbon accounts for 50–75 percent of all forest carbon in temperate and boreal regions, so small changes in soil carbon can have significant influence on total ecosystem carbon storage," the GHG emissions of harvesting activities can be substantial. The CAR paper found that the carbon losses associated with the GHG emissions associated with harvesting can persist for decades. "Available research shows that soil carbon lost during harvest activities is recovered in some systems within 50 years, but the interval is longer for more northern, less productive systems, and can be more than 100 years in some cases." The CAR paper on lying dead wood found that "LDW is an important pool of carbon throughout the U.S." and "[o]n average, LDW makes up from 1.7 percent to 4.6 percent of total forest carbon, though in individual stands the percentage can be higher."

Obviously the loss of 4.6 percent of the total forest carbon could drastically alter the carbon impacts of a forest project, easily outweighing the estimated tree growth a project reports in a given year. However, the removal of materials that would affect this carbon pool, and the associated GHG emissions, are not reported under the forest protocol. Furthermore, the CAR paper points out that the ecosystem and wildlife habitat value of lying dead wood is also critically important. "Though carbon storage in LDW is important, the other values that LDW provides, such as wildlife habitat, erosion protection, water storage, and nutrient cycling, may be even more important. While other forest structures (e.g., live trees) could sequester additional carbon in the absence of LDW, there are no replacements for these other values." CAR paper at 3. However, the forest protocol does not require reporting of these impacts, and does not include environmental standards to protect them. (CBD6)

**Responses:** Please see the responses to similar Comments N-50 and N-51 in the 45-day comments and responses (Chapter III of the October FSOR) and Comment N-22 in the first 15-day comments and responses (Chapter IV of the October FSOR).

### **Livestock Manure (Digester) Protocol**

**N-4. Comment:** The proposed Livestock Project Protocol would provide offset credits for projects that are above "common practice" in the relevant geographic region. This is contrary to the AB 32 Integrity Criteria. Evidence of Failure to Meet Integrity Criteria include:

1. Anaerobic digesters are already being used without offset payment incentive
2. Anaerobic digesters are often cost-effective
3. Anaerobic digestion provides several water quality benefits
4. Anaerobic digesters help farmers avoid liability: Anaerobic digesters can help control odor and run-off of contaminants. Farmers have an incentive to adopt anaerobic digesters to obtain these benefits in order to avoid the legal liability from nuisance lawsuits by neighbors and regulators.
5. The price of carbon offsets is too low and too uncertain to be reliably claimed as "the" reason for implementation of an anaerobic digester system. (WILLIAMSZ6)

**Response:** Please see the response to similar Comment N-61 in the 45-day comments and responses (Chapter III of the October FSOR).

### **Ozone Depleting Substances Protocol**

#### **N-5. (Multiple comments)**

**Comment:** The proposed Ozone Depleting Substances (ODS) Protocol would provide offset credits for any ODS projects that meet the description of such a project. This is contrary to the AB 32 Integrity Criteria—the requirement that all emission reductions meet the following criteria (See section 38562(d)): In the ODS Protocol, ARB establishes a standard which treats all ODS reductions from allowed projects as being

additional. This standard relies on grossly distorted, misinterpreted, and incomplete information used by the Climate Action Reserve (CAR) to draft an earlier version of the ODS protocol (CAR ODS Protocol). In establishing this standard, ARB also ignores more recent data gathered and published by ARB itself concerning California data. In Appendix B of the CAR ODS Protocol, CAR sets forth data which, CAR claims, demonstrates that very little ODS is destroyed in the United States.

However, the “ODS Destruction in the United State of America and Abroad” (2009 Report) from which CAR took this data very clearly states that the data is very incomplete. “Table 3 presents the total reported quantity of ODS (by type) destroyed in the U.S. for the years 2003 and 2004. Data is only presented for those facilities destroying ODS commercially that provided responses to questionnaires. Several other companies reported sending ODS to other off-site destruction facilities, but these data were not included due to their incomplete nature. Therefore, the data presented are not inclusive of all commercial ODS destruction that occurred in the U.S. in 2003 and 2004. Quantities of ODS destruction as reported in the TRI database, are presented in Appendix C.” The data in Appendix C, taken from EPA’s Toxic Release Inventory, shows that the 2003 data used by CAR understates the actual ODS destruction. Even these TRI figures may undercount actual destruction because, as stated in the 2009 report, ODS listed as “Treated Off-Site” in the TRI data base were not included as destroyed due to lack of certainty that they were, in fact, destroyed. In addition to understating ODS destruction rates by more than a factor of 17 times for the combination of the 4 CFC listed, CAR also “interpreted” the meaning of this data and added its own completely unverifiable data. CAR decided that the 2003-04 data represented practices of handling ODS which were “not yet influenced” by the potential incentives for generating GAG offsets and further relied up data provided by industry anonymously in minimizing the amount of historic and ongoing ODS destruction which might qualify for generating offsets under the ODS Protocol. (WILLIAMSZ8)

**Comment:** California has two appliance recycling facilities operated by JACO Environmental, and two facilities operated by Appliance Recycling Centers of America (ARCA). They handle about 145,000 to 150 000 units per year, with the vast majority of units recycled as part of a state-wide electric utility incentive program to remove older working appliances (that are energy efficient) from the electricity grid. JACO and ARCA handle 80,000 units for Southern California Edison, 40,000 units for Pacific Gas & Electric (PG&E) and a further 25,000 units for Sacramento Municipal Utility District (SMUD). Therefore, about 12–13 percent of residential refrigerator-freezers reaching end-of-life in California is recycled using a comprehensive foam blowing agent recovery process.” Projects of the type described in the ODS Protocol are currently being implemented. Therefore, the ODS Protocol would grant credit to projects which have occurred and will continue to occur in the course of business-as-usual. “GE and ARCA Inc. announced September 9, 2011 that the UNTHA Recycling Technology system was ready to crunch its first refrigerator. It will recover about 95 percent of the insulating foam, plus high-quality plastics, aluminum, copper and steel. The new UNTHA Recycling Technology (URT) system at the Appliance Recycling Centers of America (ARCA)’s facility in Philadelphia is ready to begin recycling as many as 150,000

refrigerators annually. ARCA hired 50 new employees as part of its \$10 million investment in URT and other new capital equipment. Since February, the two companies said, they have doubled the number of states served, feeding 100,000 additional appliance units to the Pennsylvania facility from Massachusetts, Connecticut, Pennsylvania, Maryland, Virginia, West Virginia, New Jersey, New York, North Carolina, Delaware, Rhode Island and Vermont. Consumers bring their used refrigerators to participating retailers, who then send them to ARCA as part of GE's participation in the EPA Responsible Appliance Disposal program." Southern California Edison states that its participation in EPA's RAD Program, which involved recycling old and inefficient but still working refrigerators and freezers, had a benefit-cost ratio of 3:1 or greater, saving the company tens of millions of dollars. Major retailers, including Home Depot, Sears, and Best Buy have joined EPA's RAD Program to recycle refrigerators and freezers. (WILLIAMSZ8)

**Comment:** The standard created by the Protocol ignores recent advances in technology, developed in Europe, which are cost-effective and profitable. This new technology has been established in the United States and, given its competitive advantages, is very likely to gain wide-spread usage. The 2010 ARCA annual report shows the refrigerator and freezer recycling, especially with the new control technology, is profitable. "2010 was a solid year for our appliance recycling operations. Appliance recycling revenues increased from \$15.9 million in 2009 to \$19.4 million in 2010, mainly as a result of new recycling contracts we were awarded during the year. Gross profit as a percentage of total revenues—excluding our new joint venture, ARCA Advanced Processing, which began operations in February 2010—increased to 42.8 percent from 35.6 percent in 2009. Gross profit increased 32 percent, from \$9.2 million in 2009 to \$12.1 million in 2010, which we attribute to stronger byproduct revenues and improved efficiencies implemented throughout our recycling operations. We signed twelve contracts with electric utilities last year, making 2010 one of our most productive years ever in terms of adding new customers. Also of note, we were successful in retaining the business of many of our current customers, including renewed contracts with all of our major utility customers in California. Southern California Edison, whose program we have provided turnkey refrigerator and freezer recycling services for since 1994, is rapidly approaching the collection of their 1,000,000th appliance. The consistently high energy savings demonstrated through programs such as Edison's have contributed to making appliance recycling a mainstay of energy efficiency portfolios across North America. The February 2010 opening of our ARCA Advanced Processing facility in Philadelphia, which was accomplished through a joint venture with 4301 Operations, LLC, was a pivotal event in our efforts to permanently retire old appliances through a highly effective process and technology. Our major contract on the East Coast now provides us with the steady stream of appliances required to make a fully integrated appliance recycling center economically attractive. We expect to complete the installation of an UNTHA Recycling Technology (URT) materials recovery system for refrigerators and freezers in our Philadelphia recycling center during the second quarter of 2011. This equipment will not only significantly reduce emissions of greenhouse gases and ozone-depleting substances that can occur during the disposal of appliances, but will also reduce the typical landfill waste of a refrigerator by

approximately 85 percent by weight. Another benefit of this technology is that the URT system will enable us to generate a finer grade of byproduct materials to sell to metals and plastics recyclers. (WILLIAMSZ8).

**Response:** We believe that the ODS protocol will supply offsets that meet the criteria for additionality. While there may be evidence that some destruction has been taking place, it is far from common practice and is not required by regulation. The substances that qualify for credit under the ODS protocol are no longer being produced; therefore, it is not surprising that the recycling of these materials is increasing as to provide a supply of these limited substances for recharging existing appliances. It is more common for this material to be recycled than it is for it to be destroyed. Even if it is recycled, the material may leak into the atmosphere in the future. Only the destruction of the material ensures that these substances are not emitted into the atmosphere. Providing a cost incentive for destruction provides an economically viable alternative to recycling while ensuring that the substances are never emitted into the atmosphere.

### **Urban Forest Protocol**

**N-6. Comment:** In the Protocol, ARB establishes the standard for additionality as any net tree gain. This ignores the creation and maintenance of urban forests by municipalities as ongoing activity which has occurred and is still occurring without an offset incentive. Several studies show that the creation and maintenance of urban forests creates numerous environmental benefits for municipalities and creates economic benefits greater than the costs associated with the urban forest programs. Therefore, these activities are almost certain to continue occurring without an offset incentive program. The creation and maintenance of urban forests is relied upon by California air pollution control districts in their plans to reduce air pollution. These planning projections do not rely on offset incentives. Some utilities already have extensive and long-standing urban forest programs which are of economic benefit to the utility. Therefore, these types of programs occur in the course of business-as-usual. (WILLIAMSZ5)

**Response:** Please see the responses to Comments N-96 and N-97 in the 45-day comments and responses (Chapter III of the October FSOR).

## O. SUPPORT AND OPPOSITION

### Support

#### O-1. (multiple comments)

**Comment:** We would like to thank the Board and particularly the Chair's leadership in showing that California can blaze the trail and it is possible to establish ambitious emission reduction goals while ensuring a fair and equitable Cap-and-Trade Program that minimize impacts on electric rate payers, particularly low income customers. Mayor Villagairosa remains committed to working with you and the Brown Administration to achieve the 33 percent renewable portfolio standard to transition away from coal and increase energy efficiency programs throughout the city. While we realize that further refinements will be made in 2012, we are confident that the Board will work closely with the L.A. Department of Water and Power and other stakeholders to resolve any remaining issues so that this critically important program may commence without further delays. The Mayor strongly supports the Board's adoption of this AB 32 regulation after addressing remaining concerns of interest to the Department, which you will hear about in more detail from Cindy Montanez and Cindy Parsons of the Los Angeles Department of Water and Power. (LAMAYOR)

**Comment:** We believe very strongly this is a job creator and not a job taker, is going to be in the efficiency field and in transforming these industries that are going to be challenged at first, but forced to become efficient in the second stage to create jobs. Those jobs are going to affect all of the workers whether it's manufacturing or construction or efficiency. We feel strong that by implementing this now that we're going to send a message. This cap-and-trade is going to be a job creator. It's going to be good for the economy, good for the environment. It's going to take a while. We're here to support you. Thank you very much for all your hard work. (JCEEP)

**Comment:** We support the CARB staff proposal to include annual reporting as a key component of engaging the public and stakeholders in the oversight of cap-and-trade implementation. We also support the proposal's acknowledgement of the need for close communication and data sharing that will occur with local air districts, who directly oversee local facility permitting processes. We also support the steps identified in the plan that will be considered if the data and investigation indicates that the cap-and-trade regulation results in adverse impacts to air quality, including modification to the regulation and use of auction revenue to mitigate impacts. We support CARB moving forward with important precaution to prevent inadvertent or unintended consequences to air quality and public health due to the implementation of the cap-and-trade component of the Climate Change Scoping Plan to implement AB 32. We look forward to working with you as the program develops to ensure successful implementation and progress toward meeting the goals of this program. (CCA5)

**Comment:** We write to you today on behalf of Operation Free, a coalition of veterans and national security experts that recognize climate change and our addiction to oil pose serious threats to U.S. national security. We believe it is our duty to protect

America by advocating for clean, domestic energy production. For the sake of America's security, California must continue to provide strong leadership on climate change by reducing our carbon footprint and investing in the next generation of energy technology through a cap-and-trade program. These investments will reduce our dependence on fossil fuels, create millions of new jobs, and secure America's economic future. The Pentagon, the State Department, the CIA and other American defense agencies consider climate change and our dependence on oil to be threat multipliers. America's billion-dollar-a-day dependence on oil directly funds our most dangerous enemies, putting guns and bullets into the hands of insurgents in Iraq and Afghanistan. With new, clean sources of energy to power our economy and fuel our military, we would no longer be forced to pay and protect hostile regimes who don't share our values. The Department of Defense has stated that climate change poses a threat as well, destabilizing weak states and creating breeding grounds for terrorist organizations like al Qaeda. California has led the nation when it comes to climate and clean energy policies. We encourage you to continue that tradition of leadership by implementing cap-and-trade along with a robust public interest energy investment program. These policies will play a vital role in reducing California's consumption of carbon fuels and will make major contributions to clean energy development. In the words of retired Marine Corps General Anthony Zinni, "We will pay for this one way or another. We will pay to reduce greenhouse gas emissions today...or we will pay the price later in military terms. And that will involve human lives." Policies like cap and trade keep America safe and strong. We strongly urge you to implement this policy in a timely manner and allow California to continue to lead America into a strong and secure future. (OPERATIONFREE)

**Comment:** The Nature Conservancy supports the final regulations of the Cap-and-Trade Program. (NC11)

**Comment:** We appreciate the process that CARB has gone through in trying to find the balance in accomplishing these goals that we all agree with. In particular, we were happy to see the resolution language for use of auction value in the utility sector and making sure that that really gets invested in solutions. And we think there was a good process on trying to find the right balance for the industrial sector of protecting those industries that are leakage exposed while not giving too much away for free. We think there are improvements that could be continued to be made to make sure there is the right incentive to make investments and improvements in that sector. And we look forward to working with CARB in the process as we implement this program. (NRDC5)

**Comment:** We support cap and trade for just a couple of reasons I'm going to point out. Number one is that it provides market certainty, and that is critical for our business. And secondly, it creates a strong market signal for investors and innovators. And the investment that we have at the Salton Sea represents hundreds of millions of dollars, hundreds of jobs over a 24-month period to build this, and dozens of jobs to operate it over a 25-year period. (ENERGYSOURCE)

**Comment:** We strongly urge your adoption of this landmark program. And going

forward, we remind everyone that there will be a need to do rigorous monitoring, enforcement, evaluation, and oversight of this program and possibly strengthening adjustments prior to the start of the second compliance period. (UCS10)

**Comment:** I am here to announce our support of the implementation of the California cap-and-trade program—Alternative 2 of the Supplement to the AB32 Scoping Plan—without further costly delays to the California economy and environment. (BAC2)

**Comment:** I'm here to announce our support of the implementation of the California Cap and Trade Program without further costly delays to the California economy and environment. The Bay Area Council is proud to have been the business group to negotiate and the first business group to support California's landmark effort to address global climate change back in 2006. We are happy to be at this point in the process. Our members are business leaders of some of the region's largest employers, and they know how much is at stake if we don't take steps towards reducing emissions.

The following reasons compel the business community to act on this issue. California's momentum to become the center of clean technology innovation would be lost if we back pedal on our commitment to become a clean energy based economy. Investors, manufacturers, and workers in California's clean energy sector face fierce global competition, and our partners in emission trading are moving forward with developing their growing market and need a clear signal from California that would stabilize carbon pricing. (BAC3)

**Comment:** I'm here on behalf of the Commission to convey the CPUC's strong support for this regulation and to encourage its adoption. As you all know, the CPUC has been a supporter of cap and trade and over the years have worked in partnership with the Air Resources Board in the development of effective and efficient regulation to address climate change. The implications of the climate change result from unfettered emissions of carbon dioxide and other global warming pollutants are profound and pose, as you know, one of the greatest challenges that modern society faces. Over the past several years, the staff of the CPUC has worked closely with your staff to help develop and refine the body of regulation you have before you to ensure it is able to achieve its fundamental objectives of reducing greenhouse gas emissions at least cost, while ensuring safe and reliable access to energy services that's the life blood of our economy. Overall, I believe we are satisfied the regulations provide a robust framework that will internalize the cost of carbon emissions, and in so doing, harness the creativity of the market to adapt to the realities of a post-carbon world. (CPUC)

**Comment:** I want to say to you that it is extremely important that you adopt the program today. This is truly an historic moment in air pollution control, not just for the state, but the nation and the world. So we hope you take action today. (SCAQMD6)

**Comment:** Along with my colleagues at the Air Pollution Control Districts, we remain supportive of the Cap and Trade Program and are committed to assist in its implementation. (BAAQMD4)

**Comment:** We urge your support on this. (CAPCOA5)

**Comment:** I stand here today in front of you to urge your vote in support of this monumentally important program. This program, an economy-wide cap and trade regulation, is going to reduce emissions. It's going to protect our economy. It's going to reestablish the United States through our great states actions as a leader internationally on this issue. (EDF9)

**Comment:** Our mission was and remains to use innovative business solutions to address the huge threat of refrigerants at end of life. Refrigerants are a threat to both the ozone layer and a significant threat to the environment. ARB is the first regulatory body in the world to address this problem by recognizing the destruction of ozone-depleting substances as one of the compliance offsets. As a direct result of the regulations that you're moving forward today, EOS has been able to use carbon finance to accelerate the adoption of new technologies from commercial to residential cooling systems. This is generating economic opportunities and transforming business. Cap and trade is one small piece of the overall program, and offsets are yet another small piece of that program. We will continue to work with the staff to provide technical information to ensure that the offset protocols reflect current best practice and scientific information. Finally, as an entrepreneur and a business woman, I support market-based mechanisms as the most efficient way to put a price on carbon, sending a clear signal to other business people like myself, to investors, and to our customers. EOS is a member of the clean economy network, a group that also supports moving forward with these regulations today. (EOSC5)

**Comment:** The American Lung Association has been a strong supporter of California's leadership on clean air and climate change over the years, and now we are supporting California's moving forward to adopt a cap and trade element of the AB 32 plan. As a public health organization, we believe that California must move forward today and use every possible tool that's available in the battle against global warming, which is, of course, the biggest public health threat of our time. We see the Cap and Trade Program as an important tool. We appreciate that the AB 32 program includes a mix of regulatory and market strategies, and this ensures both a strong backdrop of regulations, such as the Clean Cars Program, and Low-Carbon Fuel Standard, and Renewable Portfolio Standard, combined with the declining cap on carbon emissions and the price you're establishing today. (ALA2)

**Comment:** Please accept this comment in support of California's cap and trade regulation for consideration at the October board meeting. (EDF7)

**Comment:** I strongly urge you to adopt the cap-and-trade regulation as written. (EDF8)

**Comment:** The Silicon Valley Leadership Group believes that the cap and trade is the most efficient and effective way to reduce global warming pollution and also spurring the

clean energy innovation. We respectfully request that the Board take final action to adopt the proposed cap and trade regulations. (SVLG)

**Response:** We acknowledge your support to move forward with the cap-and-trade regulation.

## **Opposition**

### **O-2. (multiple comments)**

**Comment:** Please vote "No" on Cap and Trade. If you approve it, you will probably kill many tens of thousands of other jobs in California. This would be immensely hurtful for the California economy. (BUGLEGROUP)

**Comment:** We're 15 industrial contractors that do work throughout California and western United States. We have over 3,000 employees that are highly trained and highly paid. We see this as a threat to our membership. We do not think it has been thought thoroughly, and we're very much against this proposal. (CACA)

**Response:** See the response to Comment P-3 in the 45-day comments and responses (Chapter III of the October FSOR).

**O-3. Comment:** California cannot afford to go it alone. CARB's AB 32 Scoping Plan observes that "California cannot avert the impacts of global climate change by acting alone," and anticipates a regional cap-and-trade program in coordination with states in the Western Climate Initiative. However, no other states in the WCI are pursuing cap-and-trade policies, nor is the federal government. California would be going it alone, to the severe detriment of our competitiveness and economy. California ratepayers and businesses are already facing the burden of higher utility costs associated with existing laws and regulations mandating a transition to lower-carbon and renewable energy sources. In view of the fragile state of California's economy, this is the worst possible time to impose yet another new energy tax on struggling businesses and consumers, especially since not even the other Western Climate Initiative states are willing to risk their own economies on costly cap-and-trade programs. The imposition of a new tax on business or other "price signals" are not necessary to achieve the emissions reduction goals of AB 32, and will serve only to further cripple our economy, increase unemployment and impair our competitiveness. We strongly oppose such taxes in any form, and urge you to modify the cap-and-trade program to avoid the economic consequences they will bring. (CALCHAMBER5, NAACPSD)

**Response:** See the response to Comments O-14 and P-3 in the 45-day comments and responses (Chapter III of the October FSOR).

## P. USE OF ACTION PROCEEDS

### P-1. (multiple comments)

**Comment:** An excellent mitigation solution is end-use energy efficiency. A good way to meet the state's goal of maximizing cost-effective efficiency may be to utilize a fund—such as the Air Pollution Control Fund, defined in section 95870(b)(2) to collect allowance auction revenues—to support efficiency programs, similar to what is done in the Regional Greenhouse Gas Initiative. Thus, the Board could clarify that “Auction proceeds and allowance value obtained by an electrical distribution utility shall be used exclusively for the benefit of retail ratepayers of each electrical distribution utility...” (section 95892(d)(3)) includes investments associated with end-use energy efficiency. (CEEIC2)

**Comment:** The Air Resources Board and/or the California Public Utilities Commission (CPUC) must establish strong oversight to ensure that funds generated as a result of the regulation are only spent on any appropriate consumer rate relief and GHG emissions-reducing measures such as energy efficiency and the use of renewable energy. Given the free allowance allocation provisions, it is of particular concern that there is investment in mitigation versus windfalls for any participants. (CEEIC2)

**Comment:** We believe the regulation will also support a stable energy and business environment that will result in our member companies in the efficiency industry be able to grow and employ more Californians. We do offer a few suggestions to implementation that are contained in a letter we submitted. One, that the Air Board and the PUC must establish strong oversight to ensure that the funds generated as a result of the regulation are spent only on consumer rate relief and mitigation measures. And I guess it will be up to ConocoPhillips to decide how to spend their money. Secondly, a good way to meet the State's goal of maximizing cost effective energy efficiency is to utilize a fund, such as the Air Pollution Control Fund. We just ask that it be absolutely clear that those funds can be used for mitigation measure such as efficiency. Also with respect to efficiency, while it's an excellent opportunity for mitigation and a cost effective way to meet the cap, we do ask you to use some caution in enforcing and implementing the program to make sure there isn't double counting, which is certainly a possibility that can occur with efficiency in a capped system. And then the fourth point is that all participants must realize this is only one part of our overall efforts and can't replace our other greenhouse gas mitigation policies and energy policies, in particular, the funding of the public goods charge. (CEEIC3)

**Comment:** The CPUC has been and will continue to engage with ARB as we deliberate on the use of allowance revenues generated from the allocation of allowances to the investor-owned utilities. (CPUC)

**Comment:** Edison continues to support the development of a broad national Cap and Trade Program and has appreciated the opportunity to work with all the staff and the leadership of the Board. We commend the staff and the leadership for the significant efforts of developing the regulation. Many elements of this regulation have taken a

great deal of work. The allocation of—the allowance allocation of allocating allowances for the distribution of utilities on behalf of our customers we believe is a great step to help reinforce the concept that a Cap and Trade Program can be developed effectively and efficiently. And Edison supports the disposition of this allowance value, all of it, to our customers. And we'll continue to work with the California Public Utilities Commission in their efforts. By providing all this allowance value to our customers, this would mitigate the cost that these customers have already borne in terms of reducing the emissions from serving their load and reducing—providing more renewable energy, some of the energy efficiency programs, and other investments that the utilities have been making on their behalf. While we understand the concerns that were expressed by some of the water utilities that appeared here today, we urge the Board to consider those same investments and the extent to which the water utilities have made those investments, because certainly that was a key part in the negotiation on the allowance allocation. And another key element of this was the manner in which the allowance value would be returned to the eventual customers. As the Board considered the issues presented by the water utilities, we hope you'll keep that issue in mind. (SCE5)

**Response:** We will continue to work closely with the California Public Utilities Commission to ensure that all allowance value given to electrical distribution utilities on behalf of their customers is used in ways that are consistent with AB 32 goals. We agree that one possible use of auction proceeds is to support energy-efficiency programs. Further, in Resolution 11-32, the Board directed the Executive Officer to work with the CPUC and Publicly Owned Utilities to reflect the findings of the Board that the impact of the cap-and-trade regulation on electricity rates creates appropriate incentives to further the goals of AB 32. The Board further directed the Executive Officer to work with the CPUC and the Publicly Owned Utilities to reflect the finding of the Board that if allowance value provided to the electric distribution utilities for ratepayer benefit is returned directly to customers, it is consistent with State efforts to promote energy efficiency and energy conservation.

## **Q. MANDATORY REPORTING REGULATION (MRR)**

### **Q-1. (multiple comments)**

**Comment:** There are outstanding issues with the Mandatory Reporting Regulation and how it interacts with cap-and-trade including the ability to maintain compliance, lack of a safe harbor when working with the third party verifiers, and lack of an administrative appeal or review process. CCEEB would appreciate continued Board involvement with staff on these issues prior to the next reporting cycle. (CCEEB5)

**Comment:** WSPA continues to have serious implementation and compliance issues with the Mandatory Reporting Regulation (MRR) and with potential impacts on the Cap and Trade program. The MRR, as currently drafted, proposes to implement new facility calibration and accuracy requirements, including elements of the federal GHG reporting program that are still under development. Given the uncertainty in how new ARB regulations will be finalized and when that action will occur, WSPA companies will likely not be able to meet the mandates as described in the MRR. This can, in turn, lead to problems with verification, and thus enforcement and penalty issues which ultimately can affect allocation of allowances from ARB. (WSPA5)

**Comment:** WSPA requests that ARB incorporate into the adoption resolution for the Cap and Trade regulation, an action item for the EO and staff to continue to work with stakeholders to review, evaluate and identify needed updates to the MRR regulation to ensure a smooth implementation of both the MRR and the Cap and Trade program. This review would also include work with industry to ensure the appropriateness and accuracy of the oil and gas production sector benchmark values through confirmation of the reported and verified data and the calculation methodologies. (WSPA5)

**Comment:** With AB 32's mandatory emission reduction goal looming, Powerex understands the need to finalize the Cap-and-Trade Rule and the MRR. Powerex applauds ARB's commitment to meet AB 32's goal and its extensive public outreach efforts. Despite this effort, however, gaps and inconsistencies remain in the two rules as currently drafted which threaten the success of the programs. Therefore, Powerex calls upon the Board to adopt a resolution directing ARB staff to initiate a regulatory refinement process in early 2012 that includes active stakeholder participation and addresses these important issues as well as others that may be identified in the interim. This process could take the form of a new rulemaking detailing discrete amendments to the Cap-and-Trade Rule and the MRR, or it could be modeled upon Resolutions 10-42 and 10-43 last year directing the ARB Executive Officer to prepare additional 15-day rule modifications. Either way, the objective must be to resolve these issues prior to the Cap-and-Trade Rule's full implementation in 2013. These additional steps would not interfere with the Board's approval of the Cap-and-Trade Rule on October 20. They would, however, enable ARB to refine the cap-and-trade and emission reporting programs to ensure both their functionality and legal defensibility prior to full implementation in 2013. (POWEREX3)

**Comment:** ARB should amend the cap-and-trade rule and the MRR to clarify that entities other than BPA may be classified as “Asset-Controlling Suppliers.” In Powerex’s August 11, 2011 comments, we expressed concern that the definition of “asset-controlling supplier” in both the MRR and the Cap-and-Trade Rule could be interpreted inappropriately to mean that no entity other than BPA could be an asset-controlling supplier. Limiting the eligibility to BPA would be to the detriment of comparable hydropower resources in the Pacific Northwest such as those owned and controlled by Powerex’s parent BC Hydro. In Powerex’s September 27 comments, we explained that ARB has "National Treatment" obligations to Powerex under Chapters Six and Eleven of the North American Free Trade Agreement (NAFTA), Dec. 17, 1992, U.S.-Mex.-Can., 32 I.L.M. 289, chaps. 6, 7 (1993). Because Powerex is indistinguishable from BPA in terms of government ownership, Powerex is entitled to parity treatment with BPA. This requirement extends to the compliance obligations placed by ARB on first deliverers of imported electricity. We direct the Board to Powerex’s September 27 comments for specific proposals to mitigate the potential for a NAFTA claim on ARB’s second set of 15-day rule modifications were submitted on September 27, 2011, and assigned Comment No. 1677 on the Cap-and-Trade Rule and Comment No. 138 on the MRR. (POWEREX3, POWEREX4)

**Comment:** The Cap-and-trade Regulations and Reporting Regulations, when taken together, provide unique and favorable treatment to a single importer, the Bonneville Power Administration (“BPA”), by assigning an emission factor that is 1/5 of the default factor applied to all other unspecified sources of imported energy. This discriminatory treatment is counterproductive to CARB’s GHG emissions reductions goals, fosters “resource shuffling” and GHG emission “leakage” which CARB has sought to avoid, and unfairly creates a competitive advantage for BPA at the expense of all other obligated entities within the electric sector. The Cap-and-trade Regulation creates a special class for a single electricity importer, the Bonneville Power Administration (“BPA”), and then the Reporting Regulation affords BPA favorable treatment in the calculation of GHG emissions associated with imported power to California by applying a default emissions factor that is 1/5 of that applied to all other unspecified imports. Not only does this language favor BPA in comparison with other importers, but the unique treatment afforded BPA may favor BPA versus in-state electric generation assets and contribute to the “leakage” that CARB and AB 32 sought to avoid. Moreover, this favorable treatment will create opportunities for “resource shuffling” where importers will seek to sell their power through BPA because BPA has such a low emissions factor. This result is counter-productive to CARB’s emission reduction goals.

The proposed regulations treat a single entity, BPA, in a unique and beneficial manner when compared to all other obligated entities in the electric sector in the context of calculating GHG emissions from specified and unspecified resources (section 95111(b)(3)). Providing a “regulatory carve out” for a single entity such as BPA is effectively discriminating against all other suppliers. The CARB Board should direct staff to eliminate this unique and favorable treatment, thereby treating all obligated entities in a comparable and non-discriminatory manner when calculating GHG emissions for specified and unspecified imports. (IEPA4)

**Response:** These comments address the Mandatory Reporting Regulation (MRR); no response is necessary. Similar comments are addressed in the MRR rulemaking. Comments addressing the Mandatory Reporting of GHG Emissions are included and responded to in the MRR's Final Statement of Reasons, which can be found on the MRR's regulatory website:  
<http://www.arb.ca.gov/regact/2010/ghg2010/ghg2010.htm>.

However, as the cap-and-trade regulation and the MRR are closely intertwined, there may be future amendments to the cap-and-trade regulation that may require corresponding amendments to the MRR, and both will be done as part of new rulemakings, each with a new public process and Board consideration.

## R. CEQA – FUNCTIONAL EQUIVALENT DOCUMENT

**R-1. Comment:** We note that our comments to the final environmental document were omitted from your record as shown. We are sure that this is inadvertent. We sent it on July 28th. So we ask that ARB staff re-look at the record for the FED and ensure that all comments were included in the record. (WSPA6)

**Response:** During the October Air Resources Board hearing, WSPA representative Mike Wang commented that ARB had not responded to a letter dated July 28, 2011. ARB reviewed that particular letter and confirmed that the letter in question was submitted as a comment on the *Supplement to the AB 32 Scoping Plan FED*, rather than the FED prepared for the cap-and-trade regulation. The commenter's letter is identified as comment #82 in the *Response to Comments on the Supplement to the AB 32 Scoping Plan FED*, released on August 19, 2011, and considered by the Board on August 24, 2011. The WSPA letter and responses are located on pages 82-1 through 82-10 of that document.

**R-2. Comment:** The range of alternatives analyzed must include alternatives that would mitigate the identified impacts to forests. As the staff response repeatedly notes, the FED discloses the risk that the forest protocol may significantly affect biological resources. See staff response at 15 and 19. The staff response also acknowledges the need for the analysis to include alternatives that mitigate the impacts identified in the FED. "At the programmatic level, the fundamental purpose of the alternatives analysis is to determine if other broad program approaches, such as direct regulation or adoption of a carbon fee, might achieve the project objectives and lessen or avoid the potential adverse environmental impacts attributed to the proposed project." However, the same section of the staff response argues the opposite, stating that the analysis need not include alternatives that would mitigate the identified impacts to forests. "The alternatives do not focus on a single sector (such as food processing) or a single action (such as facility relocation), because this would be too narrowly defined to achieve the AB 32 GHG reduction goal." This comparison is unhelpful and misleading. The FED does not identify potentially significant impacts for food processing or facility relocation that could be avoided by feasible alternatives. The FED does identify potentially significant impacts to forests associated with adoption of the forest protocol. Moreover, unlike the food processing sector or facility relocation, the forest protocol is a freestanding element of the cap and trade program that has been circulated, and may be adopted, by ARB separately from other aspects of the regulation. Accordingly, the FED should have identified feasible alternatives, not just to the adoption of the cap and trade program as a whole, but within the forest protocol that could feasibly avoid significant impacts. Our comment letters on the forest protocol submitted throughout this process suggested a number of steps ARB could have taken in this regard. ARB's decision not to consider these alternatives is erroneous. (CBD6)

**Response:** The protocols, including the Forest Offset Protocol, are an intrinsic part of the overall cap-and-trade regulation and program design. It appears that the commenter would prefer that a separate FED be prepared for the Forest

Offset Protocol with a separate set of alternatives. The FED prepared for the regulation is programmatic and does not examine the potential for adverse project-specific impacts, but does disclose that the potential for adverse impacts associated with biological resources exists. General mitigation is identified in the FED; however, it is important to note that ARB does not have the authority to require specific mitigation for projects outside its regulatory purview, and consequently, we adopted a statement of override at the Board hearing. The revised regulation reflects substantial changes to the general offset sections of the regulation and the Forest Offset Protocol, increasing the stringency of the offset requirements that largely address concerns regarding potential adverse environmental impacts. The commenter is referred to the discussion of adaptive management provided as a response to CBE 1 and CBD1 in Attachment A of the FSOR.

**R-3. Comment:** As stated in our prior comments, the proposed regulation creates specific incentives for biomass by exempting emissions from compliance obligations and by creating opportunities for biomass facilities to obtain free allowances if they "opt in" to the system. These incentives, in the context of the RPS program, may lead to increased biomass development at the expense of less carbon-intensive technologies. The result of these incentives thus could be an overall increase in greenhouse gas and other air pollutant emissions, in addition to impacts on forests and associated biological resources. The FED did not analyze these potential impacts. (CBD6)

**Response:** Development of the cap-and-trade regulation included an extensive economic analysis and the involvement of an Economic and Allocation Advisory Committee. The updated economic analysis supporting the development of the regulation indicates that biomass facilities would not be incentivized by the regulation regardless of whether they "opted in" to the system or not. Although ARB proposes to monitor the use of biomass as part of the monitoring and oversight of the implementation of the cap-and-trade regulation, the economics of biomass power plants would preclude transport of materials far from the plant or woody fuel source. Fuel costs are critical to the economic viability of biomass power plants and transportation costs can be the largest component of the cost of fuel. The fuel shed of a biomass power plant must be a limited distance from a plant. Prior environmental investigations have found that approximately 50-mile distance for transport is economically feasible. Response for CBD5 in the Response to Comments in Attachment A of the FSOR (starting on page 29) contains the reference.

**R-4. Comment:** The FED misunderstands the concern that the Forest Protocol will incentivize conversion of native forests to even-age plantations. The staff response misunderstands and mischaracterizes the concern that the forest protocol will incentivize conversion of native forests to plantations. "Furthermore, modeling forest growth, mortality, and harvesting over time indicate that it would be unlikely for a forest project to remain eligible (i.e., demonstrate a continued net reduction in carbon sequestration), if conversion to a single-species, single-aged plantation occurred (FED,

page 304)." To be clear, it is not our primary concern that registered forest projects could be converted to plantations (although that would undoubtedly be an adverse impact to biological resources). Given the relatively slow rate of tree growth in the first decade following clear-cutting and replanting, and the "10-year look-back" period in the forest protocol, it is unlikely that it would be profitable to register regenerating plantations as forest projects until at least 10 years after harvest and replanting. Rather, our concern is that large timber operations would be incentivized to convert native forests (with diverse structures and multiple species) to even-age plantations with the expectation of registering them as projects 10 years or more after replanting. Also, the protocol incentivizes such operations to concentrate and increase intensive harvesting in watersheds with forest projects (but outside the project boundaries) because such activities suppress the assessment area baseline against which the forest project is compared. (CBD6)

**Response:** We disagree that the forest project offset protocol incentivizes timber harvesting beyond that which is already allowed under Timber Harvest Plans and Forest Practice Rules. The FED fully analyzed the potential for adverse impacts resulting from the Forest Offset Protocol. The Protocol would not allow any forest management activity that is not allowed by state, federal, or local laws and regulations. The Protocol includes environmental safeguards that help assure the environmental integrity of forest projects, and these include requirements for projects to demonstrate sustainable long-term harvesting practices, limits on the size and location of even-age management practices, and requirements for natural forest management that require all projects to utilize management practices that promote and maintain native forests comprised of multiple ages and mixed native species at multiple landscape scales.

The Forestry Offset Protocol discourages clearcutting and clearly encourages the sequestration of carbon once a property is accepted as an offset project. The commenter asserts that the creation of the Forest Offset Protocol incentivizes private land owners to clearcut their forests before submitting their properties for offset crediting. The regulation includes a mandatory 10-year prohibition on clear-cutting before a property can be considered as an offset project. ARB contends the 10-year prohibition is sufficient to nullify such incentive. Generally, the present value of timber far outweighs the potential return as an offset project at least a decade in the future.

**R-5. Comment:** In the FED Response, ARB states that "no revision to the FED analysis or recirculation is required," based upon a stated conclusion that the modifications to the Regulation for the California Cap on GHG Emissions and Market-Based Compliance Mechanisms "do not ... affect the environmental impact analysis in the FED." However, the revised Cap-and-Trade Regulation which was released on October 10, 2011, contains numerous and substantial changes to the regulation proposed in 2010, resulting in an additional 82 pages of text and potential adverse environmental impacts to water supply, and other natural resources. In fact, ARB states on page 13 of the FED Response that the revised Cap-and-Trade Regulation reflects

substantial changes to the general offset sections of the Regulation and the Forest Offset Protocol and “some of the impacts associated with forestry operations are considered potentially significant and may be unavoidable.” As a means of mitigating the forestry impacts, ARB staff issued a proposed Adaptive Management Plan (Adaptive Plan) for the Cap-and-Trade Regulation the same day that the FED Response and the final Cap-and-Trade Regulation package were released. However, the Adaptive Plan is not comprehensive and does not even include mitigation measures for the gamut of significant environmental impacts identified in the FED.

Numerous stakeholders have raised significant environmental issues since the FED was originally circulated in conjunction with the proposed Cap-and-Trade Regulation in October 2010. Metropolitan believes that ARB has failed to mitigate or otherwise adequately respond to these stakeholder concerns and has not considered alternatives to reduce adverse environmental impacts and the inequitable impacts in the Cap-and-Trade FED and Regulation. If ARB were to take final action to approve the FED Response, it would be in violation of ARB’s Certified Regulatory Program which prevents ARB from approving any action or proposal for which significant adverse environmental impacts have been identified during the review process, unless feasible mitigation measures or feasible alternatives were not available that would substantially reduce the adverse impacts (CCR section 60006).

Because ARB only provided Metropolitan and other stakeholders nine days for review of the FED Response, Metropolitan did not have sufficient time to prepare detailed comments on ARB’s decision not to update the FED; or to provide additional information to ensure adequate environmental analysis of the potentially significant impacts raised by others, which were summarily dismissed by ARB in their FED Response. However, Metropolitan believes that the original FED and the FED Response inadequately addressed water supply and water quality environmental impacts, such as those raised by the Department of Water Resources (DWR), the operator of the State Water Project (SWP), one of Metropolitan’s two major sources of water supply. Metropolitan is one of 29 agencies that have long-term contracts for water service from DWR. Metropolitan agrees with and incorporates DWR’s comments on the FED. An example of the impact on water supply resources from the Cap-and-Trade Regulation would be the increased costs of water for imported Colorado River supplies which could incentivize procurement of alternative water supplies with resulting negative environmental impacts. Metropolitan’s Integrated Resources Plan reflects a comprehensive approach to managing water supplies. A stable supply of imported water is an important component of the plan. A shift in resources may undermine Metropolitan’s ability to effectively manage water supply. For example, if Colorado River water becomes uneconomical due to increased energy costs, there may be environmental impacts associated with securing alternative supplies. Metropolitan believes the inadequate analysis of potential water supply and water quality impacts, including impacts to the environmentally sensitive Sacramento-San Joaquin River Delta, must be rectified before the Cap and Trade Program can be implemented. Metropolitan therefore, opposes ARB’s FED Response, and its foundational FED and urges ARB to update its responses and analysis to comply with ARB’s certified Regulatory Program and CEQA

before proceeding with Board consideration for adoption of the FED and a Cap-and-Trade Program in their current forms. (MWDC5)

**Response:** We did not indicate that changes were not substantial. A wide range of improvements were made to the regulation. The environmental consequences of those modifications are not substantially different from those described in the draft document. Some changes provide environmental benefits. ARB considered stakeholder concerns and prepared appropriate responses to comments received. The alternatives analysis was prepared in accordance with ARB's certified regulatory program and evaluated alternatives at a programmatic level, as appropriate. One of the fundamental concerns expressed by the water contractors during the October Board Hearing focused on inequities of allowance allocation. This specific issue does not pose environmental impacts, and Board Resolution 11-32 contains a directive to staff to continue discussions with stakeholders to identify and propose, as necessary, potential amendments to the regulation. Further, the potential increase in the price of water is an economic issue, not an environmental one, and is not required to be analyzed under CEQA. The cap-and-trade program is not expected to result in an increase to the cost of water sufficient to justify securing other sources.

**R-6. Comment:** The removal of the requirement that the transport of woody biomass materials not lead to the transport of insects or tree diseases may result in the spread of insects and tree diseases. "The commenter indicates that the removal of Section 95852.2(a)(4)(C) would invite transport of infected and infested materials, thereby possibly resulting in a new environmental impact. ARB disagrees. The California Department of Forestry has oversight of the harvesting of wood and wood wastes, and is required to identify species known to harbor insect or disease nests and approve transportation." However, all of the citations ARB offers in defense of this statement state only that there are various sections of the PRC that grant the California Department of Forestry authority to limit the transport of infested materials, should they decide to. That is obviously very different from having a mandate and the capacity to do so. Thus, our comments stand that the elimination of section 95852.2(a)(4)(c) invites the transport of infested and infected woody materials. The staff response simply proposes to assign to the California Department of Forestry the blame for any spread of disease or infestation that results from this policy. The Staff Response also dismisses the concern of spreading infestation as being limited by economic limitations. "Notwithstanding the protection of regulatory restrictions on the potential transport of invested plant or woody materials, the economics of biomass power plants would preclude transport of materials far from the plant or woody fuel source. Prior environmental investigations have found that within 50 miles, the transport of biomass fuel can still be viable, and beyond that distance, the transport begins to be economically infeasible. Therefore, if any material were to carry an infestation, the environmental effect would be minimized by the economic limitations of the cost of fuel transport." However, the economic scenario referred to in this section exists only prior to the implementation of the compliance exemption for biomass combustion. The added economic incentive provided by the exemption of woody biomass combustion

from compliance obligation could result in substantially expanding the distance at which it will be economical to transport woody feedstock. Furthermore, the staff response appears to misunderstand the dynamics of both the operation of biomass plants and the spread of forest insects and disease. "Once at the plant, the fuel would be combusted and the risk of spreading an infestation would be eliminated." To be clear, forest biomass feedstock is not offloaded from the transport trucks directly into a generator. Instead, feedstock is often stored for days or weeks in piles at the facility, potentially allowing for the dispersal of insects to the surrounding forest. In fact, even the transportation of these woody materials is an opportunity for the dispersal of insects and disease, in the form of wood and bark falling from the load in transit. (CBD6)

**Response:** ARB believes that the analysis is sound. Under current conditions, wood is routinely transported in and out of state. As described in the initial response, the cap-and-trade regulation would not alter how much wood is transported throughout the state. It would be inappropriate for ARB to interfere with the regulatory authority of another agency. Thresholds of significance based on existing laws, ordinances, and regulations is an appropriately recognized practice under CEQA. CalFIRE has inspection requirements in place. Compliance with those requirements is recognized as sufficient to avoid a significant impact.