



January 11, 2010

Mr. Kevin Kennedy
California Air Resources Board
1001 I Street
Sacramento, California 95812

Subject: Comments on the offset provisions of the Preliminary Draft Regulations (Nov 24, 2009)

I. Introduction

These comments are submitted by the Offsets Working Group (OWG), a collaborative team of publicly-owned electric utilities serving customers in California.¹ These comments are provided from the viewpoint of covered entities that would have surrender obligations² under the Air Resources Board's (ARB) proposed regulations. These comments serve as the OWG's responsive input to the provisions of the Preliminary Draft Regulations (PDR) related to offsets.³

The OWG fully supports the ultimate intent of AB 32, i.e., reducing statewide GHG emissions in the most technologically feasible and cost-effective manner. It is evident to the OWG, from reading the PDR and from its discussions with ARB staff, that staff has taken significant efforts to develop an offset program that is based on science, technical feasibility, and cost-effectiveness. Recognizing that ARB staff released the PDR in order to provide stakeholders with an early introduction to staff's thinking, the OWG commends staff for establishing a process in which stakeholders are being engaged throughout the regulatory development. The OWG also recognizes that significant work by staff is yet to be done and appreciates this opportunity to comment on the substantive concepts. These comments concentrate on the proposed concepts with which the OWG has concerns involving cost-effectiveness, fairness, and/or feasibility.

¹ The OWG includes representatives from the Modesto Irrigation District, City of Redding, City of Roseville, Sacramento Municipal Utility District, and Turlock Irrigation District. These utilities comprise approximately 1/3 of the electricity load in California served by publicly-owned electric utilities.

² PDR Subarticle 7; PDR § 95802(a)(141) (defining "surrender obligation").

³ All of the OWG members plan to file comments on other aspects of the PDR separate from these comments filed by the OWG.

II. Executive Summary

Offsets provide an important mechanism that allows covered entities to contribute to the overall reduction in global GHG levels in a cost-effective manner. Offset credits, by definition, must achieve emission reductions while meeting ARB's quality standards and, hence, offset credits do not "break" the statewide emissions cap set by AB 32. Offsets will promote innovation and encourage emission reductions at uncapped sources in all geographical areas. In addition to the reduction, avoidance or sequestering of greenhouse gases, many offset projects will provide substantial environmental and public health co-benefits that will be enjoyed by most, if not all, Californians. Accordingly, offset credits meeting ARB's quality standards should be fully tradable and treated no less favorably than other compliance instruments. Each offset credit, once issued, should have the same value and usage limitation as an allowance – to ensure the capability of covered entities to meet their AB 32 obligations.

The OWG encourages ARB to develop a regulatory program that incorporates the principles of integrity, flexibility, certainty, transparency, and simplicity. Without a doubt, the OWG supports regulations that ensure the integrity of credits issued for the emissions that are reduced, avoided, or sequestered by offset projects. Robust offset protocols provide sufficient protections to ensure that the benefits of real reductions are achieved and, furthermore, should prevent manipulation.

In order to maintain the flexibility to add new projects or protocols, the OWG agrees with ARB that specific offset protocols should not be defined in the regulations. ARB should remain open to approving and utilizing standards from other systems as long as all of ARB's quality criteria are met. Existing protocols, definitions, and calculations from other standards may then be incorporated by reference into the regulations.

The OWG acknowledges ARB staff's rationale for proposing that no more than 49% of emission reductions may come from offsets. However, the stated purpose for this quantitative limit has less applicability to electric utilities than to other covered entities. This is because electric utilities are subject to complementary measures, including a proposed 33% Renewable Energy Standard (RES), the 1 million solar roofs envisioned by the California Solar Initiative, and the requirement to achieve all cost-effective energy efficiency savings. Both of these mandatory measures will ensure that substantial direct emission reductions will occur from capped sources in California and provide meaningful local, public health co-benefits to many Californians. Most of the OWG members believe that the PDR's offset usage limitation is too stringent, particularly in its blanket application to even those offset projects located within California that would provide substantial in-state environmental, economic, and public-health benefits. The proposed usage limitation could frustrate the cost-effective achievement of statewide GHG emission reduction goals. The need to limit the usage of offset credits is also minimized where compliance instruments issued by external programs are verifiable and approved by ARB.

The OWG recommends against setting any geographic limits on offset credits as long as all AB 32 criteria are met by the offset project (or the sector-based approach). Since the reduction of greenhouse gases is a global issue, the OWG believes that the use of offset credits should have no geographic restrictions.

ARB should approve certain existing offset protocols as soon as possible to provide market certainty to entrepreneurs and covered entities, encouraging them to invest *now* in GHG-reducing projects. ARB should set the highest priority on the development of new offset protocols and the approval of existing offset protocols (e.g., the Climate Action Reserve (CAR)) and programs (e.g., the Clean Development Mechanism (CDM)).

III. Comments and Recommendations on the PDR

The OWG’s responsive comments provided below follow the PDR’s numbering system. For each relevant PDR section, the OWG’s responses are categorized as either Comments or Recommendations. For the sake of ease, and unless otherwise required by the context, the OWG uses the term “emission reduction” to encompass either a reduction, avoidance, or sequestering of GHGs by a qualified offset project.⁴

PDR § 95802(a)(42) “Crediting period” means the pre-determined period for an offset project or activity for which GHG reductions, avoidances or sequestration from the activity baseline are verified by an accredited verifier or verification body for purposes of the issuance of offset credits.

1. **OWG Recommendation: The regulations should ensure that crediting periods are consistent with any permanence requirement in the regulations,⁵ and the permanence requirement and crediting period of the external Offset Crediting System (OCS) or Offset Quantification Methodology (OQM) being used.** In particular, the CAR Forest Project Protocol has a permanence requirement and crediting period of 100 years⁶ and the ARB crediting period should match this if it adopts the CAR Forest Project Protocol for use in AB 32 compliance. The CAR Urban Forest Reporting Protocol also has a permanence requirement of 100 years⁷ (*see below at [PDR_96240i](#)*).
2. **OWG Recommendation: If ARB implements a crediting period shorter than the permanence requirement, then the regulations should include a “re-crediting protocol” that provides re-crediting as an administratively simple rebuttable presumption.** An offset project with a 100-year permanence requirement should not be burdened with a costly requirement to re-establish the credit at intervening periods (*see below at [PDR_96240i](#)*).

⁴ The PDR states that offset credits represent a *reduction, avoidance, or sequestration* of 1 metric ton of CO₂e. PDR §§ 95802(a)(97), 96220(a)(1).

⁵ PDR § 95802(a)(107).

⁶ Climate Action Reserve Forest Project Protocol, Version 3.1 (Oct 2009), at 9.

⁷ Climate Action Reserve Urban Forest Reporting Protocol, Version 1.0 (Aug 2008), at 14-16.

PDR § 95802(a)(99) “Offset project commencement” means, for an offset project involving physical construction, other work at an offset project site, or installation of equipment or materials, the date of the beginning of such activity. For an offset project that involves the implementation of a management activity, “offset project commencement” means the date on which such activity is first implemented or the applicable offset quantification methodology is first utilized.

3. **OWG Recommendation:** The regulations should clarify whether the “offset project site” is the same as the “offset project boundary” as defined in PDR § 95802(a)(117).
4. **OWG Recommendation:** For offset projects that existed prior to ARB’s regulatory commencement date, the regulations should authorize the issuance of offset credits for the incremental emission reductions achieved from a new “additional” phase of a project that was started after that commencement date. By example, and only for the purpose of describing this recommendation, the OWG will use three assumptions: (1) ARB adopts the CAR Livestock Project Protocol;⁸ (2) an entity “X” begins operating a manure management biogas control system (BCS) prior to December 31, 2006; and (3) ARB adopts the PDR proposal that offset credits will not be issued for project commencement dates prior to December 31, 2006⁹ (see below at [PDR 96240c3](#)). In this example, entity “X” subsequently discovers a technologically feasible and cost-effective opportunity for expanding or improving its existing BCS and commences the expansion project after December 31, 2006. The CAR Livestock Project Protocol is used to establish a new emission baseline for the existing BCS and the expansion or improvement will result in greater emission reductions than were being achieved by the existing BCS. Offset credits should be issued for the incremental emission reductions that exceed the existing BCS baseline as long as the new project construction met all other offset project criteria including the “additionality” requirement in PDR § 95802(a)(4). The OWG believes that unless offset credits are issued for the incremental emission reductions, Entity “X” will be penalized because it took the early voluntary action to install its BCS.
5. **OWG Recommendation:** ARB should more specifically define the commencement date for biological sequestration projects such as forestry projects. ARB should consider using the date established by the relevant OCS. For example, the CAR Forest Project Protocol defines different Project Start Dates depending upon the type of project (Reforestation, Improved Forest Management, or Avoided Conversion).¹⁰

PDR § 95860 Discussion of Concept – Compliance Instruments Issued by External Programs

6. **OWG Comment:** The OWG strongly supports the development of a process for ARB approving the use of compliance instruments from external OCS’s. The OWG agrees

⁸ Climate Action Reserve Livestock Project Protocol, Version 2.2 (Nov 2009).

⁹ PDR §§ 96240(c)(3), 96400(a)(2).

¹⁰ Climate Action Reserve Forest Project Protocol, Version 3.1 (Oct 2009), at 10.

with the preliminary list of compliance instruments listed in the Discussion textbox on PDR page 29.

7. **OWG Recommendation: ARB should immediately begin a public process to consider and approve certain external Offset Crediting Systems.** There must be certainty in order to encourage additional investment and development which will start achieving emission reductions now. Covered entities must also be able to forecast and be assured of their ability to purchase compliance-grade offsets before their surrender obligation begins (*see also below at [PDR 96170](#) and [PDR 96260](#)*).

PDR § 95970 Quantitative Usage Limit on Designated Compliance Instruments

8. **OWG Comment:** By definition, and therefore in practice, an offset credit will represent an emission reduction at an uncapped source that is in addition to any reduction otherwise required by law or regulation or that would otherwise occur.¹¹ An offset emission reduction provides exactly the same beneficial effect as provided by a direct emission reduction at a capped source: (1) in reducing the global mix of GHGs;¹² and (2) achieving the statewide GHG limit.¹³ Offset credits meeting the AB 32 quality standards (*see below at [PDR 96220](#)*) do not “break” the statewide emissions cap. The requirements of AB 32 and scientific fact undercut the position of any stakeholder seeming to suggest that an offset credit should be categorized as a “low road” to AB 32 compliance when compared either to the surrender of an allowance or an emission reduction at a covered source.
9. **OWG Comment:** In AB 32, the “Legislature finds and declares [that] . . . [g]lobal warming poses a serious threat to the economic well-being, public health, natural resources, and the environment of California.¹⁴ In addition to their GHG reduction-related benefits to California, many offset projects also provide economic, environmental, and public health benefits to the state. These include water purification, mitigation of floods and droughts, temperature reduction, detoxification and decomposition of wastes, noise reduction, odor reduction, generation and renewal of soil fertility, pollination of crops and natural vegetation, pest control, climate stabilization, air pollutant reduction,

¹¹ The regulations adopted by ARB, including those that will apply to offset credits, “shall ensure all of the following: (1) The greenhouse gas emission reductions achieved are *real, permanent, quantifiable, verifiable, and enforceable* by the state board. (2) For regulations pursuant to Part 5 (commencing with Section 38570), the reduction is *in addition to any greenhouse gas emission reduction otherwise required by law or regulation, and any other greenhouse gas emission reduction that otherwise would occur*. (3) If applicable, the greenhouse gas emission reduction occurs over the same time period and *is equivalent in amount to any direct emission reduction required pursuant to this division.*” Health & Safety Code § 38562(d) (emphasis added); *See e.g.*, PDR §§ 95802(a)(4), (97), 96220(a), 96240(c).

¹² *See* “Endangerment and Cause or Contribute Findings for Greenhouse Gases under Section 202(a) of the Clean Air Act; Final Rule,” 74 Federal Register 239 (15 December 2009), pp. 66516.

¹³ Health & Safety Code §§ 38505(n), 38550, 38562.

¹⁴ Health & Safety Code § 38501(a).

and many other positive attributes.¹⁵ The benefits of many types of “ecosystems services” provided by an offset project can be identified and quantified.¹⁶ The measureable value provided by many of these offset projects will flow to all Californians. Importantly, the ecosystems services of some offset projects will primarily benefit certain low-income and disadvantaged communities.¹⁷

10. **OWG Comment:** ARB is required to adopt GHG emission reduction measures “to achieve the maximum technologically feasible and cost-effective reductions in greenhouse gas emissions in furtherance of achieving the statewide greenhouse gas emissions limit”¹⁸ Offsets are mechanisms that allow covered entities to mitigate compliance costs while at the same time contributing to the overall reduction in global CO₂ levels. Offset projects will assist California in achieving the maximum technologically feasible emission reductions by promoting innovation and encouraging emission reductions at sources that would not otherwise be reached by ARB’s regulations.¹⁹ Offsets provide compliance flexibility for covered entities and thus promote the essential criterion of AB 32 for cost-effectiveness.²⁰

11. **OWG Comment:** In recognition of the true emission reductions and ancillary benefits of qualified offset projects, the OWG members encourage ARB to reconsider the

¹⁵ ARB “shall evaluate the total potential costs and total potential economic and noneconomic benefits of the plan for reducing greenhouse gases to California’s economy, environment, and public health, using the best available economic models, emission estimation techniques, and other scientific methods.” Health & Safety Code § 38561(d); Daily, G.C., *et al.*, 1997. *Nature’s Services: Societal Dependence on Natural Systems*, ISLAND PRESS (describing ecosystems services, principles of valuations, and providing case studies); Escobedo, F., *et al.*, 2009. *Air Pollution Removal and Temperature Reduction by Gainesville’s Urban Forest*, Document FOR216, University of Florida; Richards, K., 1997. *Nature’s Services: Societal Dependence on Natural Ecosystems*, ISSUES IN SCIENCE AND TECHNOLOGY; Straton, A., Pearson, L., 2008. *Importance of “ecosystem services” for sustainable development: ecosystem services are the foundation of sustainable development*, ECOS; Shaw, M.R., *et al.*, 2009. *The Impact of Climate Change on California’s Ecosystem Services*, Draft Paper submitted to the California Energy Commission, CEC-500-2009-025-D; In 2008, the USDA announced its new Office of Ecosystem Services and Markets. <http://www.fs.fed.us/ecosystems-services/>

¹⁶ Health & Safety Code § 38570 states that “[p]rior to the inclusion of any market-based compliance mechanism in the regulations, to the extent feasible and in furtherance of achieving the statewide greenhouse gas emissions limit, the state board shall . . . [m]aximize additional environmental and economic benefits for California, as appropriate.” ARB should value the ecosystems services that offset credits represent in relation to other compliance instruments; Daily, G.C., *et al.*, 2000. *The value of nature and the nature of value*, 289 SCIENCE 395-396; Hawkins, K., 2003. *Economic Valuation of Ecosystem Services*, University of Minnesota; Heal, G., 2000. *Valuing ecosystem services*, ECOSYSTEMS; Heal, G., 2000. *Nature and Marketplace: Capturing the Value of Ecosystem Services*, ISLAND PRESS; The Katoomba Group and Forest Trends, 2008. *Payments for Ecosystems Services, Getting Started: A Primer*.

¹⁷ “In adopting regulations pursuant to this section and Part 5 (commencing with Section 38570), to the extent feasible and in furtherance of achieving the statewide greenhouse gas emissions limit, the state board shall . . . [e]nsure that activities undertaken to comply with the regulations do not disproportionately impact low-income communities. Health & Safety Code § 38562(b)(2).

¹⁸ Health & Safety Code § 38562(a).

¹⁹ *Recommendations for Designing a Greenhouse Gas Cap-and-Trade System for California*, Market Advisory Committee (June 30, 2007), at 61-62.

²⁰ *Id.*; Hanemann, W.M., Farrell, A.E., *et al.*, (2006). *Managing Greenhouse Gas Emissions in California*, The California Climate Change Center at UC Berkeley, p. 5-18.

proposed usage limitation on offsets.²¹ These OWG members acknowledge ARB staff's rationale for proposing that no more than 49% of emission reductions may come from offset projects. However, the stated purpose for this quantitative limit has less applicability to electric utilities than to other covered entities because electric utilities are subject to mandatory emission reduction measures (including a proposed 33% RES and the requirement to achieve all cost-effective energy efficiency savings),²² which assure that a majority of emission reductions will come from covered sources. Allowing electric utilities to use more offsets to achieve even greater reductions would not frustrate this purpose.

12. OWG Recommendation: A majority of the OWG members recommend that the offset quantitative usage limit percentage should either be eliminated or increased for all offset credits.²³ This recommendation is supported by the OWG Comments above and the principle of cost containment as presented in the Discussion textbox on PDR page 50.²⁴ The limitation proposed in PDR § 95970 is substantially more stringent than other GHG reduction programs.²⁵

13. OWG Recommendation: The offset quantitative usage limit percentage should either be eliminated or increased for offset credits from projects located in California. This recommendation is supported by the OWG Comments above and the principle of cost containment as presented in the Discussion textbox on PDR page 50. Eliminating or increasing the usage limit percentage for offset projects in California can be shown to directly benefit Californians through greater reductions in co-pollutants and green jobs, among other things. This limit may also inhibit a covered entity (public or private) having an uncapped source located in California from implementing a technologically and cost-effective opportunity to reduce emissions directly at that

²¹ These OWG members do not believe that the proposed quantitative limitation is scientifically based or beneficial to California. Nor do the OWG members believe that there is substantial evidence to support such a restriction. Yet, ARB is required to “rely upon the best available economic and scientific information and its assessment of existing and projected technological capabilities when adopting the regulations” in furtherance of achieving the statewide GHG emissions limit. Health & Safety Code § 38562(e).

²² AB 32 Scoping Plan, at 41-46. At an estimated cost of \$133/ton, the Scoping Plan states that the RES is the most expensive means of achieving emission reductions. *Id.* at 84.

²³ At least one OWG member is not disputing the quantitative usage limitation.

²⁴ In promoting the principle of cost containment, the OWG does not mean to suggest that ARB should reduce the integrity of acceptable offsets in order to decrease costs.

²⁵ The offset limit for the EU-ETS is 8% while the limit during the early years of the Waxman-Markey proposed legislation would be closer to 35%. *Comments of Michael Wara to the California State Senate Select Committee on Climate Change and AB 32 Implementation*, Informational Hearing on the Greenhouse Gas Emissions Cap-and-Trade: California Air Resource Board's Preliminary Draft Regulation, January 7, 2010; The RGGI offset usage limit is 3.3% of reported emissions but increases to 5% (stage 1 trigger at \$5.00/ton) and then 10% (stage 2 trigger at \$10/ton) if certain allowance price levels are reached. RGGI MODEL RULE, section XX-6.5 (December 2008); California's allowance prices are estimated to substantially exceed \$10/ton from the inception of the ARB cap-and-trade program.

uncapped source if the reduction would exceed 4% of the entity's covered emissions.²⁶ In addition, ARB may consider eliminating or increasing the offset limit percentage from projects associated with in-state local disadvantaged communities. Such offset projects represent emission reductions within California and will not frustrate the purpose of achieving in-state emission reductions and commensurate co-benefits. These offset projects would also help achieve AB 32's goal of focusing emission reductions on overburdened and disadvantaged communities in the state, and ARB should favor incentives to undertake these projects.

PDR § 95970(a) Each covered entity must surrender compliance instruments in accordance with the following equation: O/S must not be greater than or equal to L.

14. **OWG Comment:** If some level of quantitative usage limit is implemented,²⁷ the percentage-use limitation should be applied at the entity level and calculated as a percentage of the entity's actual emissions during the compliance period and not as a percentage of the entity's allocated allowances or emission reduction obligations.
15. **OWG Recommendation:** **The calculation in PDR § 95970(a) is unclear and does not appear to accurately reflect ARB's text in the Discussion textbox on PDR page 42-43.** The calculation purportedly pertains to a single entity's usage limit, yet the numerator "O" appears to be a number that reflects the summation of all offset credits available for all covered entities. The OWG recommends a simpler calculation in the form as follows:

*O shall be $\leq S * 0.04$, where*

O = the number of "use-limited" compliance instruments that a specific covered entity may use to meet its surrender obligation.

S = the surrender obligation of a specific covered entity (i.e., its covered emissions during the compliance period).

16. **OWG Comment:** The issue of offset carry-overs is presented in the Discussion textbox on PDR page 43 but it is unclear whether ARB is considering a similar approach. In its comments to WCI, the OWG supported a carry-over mechanism that allowed covered entities to surrender additional offset credits when the total credits surrendered during a compliance period was less than the aggregate usage limitation for all covered entities. This mechanism will not increase the aggregate amount of offset credits available during the course of the program, but it will allow some individual covered entities to exceed the

²⁶ For example, if a covered entity emitted 30,000 MT CO₂e per year from its covered sources and had a more cost-effective option to substantially reduce emissions at its 15,000 MT CO₂e uncovered sources, it would be unable to use more than 1,200 offset credits to meet its own surrender obligation.

²⁷ This recommendation is still applicable if ARB finds that a higher usage limit than the proposed 4% is supported by substantial evidence.

usage limitation. As proposed by WCI, a carry-over will facilitate a more liquid market that gives both buyers and sellers access to the full limit of offset tons for the entire period 2012 to 2020. This will provide the greatest certainty to buyers and sellers while promoting the offset program goals of cost containment and enabling real emission reduction opportunities at a wider variety of sources.

17. **OWG Recommendation:** The regulations should include a process that permits covered entities to exceed their offset usage limit when the total credits surrendered during a compliance period was less than the aggregate usage limitation for all covered entities. As stated above, this will not increase the aggregate amount of offset credits available during the course of the program.

PDR § 96080 Discussion of Concept – Use of Clearing Facility for Bilateral Trades of Offset Credits

18. **OWG Comment:** The issue of offset credit clearing facilities is presented in the Discussion textbox on PDR page 53. It would appear that the possibility of offset project reversals primarily concerns biological projects that have been issued credits for sequestering or avoiding emissions. The CAR Forest Project Protocol uses a buffer pool mechanism whereby reversals are remedied without the need for a make-whole contract by retiring excess credits from the buffer pool.²⁸

19. **OWG Recommendation:** ARB should consider using a buffer pool mechanism for offset project types that have a possibility of undergoing reversals.

PDR § 96170. Requirements for Approval of GHG Offset Crediting Systems

20. **OWG Recommendation:** As required by AB 32, the regulations should incorporate linkages between external OCS's and ARB's compliance program.²⁹ California should link to as many other cap-and-trade systems as possible, assuming they are comparably stringent and can be quantified. By having a broadened market, covered entities will benefit from a broader array of compliance options resulting in reduced emission abatement costs, which in turn will benefit California and its consumers with more reductions at a lower overall cost. These reduced costs are achieved from increased market liquidity, project availability, price stability, and flexibility when compared to a California-only trading program.³⁰

²⁸ Climate Action Reserve Forest Project Protocol, Version 3.1 (Oct 2009), at 54-59.

²⁹ ARB “shall consult with other states, and the federal government, and other nations to identify the most effective strategies and methods to reduce greenhouse gases, manage greenhouse gas control programs, and to facilitate the development of integrated and cost-effective regional, national, and international greenhouse gas reduction programs.” Health & Safety Code § 38564.

³⁰ *Recommendations for Designing a Greenhouse Gas Cap-and-Trade System for California*, Market Advisory Committee (June 30, 2007), at 69-72; *Linking California's Cap-and-Trade Program to Other Greenhouse Gas*

21. **OWG Recommendation:** ARB should implement linkages with certain OCS's as soon as possible in order to provide regulatory certainty. In particular, ARB should formally consider adopting existing certain CAR protocols no later than January 1, 2011.

PDR § 96180 Types of Linkage

22. **OWG Recommendation:** The OWG supports both unilateral and bilateral linkages being formed with external systems. The OWG supports establishing bilateral linkages whenever possible. Bilateral linkage removes competitive concerns between the jurisdictions, decreases any perceived threats from linking to other programs, and ensures that costs are adequately balanced. However, the OWG also believe that the possibility should not be excluded of linking unilaterally to jurisdictions producing qualified offsets where sufficient protections can be developed to avoid distributional and economic imbalances.
23. **OWG Recommendation:** At least one OWG member supports a unilateral linkage to allow California's cap-and-trade system to accept credits from, but not trade credits into, the Low Carbon Fuel Standard (LCFS) system in the state. Such a linkage will help to reduce California's GHG reduction costs, reduce emissions from California's largest emitting sector (transportation), promote electrification of the transportation sector, and integrate these two flagship California climate programs. No usage limitation should apply to LCFS credits, as these credits represent actions that reduce emissions and provide economic benefits within the state.³¹

PDR Subarticle 13 Discussion of Concept – Creation of Offset Credits

24. **OWG Comment:** The OWG is generally supportive of the process flow as preliminarily described in PDR §§ 96220-96380.
25. **OWG Comment:** In the Discussion textbox on PDR page 60-61, ARB staff invites comments on the "right role for ARB to play in the offset market." The PDR presents draft language for ARB acting as a credit issuing body using approved OQM's, and for ARB approving external OCS's that issue offset credits. The OWG believes that the regulatory program should incorporate the principles of integrity, flexibility, certainty, transparency, and simplicity.³² These principles can be fulfilled by any system in which ARB regulations set the same quality standards regardless of whether the credits are issued by ARB or an external system.

Trading, Comments of Redding/MID/TID submitted to ARB, August 21, 2009; Sacramento Municipal Utility District's Comments on Linking California's Cap-and-Trade Program to Other Greenhouse Gas Trading Programs, Comments of SMUD submitted to ARB, August 21, 2009.

³¹ *Sacramento Municipal Utility District's Comments on Linking California's Cap-and-Trade Program to Other Greenhouse Gas Trading Programs, Comments of SMUD submitted to ARB, August 21, 2009.*

³² ARB shall "[m]inimize the administrative burden of implementing and complying with these regulations." Health & Safety Code § 38562(b)(7).

26. **OWG Recommendation:** ARB should continue its public process to develop regulations that permit a hybrid approach with ARB acting as a credit issuing body as well as ARB approving external credit issuing bodies.

PDR § 96220. General Requirements for Offset Credits

27. **OWG Comment:** The OWG agrees that utilizing robust offset protocols will provide adequate protections to ensure the benefits of real reductions are achieved and to prevent manipulation. This will enable covered entities to use offset credits for achieving the goals of AB 32 in the most efficient manner. Strong standards for offset integrity will provide lasting certainty to developers, purchasers, ARB, and the public. The OWG cautions, however, that overly stringent requirements that are unsupported by science³³ will have a chilling effect on the offset market.

PDR § 96230 Discussion of Concept – Requirements and Approval of Offset Quantification Methodologies

28. **OWG Comment:** The OWG agrees with the recommendations in the Discussion textbox on PDR page 62 that ARB would adopt specific offset quantification methodologies similar to the proposed requirements in PDR Subarticle 12, and issue offset credits accordingly.
29. **OWG Comment:** The OWG agrees with recommendations in the Discussion textbox on PDR page 62 that the regulations should set out the process for Board approval and/or amendment of OQM's, but that the actual OQM's will not be included within the regulatory language.
30. **OWG Recommendation:** The regulations should clearly state that any new OQM's will only apply to new offset projects and will not adversely affect existing projects during the project's pre-established crediting period. Additionally, any new OQM should not be used to invalidate any credits that have already been approved and issued.
31. **OWG Recommendation:** The Board should begin evaluating the CAR protocols that it began adopting in 2007 for voluntary offset projects and expedite their approval for use as compliance-grade OQM's. This will promote certainty for all stakeholders.

³³ ARB “shall rely upon the best available economic and scientific information and its assessment of existing and projected technological capabilities when adopting the regulations” in furtherance of achieving the statewide GHG emissions limit. Health & Safety Code § 38562(e).

PDR § 96240 Discussion of Concept – Offset Project Types

32. **OWG Comment:** In the Discussion textbox on PDR page 63, ARB staff asks whether these regulations should be used as a tool to reduce emissions of ozone-depleting substances (ODS). The OWG does not have a substantive recommendation on this concept, however, it presents two relevant insights. First, many ODS's are already regulated and being reduced by virtue of other legal structures.³⁴ AB 32 may not provide ARB the legal authority to regulate gases except those specifically listed in the statute which include carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride.³⁵ Second, there is some evidence that one of the greenhouse gases listed in AB 32 may be the most prominent ODS of the 21st century.³⁶ Therefore, it appears that by implementing AB 32 in a manner that concentrates on the listed gases, the regulations will achieve an ancillary benefit of reducing an important ODS.

PDR § 96240(c)(3) The standardized methodology is considered additional only to the extent that . . . the offset project commencement date is after December 31, 2006.

33. **OWG Comment:** Most OWG members accept December 31, 2006 as the earliest date for project commencement. At least one OWG member supports an earlier date, stating that this date frustrates the AB 32 mandate to provide appropriate credit to entities that intentionally and voluntarily reduced emission levels before AB 32 was passed. Moreover, the CAR protocols typically accept project start dates as early as January 1, 2001. Some of these projects may have generated and registered offset credits (i.e., Climate Reserve Tonnes or "CRTs") that have not yet been purchased. Furthermore, some of these early projects will continue to generate CRTs well into the future. If ARB eventually approves an external OCS, ARB staff should consider whether it should qualify offset credits from projects that were "additional" when they were initiated before December 31, 2006. Otherwise, these valuable offset credits may become stranded.

³⁴ The Montreal Protocol, which is an international treaty developed to reduce ODS's, is implemented through the federal Clean Air Act. AB 32 requires that the regulations "[e]nsure that activities undertaken pursuant to the regulations complement, and do not interfere with, efforts to achieve and maintain federal and state ambient air quality standards and to reduce toxic air contaminant emissions." Health & Safety Code § 38562(b)(4).

³⁵ Health & Safety Code § 38505(g).

³⁶ Ravishankara, A.R., *et al.* (2009). *Nitrous Oxide (N₂O): The Dominant Ozone-Depleting Substance Emitted in the 21st Century*, 326 *SCIENCE* 56. The article states that by "comparing the ozone depletion potential-weighted anthropogenic emissions of N₂O with those of other ozone-depleting substances," N₂O emissions are the "single most important ozone-depleting emission and is expected to remain the largest throughout the 21st century." N₂O is not currently regulated by the Montreal Protocol.

PDR § 96240(c)(5) The standardized methodology is considered additional only to the extent that . . . Any portion of GHG emission reductions or avoidances, or any GHG sequestration resulting from public grants or government grants will not be considered additional.

34. **OWG Comment:** As written, it is unclear whether this regulation would act to restrict a governmental entity from financing an offset project, e.g., preventing a “granting” government from being a project developer. For example, the CAR Forest Protocols permit projects on public lands³⁷ and the California Department of Parks and Recreation has registered a reforestation project with CAR.³⁸ Likewise, local governments may have opportunities for developing eligible offset projects at publicly-owned facilities such as landfills, wastewater treatment plants, parks, wetlands, or buildings. These beneficial activities should be promoted.

35. **OWG Recommendation: The regulations should clarify that governmental entities are not restricted from participating in offset projects including financing, sponsoring, and developing the projects.** The regulations should further state that such funding will not affect any determination of additionality. For example, a developer’s use of tax incentives, tax credits, or stimulus payments from a government does not, in fact, undermine the project’s additionality as long as the project is not *required* by law. Offset projects should be encouraged by all means necessary since they often require multiple incentives to be economic. The additionality requirement should be limited in application to regulatory requirements and exclude financial incentives. The proposed rule would discourage rather than promote more quality offset projects.

PDR § 96240(i) Crediting Periods. The standardized methodology must determine the crediting period for an offset project of that type. The crediting period must be no fewer than 5 and no greater than 10 years for any project type other than a project type involving greenhouse gas sequestration. The crediting period must be no fewer than 10 and no greater than 30 years for any project type that involves greenhouse gas sequestration.

36. **OWG Recommendation: The regulations should clearly state the crediting period will remain valid even if a law or regulation is subsequently enacted that makes the project activity mandatory.** Decisions to develop a project or purchase offset credits involve long-term investments and will be driven by risk management principles. Developers and covered entities must have certainty that their investments, which are based *ex ante* on a known crediting period, will last for at least that same period.

³⁷ Climate Action Reserve Forest Project Protocol, Version 3.1 (Oct 2009), at 11.

³⁸ See Project CAR505. The description of the project states that in 2003, the largest wildfire in California’s recorded history (Cedar Fire) burned over 279,900 acres in Southern California including almost the entire Cuyamaca Rancho State Park (CRSP). “The land is owned by the State of California (CA State Parks) and operated as a park in the California state park system. California State Parks has not historically engaged in or allowed commercial timber harvesting. . . . In the absence of this project, it is unlikely that any sort of comprehensive reforestation would take place in the park. There are statutes that give the Department of Parks and Recreation the authority to manage the park and to protect it from damage. However, there are no statutes, policies or guidelines that require or fund restoration or reforestation actions.”

37. **OWG Recommendation:** The determination of crediting periods for certain project types should be based on science³⁹ and objective data and not on an arbitrarily derived value.

38. **OWG Recommendation:** The crediting period for forest-related sequestration projects should be extended to 100 years consistent with the CAR Forest Protocols. If ARB implements a crediting period shorter than the permanence requirement, then the regulations should include a “re-crediting protocol” that provides re-crediting as an administratively simple rebuttable presumption (see above at [PDR 95802a42](#)).

PDR § 96260 Discussion of Concept – Current Board Approved Offset Quantification Methodologies

39. **OWG Comment:** The OWG agrees with the Discussion textbox on PDR page 67, whereby ARB staff states “that the quantification methods for calculating emission reductions in the Board approved offset quantification methodologies are of the highest quality and should be integrated into the compliance system.”

40. **OWG Recommendation:** This integration of existing OQM’s should occur as soon as possible. ARB should initiate workshops within the next 30 days to engage stakeholders in this process. Among others, the OQM’s being evaluated in these workshops should include methodologies of the CAR Forest Project Protocol and Livestock Project Protocol.

PDR § 96260 Discussion of Concept – Where Should California Issue Offset Credits?

41. **OWG Comment:** The OWG filed comments concerning international offsets with ARB on September 11, 2009, and those comments are incorporated by reference here.

42. **OWG Recommendation:** There should be no geographic limits on offsets as long as all AB 32 criteria are met.⁴⁰ Because the reduction of greenhouse gases is a global issue, the OWG believes that the use of offset credits should have no geographic

³⁹ ARB “shall rely upon the best available economic and scientific information and its assessment of existing and projected technological capabilities when adopting the regulations” in furtherance of achieving the statewide GHG emissions limit. Health & Safety Code § 38562(e).

⁴⁰ The Legislature intends and declares “[n]ational and international actions are necessary to fully address the issue of global warming” and also that California should “exercise[e] a global leadership role, . . . , to benefit from national and international efforts to reduce emissions of greenhouse gases.” Health & Safety Code §§ 38501(d)-(e); “The state board shall consult with other states, and the federal government, and other nations to identify the most effective strategies and methods to reduce greenhouse gases, manage greenhouse gas control programs, and to facilitate the development of integrated and cost-effective regional, national, and international greenhouse gas reduction programs.” Health & Safety Code § 38564.

restrictions.⁴¹ Offset credits provide a necessary alternative compliance mechanism, and limiting the geographic area from which offset projects can be developed would frustrate this purpose. Offsets that meet ARB’s quality criteria should be issued for emission reduction projects occurring at uncapped sources outside California even if the source would have been subject to the cap-and-trade program inside California.

PDR § 96390(b) An offset credit could be determined to be invalid if a failure in the monitoring equipment or verification process is determined after the issuance of offset credits.

- 43. **OWG Recommendation:** The invalidation of an offset credit that has been issued or approved should be limited to circumstances related to malfeasance or equipment failure as described in PDR § 96390(b).
- 44. **OWG Recommendation:** The regulations should clearly state that an offset credit that has been approved or issued pursuant to Subarticle 12 or 13 will remain valid until it is surrendered except for the limited circumstances as described in PDR § 96390(b).

PDR § 96390 Discussion of Concept – Reversals of Offset Credits “ARB’s preferred approach [for dealing with reversals] would be to require the covered entity using the flawed offset credit to meet its surrender obligation by making the system whole and replacing the lost tons. The covered entity would then take recourse with the Offset Project Operator through contracts.”

- 45. **OWG Recommendation:** The regulations should clearly state that “buffer pool” credits from an approved OQM or external OCS will be accepted in the case of project reversals. For example, the CAR Forest Project Protocols utilize a credit buffer pool that is used to compensate for reversals.⁴²

PDR § 96400 Offset Credits Issued by External Programs

- 46. **OWG Comment:** Recognizing that the PDR language is preliminary and incomplete, the OWG is generally supportive of the process flow as described in the PDR §§ 96400 - 96420. More specific comments and recommendations are provided below.

PDR § 96400 Discussion of Concept – International Offsets and Sector-based Crediting

- 47. **OWG Comment:** The OWG is generally supportive of ARB evaluating the sector-based approach for the long-term program. The OWG agrees with the policy-related and

⁴¹ See “Endangerment and Cause or Contribute Findings for Greenhouse Gases under Section 202(a) of the Clean Air Act; Final Rule,” 74 Federal Register 239 (15 December 2009), pp. 66516.

⁴² Climate Action Reserve Forest Project Protocol, Version 3.1 (Oct 2009), at 54-59.

practical reasoning presented by ARB staff in the Discussion textbox on PDR page 77-80, including the observation that the sector-based approach may foster additional GHG emission reductions and reduce compliance costs for covered entities. The OWG supports ARB staff's evaluation of opportunities for California's participation with international forestry projects as presented in the Discussion textbox on PDR page 79-80. However, the OWG expresses at least one note of concern in regard to the administrative costs that could be incurred if California is the only U.S. state developing or implementing an international sector-based approach.

48. **OWG Recommendation:** At least for the short term, the regulations should include a process for approving project-based offset credits from offset projects located outside the United States. ARB staff should initiate workshops to engage stakeholders in the evaluation of a sector-based crediting program that includes an economic analysis for covered entities. The OWG supports the use of state-approved international credits (such as certified emission reductions or "CERs") through the Clean Development Mechanism (CDM) under Kyoto or another framework for measuring and certifying GHG reductions.⁴³

PDR § 96410(c) The Board will not approve project types for the United States and Canada that reduce emissions covered by the cap-and-trade program.

49. **OWG Recommendation:** ARB should accept an offset credit from any emission source that is not capped in the relevant jurisdiction as long as the credit represents an emission reduction that meets all of the same criteria applicable to in-state offsets except that: (1) additionality is determined based on the laws or regulations applicable to the relevant jurisdiction;⁴⁴ and (3) the offset credit does not raise competitive concerns for California entities.

PDR § 96420(c) Preference will be given to the approval of offset credits from offset projects located in least developed countries as defined by the United Nations.

50. **OWG Comment:** The OWG seeks clarification from ARB on the efficacy and capability of implementing a "preference" for international offsets.

PDR § 96430 Requirements for Sector-Based Crediting

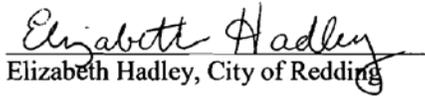
51. **OWG Comment:** Recognizing that the PDR language is preliminary and incomplete, the OWG is generally supportive of the process flow in PDR § 96430.

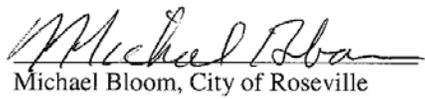
⁴³ Sacramento Municipal Utility District's Comments on Linking California's Cap-and-Trade Program to Other Greenhouse Gas Trading Programs, Comments of SMUD submitted to ARB, August 21, 2009.

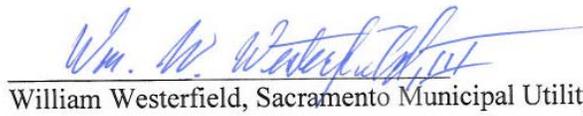
⁴⁴ See PDR § 96240(c).

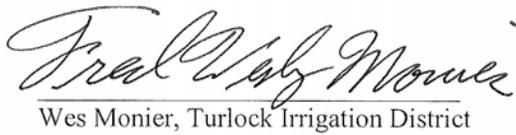
The OWG thanks ARB staff for evaluating and considering the foregoing comments.


Joy Warren, Modesto Irrigation District


Elizabeth Hadley, City of Redding


Michael Bloom, City of Roseville


William Westerfield, Sacramento Municipal Utility District


Wes Monier, Turlock Irrigation District