MEMORANDUM

TO: California Air Resources Board
FROM: Modesto Irrigation District
Redding Electric Utility
Turlock Irrigation District
SUBJECT: Cap-and-Trade Design
DATE: May 15, 2009

Introduction

Modesto Irrigation District (“MID”), Redding Electric Utility (“REU”), and Turlock Irrigation District (“TID”), collectively the “Utilities,” appreciate the opportunity to propose a cap-and-trade design. There are numerous complicated issues to be addressed as part of a well designed cap-and-trade program, and this paper presents a high level approach to a complete program. The Utilities continue to work on adding details to the various program components and look forward to providing these details in future submissions.

As the implementation of AB 32 will affect a number of economic sectors in the coming years it is imperative to pay attention to the cumulative effects that the cost of compliance will have on every citizen through their electric rates, groceries, gas and other every day products. Acknowledging that a disproportionate share of the emission reduction burden will fall on the electric sector, the Utilities continue to focus on achieving compliance with AB 32 with the lowest possible impact on ratepayers and grid reliability. To that end, retail electric service providers must have the ability to manage their portfolio of options (tools) to meet greenhouse gas (GHG) emission goals in a way that is locally cost effective and best serves their customers. Any cap-and-trade program should function as a complimentary tool to assist retail service providers in meeting their compliance obligations.

The cap-and-trade program design must encompass not only setting an appropriate cap trajectory to meet the State goal of reducing Statewide emissions to 427 MMTCO2E by 2020, but must also include a method for distributing allowances, incorporating flexible compliance measures (such as offsets, early action credits, banking and borrowing), identifying who will participate in
the market, establishing enforcement and market oversight mechanisms, and guiding the
distribution and use of revenues derived from the market. Such program design details must
equitably balance conflicting policy and economic interests of the various economic sectors as
as well as impacted entities and cost-bearing citizens.

California’s GHG reduction program must be coordinated and adjusted to harmonize with a
regional and/or federal GHG reduction programs so that there is a single system and not multiple
layers of compliance complicated by jurisdictional overreach.

The Utilities also believe that further research and development of new technologies are
necessary for achieving the State’s GHG emission goals. Any Cap and Trade program must
support investment in research, development and implementation of new low emission
technologies. One key to including cap-and-trade as part of a successful GHG reduction
program for California will be to ensure that resources are available to allow entities having
compliance obligations to invest in new technologies.

**The Utilities**

MID, REU and TID are local publicly owned electric utilities. MID and TID are irrigation
districts located in the Central Valley and REU is a municipal electric utility within the City of
Redding. MID serves over 110,000 electric customers with a peak load around 650 Megawatts
(MW). TID serves about 100,000 electric customers with a peak load of approximately
600 MW. REU serves 42,000 customers with a peak load of 247 MW. The Utilities maintain
similar resource mixes, including hydroelectric, eligible renewables and fossil fuel sources.
They also share similar challenges, including weather patterns, demographics and economics.
The Utilities have consistently supported the goals of AB 32 and participated in CARB’s effort
to create a successful implementation program. The Utilities continue to urge CARB to move
forward in a manner that protects the reliability of the electric grid and maintains the Utilities’
efforts to provide reliable and affordable power to their customers.

**Cap Trajectory**

Multi-year compliance periods will be required in order to provide capped entities with the
ability to adjust their long term planning criteria and to manage uncontrollable variables such as
weather, the economy and population growth patterns. A three-year compliance period was
recommended by the Western Climate Initiative, requiring compliance measures as of the end of
2014, 2017 and 2020. Annual cap targets could be set as guidance for capped entities; however,
allowances would only be required to be surrendered at the end of the compliance period.

The cap would initially be set at the beginning of the first compliance period in 2012. The
Utilities recommend setting the cap at the average number of actual emissions recorded for 2009
through 2011 based on the verified reports submitted pursuant to CARB’s mandatory reporting
regulations, to account for variations in weather and any adjustments to load growth. The cap in
2020 would be 365 MMTCO2e, which was adopted by CARB as the State’s 2020 limit on
December 6, 2007. Annual compliance goals can be established by a straight line declining
trajectory between 2012 and 2020. Adjustments would be needed to the cap level and trajectory
at any point in time that a new sector is added to the scope of the cap-and-trade program. The Utilities do not address entities to be included within the cap as the Scoping Plan sets forth the sectors to be covered. As new methods for monitoring and measuring emissions are developed, CARB should revisit its determination on which sectors should be included within the cap. If additional sectors are identified for inclusion, adjustments would need to be made to the cap.

Allowance Allocation

The Utilities believe that allowances should be allocated administratively to capped entities with compliance obligations.

Whether allowances are allocated among sectors and subsequently within each sector, or directly allocated to capped entities generally on some proportional basis, the allowance allocation methodology should support all efforts made by California utilities towards meeting the goals of AB 32. The Utilities urge CARB to take under consideration the CPUC/CEC Joint Decision (Rulemaking 06-04-009) on the allocation of allowances within the electric sector. The Joint Agencies received substantial stakeholder input and spent a significant amount of time and resources, working through all the varying interests, to develop a proposal that reflects a balanced approach for the electric sector.

The Joint Decision presumes a proportional allocation of allowances between capped sectors. As detailed in the Joint Decision, a portion of the electric sector allowances would be allocated to entities identified as being the “point of regulation,” or the first jurisdictional deliverers, on a fuel differentiated output basis. The remainder of the allowances would be allocated to retail providers for the benefit of their customers based on historical emissions in the early years, with a transition over time to allocations based on sales. Further, the Joint Decision recognizes the option of calculating the sales based allocation on a “net load” sales basis (excluding large hydro and nuclear). The allocation methodology referenced above achieves the necessary balance of interests, provided that the timing, magnitude and trajectory of the inherent transitions are cognizant of utilities’ long term resource planning processes while minimizing economic harm to ratepayers. Allocation of allowances among sectors may need to be adjusted to account for emission shifting (electrification) and permanent load growth.

If allowances are not allocated among the capped sectors, a common basis for proportioning the allowances among the capped entities would have to be established. Thus, such an allocation methodology would need to be emissions based in order to maintain “apples to apples” relationships. One ton of emissions equals one ton of emissions whether it is used for electrical generation or the manufacturing of a gross of widgets.

If allowances are not freely allocated to capped entities, auctions should be minimal and delayed until a robust market has been established. Auctions should be limited to capped entities having compliance obligations. The auction design should provide for transparency, including open bids and disclosure of winning bidders, bid prices and purchased quantities. Auctions may be held regularly but some form of purchase limit should be adopted. All successful bidders should pay the same price per allowance. The use of a “non-competitive” reserve of allowances should be considered as well.
A secondary market for allowances will most likely emerge. If such a market develops, participation will not be limited, and thus additional oversight will need to be developed. CARB may monitor and set general guidelines for such market, but will not directly administer it.

**Early Action Credits**

The Utilities have previously submitted comments on early actions and have attached that document for your review (see Attachment A). To summarize the Utilities position, voluntary early actions that result in “real, permanent, quantifiable, verifiable, enforceable and additional” emission reductions should be recognized through the issuance of Early Action Credits. While more work will have to be done to fully define each element of such criteria, the Utilities propose that entities, both within capped and uncapped sectors, that have developed early action reductions from 2007 (the point AB 32 became effective) through 2011 (until the first compliance period begins) should be awarded Early Action Credits. Such Credits will have the same value as Allowances and can be surrendered to meet compliance obligations in place of Allowances during the first (2012-2014) compliance period. These Early Action Credits would be administered by the designated agency in a manner similar to Offsets, but would be separate and distinct from Offsets which could be awarded to uncapped entities that achieve qualified emission reductions during compliance periods.

**Offsets**

The Utilities have also previously submitted comments on offsets and have attached that document for your review (see Attachment B). To summarize the Utilities position, offset projects must be “real, additional, quantifiable, permanent, verifiable, and enforceable”, and go beyond what would have otherwise happened under regulation and common practice. Offsets credits should be available to be earned by entities in uncapped sectors in order to encourage emission reductions that would have not otherwise been achieved. Although the Utilities encourage the development of local offset projects, offsets should not be limited geographically. Offset credits, once obtained, would have the same use as an Allowance – to ensure logistical capability of capped entities to meet their AB 32 obligations. The Utilities envision a 1 to 1 ratio of allowance to offset credit value. For example, if an allowance represents one ton of carbon dioxide equivalent, an Offset credit would be awarded for one ton of carbon dioxide equivalent reduction achieved through the qualified offset protocol and verified through the established procedures. Likewise, one offset credit can be turned in as one allowance during the compliance period. This allows offsets to achieve the goals of the cap-and-trade system in the most efficient manner.

**Other Flexible Compliance Mechanisms**

Capped entities should be permitted to bank any excess allowances for use in future compliance periods. A special appeal process (not within the jurisdiction of the market oversight entity) should be made available for allowing borrowing in circumstances where, due to events beyond the capped entity’s control, an anticipated low carbon resource does not become available within the current compliance period provided. If such an event occurs, a firm production date will be established prior to 2020.
Compliance/Enforcement

The Utilities acknowledge that compliance is a critical component of any Cap and Trade program. At the end of a compliance period, CARB should have independent third party verified reports of emissions in the State and an accounting of surrendered allowances. CARB would then evaluate allowance submissions, determine compliance or violations and assess penalties. The Utilities understand that CARB, under AB 32, is directed to use existing penalty provisions: Article 3 Commencing with §42400 and Chapter 1.5 commencing with §43025.

The Utilities, however, want to ensure fairness in determining compliance and recognition of the numerous extenuating circumstances that can affect an entity’s ability to comply. The Utilities believe that attention has to be paid to the availability of transmission, the availability of low emitting technologies that are feasibly implemented, the shifting of emissions from other sectors (electrification), the responsibility of utilities to maintain grid reliability, the cost effectiveness of available tools, and other mitigating circumstances such as unusual weather, hydro and economic conditions. Thus, a provision for dealing with extenuating circumstances must be included in any program design.

Market Oversight

The Utilities believe that the regulatory entities should provide mechanisms to avoid significant economic impacts while achieving GHG emission reductions. Any well designed market system must include adequate market protection mechanisms to avoid manipulation and other unintended consequences. Additional stakeholder input should be solicited on effective mechanisms and structure for such oversight. Some issues to consider include: volume limits, requirements supporting transparency, and the scope of permitted participation. Market oversight and revenue disbursement should be administered separately from disbursement of allowances and operation of an auction.

Revenues

The Utilities believe that any revenues accruing from the cap-and-trade program should be returned through retail service providers proportionally to their “investments” in the allowance market to reduce the overall consumer costs of compliance with AB 32. Revenues would be required to be used for purposes that further the goals of AB 32, including, without limitation, investments in renewable resources, research and development of new low emitting resources, increased energy efficiency programs, and investments in offset projects.

The Joint Agency Decision recommends an allowance allocation methodology to achieve this return of value to the consumers. As described in the allowance allocation section of this paper, a portion of allowances would be allocated to retail providers; the retail providers are then mandated to sell all such allowances at auction and would retain all proceeds from the sale of those allowances. This process ensures the funds are invested directly in emission reductions, and avoids appropriation to the State’s General Fund.
A portion of return from each auction could be earmarked to cover the administrative costs of implementing AB 32 and other identified State emission reduction projects. If such earmark is included in the program design no other administrative fee should be collected. It is critical to avoid imposing multiple levels of charges on the same person (be it individual, business or government) for the same emission.

**Point of Regulation**

These comments are based on the assumption that point of regulation is the First Jurisdictional Deliverer.

**Federal Transition**

The Utilities believe that California’s GHG reduction program should be coordinated and adjusted to harmonize with the regional and/or federal GHG reduction programs so that there is a single system that does not impose multiple layers of compliance complicated by jurisdictional overreach.

**Conclusion**

The Utilities appreciate the opportunity to put forth the above proposal and would welcome the chance to work with CARB and a designated working group to develop these concepts further.

Respectfully submitted,

Joy Warren  
MODESTO IRRIGATION DISTRICT

Elizabeth Hadley  
REDDING ELECTRIC UTILITY

Wes Monier  
TURLOCK IRRIGATION DISTRICT
M E M O R A N D U M

TO: California Air Resources Board
FROM: Modesto Irrigation District
       Redding Electric Utility
       Turlock Irrigation District
SUBJECT: Voluntary Early Action Design
DATE: March 31, 2009

Introduction

Modesto Irrigation District (“MID”), Redding Electric Utility (“REU”), and Turlock Irrigation District (“TID”), collectively the “Utilities,” appreciate the opportunity to propose a program design to ensure that voluntary early actions by capped and uncapped entities are encouraged and given appropriate credit when the cap and trade program begins in 2012. Full recognition of emission reduction activities undertaken voluntarily before the first compliance period is a necessary step toward reaching California’s 2020 goals. It is often stated that the earlier reductions are achieved, the more we will see clean air benefits and co-benefits accumulated in the long run. It is also often stated that uncertainties about the design of the State’s emission reduction program and how early actions will be quantified and credited prevent investors from undertaking such valuable programs.

The Utilities suggest that actions resulting in “real, permanent, quantifiable, verifiable, enforceable and additional” emission reductions should be awarded Early Action Credits separate from but equivalent to program offsets and allowances. These Credits should not be taken out of the cap in any form of set-aside.

The Utilities

MID, REU and TID are local publicly owned electric utilities. MID and TID are irrigation districts located in the Central Valley and REU is a municipal utility within the City of Redding. MID serves over 110,000 electric customers with a peak load around 650 Megawatts (MW). TID serves about 100,000 electric customers with a peak load of approximately 600 MW. REU
serves 42,000 customers with a peak load of 247 MW. The Utilities maintain similar resource mixes, including hydro electric, eligible renewables and fossil fuel sources. They also share similar challenges, including weather patterns, demographics and economics. The Utilities have consistently supported the goals of AB 32 and participated in CARB’s effort to create a successful program to implement these goals. MID, REU and TID continue to urge CARB to move forward in a manner that protects the reliability of the electric grid and maintains the Utilities’ efforts to provide reliable and affordable power to their customers.

Proposed Approach to Recognizing Early Reduction Actions

Voluntary early actions that result in “real, permanent, quantifiable, verifiable, enforceable and additional” emission reductions should be recognized through the issuance of Early Action Credits. While more work will have to be done to fully define each element of such criteria, the Utilities propose that entities, both within capped and uncapped sectors, that have developed early action reductions from 2007 (the point AB 32 became effective) through 2011 (until the first compliance period begins) should be awarded Early Action Credits. Such Credits will have the same value as Allowances and can be surrendered to meet compliance obligations in place of Allowances during the first (2012-2014) compliance period. These Early Action Credits would be administered by the designated agency in a manner similar to Offsets, but would be separate and distinct from Offsets which could be awarded to uncapped entities that achieve qualified emission reductions during compliance periods.

Below is a simple question answer format to outline the Utilities proposal:

Who would be eligible to receive Early Action Credits? All entities who achieve real, permanent, quantifiable, verifiable, enforceable and additional emission reductions during the period 2007 through 2011 would be eligible to receive Early Action Credits.

What programs qualify? Before specific programs can be identified to qualify for Early Action Credits, the criteria for qualification (real, permanent, quantifiable, verifiable, enforceable and additional) must be defined. Qualified programs would not be tied to protocols developed for Offsets. A small multi-sector working group would need to be organized to recommend guidelines to CARB for incorporation of Early Action Credits into applicable regulations. At a minimum, early achievements ahead of the state adopted renewable portfolio standard of 20% by 2010 and energy efficiency goals should be considered. All early actions would have to be verified by CARB or its designee and all Early Action Credits would be certified.

How will emission reductions be measured? Each Early Action Credit will carry the same value as an Allowance and, if provided, an Offset. For example, if an Allowance represents 1 ton of carbon dioxide equivalent, an Early Action Credit would be awarded for 1 ton of carbon dioxide equivalent reduction achieved through the qualified early action program and verified through established procedures.

How many “credits” will be available? The Utilities do not advocate setting a limit on the number of Early Action Credits. Sufficient supply of Credits will ensure that more voluntary early actions are undertaken. A sufficient supply of Credits will also help keep the cost of AB 32 compliance manageable. If protections were needed to maintain the integrity of the overall cap
program, a limit could be placed on the ratio of Credits to Allowances surrendered by any entity. Early Action Credits should not be considered as a “set-aside” from the Allowance cap.

**How would Early Action Credits be Valued?** During each AB 32 compliance period, capped entities can surrender one Early Action Credit in place of an Allowance to be counted toward their compliance obligation. The monetary value of the Credit will be tied to the cost of Allowances.

**How would Early Action Credits be distinguished from Offsets?** Offsets are awarded only to uncapped sectors for projects meeting specific protocol guidelines. Offsets, once obtained, would have the same use as Early Action Credits – to ensure logistical capability of capped entities to meet their AB 32 obligations. The Utilities envision a 1 to 1 ratio of Credit to Offset value.

**How will Early Action Credits be marketed?** A secondary market for Early Action Credits would develop in parallel with the Offset market. Similar market rules could be applied.

**Conclusion**

The Utilities appreciate the opportunity to put forth the above proposal and would welcome the chance to work with CARB and a designated working group to develop these concepts further.

Respectfully submitted,

Joy Warren  
MODESTO IRRIGATION DISTRICT

Elizabeth Hadley  
REDDING ELECTRIC UTILITY

Wes Monier  
TURLOCK IRRIGATION DISTRICT
MEMORANDUM

TO: California Air Resources Board

FROM: Modesto Irrigation District
Redding Electric Utility
Turlock Irrigation District

SUBJECT: Offsets

DATE: April 17, 2009

Introduction

Modesto Irrigation District (“MID”), Redding Electric Utility (“REU”), and Turlock Irrigation District (“TID”), collectively the “Utilities,” appreciate the opportunity to propose a design for the use of Offsets as a part of California’s cap-and-trade program.

The Utilities agree that Offsets must be “real, permanent, quantifiable, verifiable, enforceable and additional” emission reductions and can only be created within the uncapped sectors. Offsets must be made available to capped entities throughout the cap-and-trade program to meet their compliance obligation. Offset credits should act as a pressure relief valve to avoid drastic unanticipated spikes in the price of Allowances and should be recognized as the equivalent of allowances.

The Utilities

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successful program to implement these goals. The Utilities continue to urge CARB to move forward in a manner that protects the reliability of the electric grid and maintains the Utilities’ efforts to provide reliable and affordable power to their customers.

What is An Offset Credit?

Offsets credits are certificates awarded only for projects meeting specific protocol guidelines. Offset projects must be “real, additional, quantifiable, permanent, verifiable, and enforceable”, and are beyond what would have otherwise happened under regulation and common practice.

By the above definition, entities in capped sectors are not eligible to develop Offset credits. Offsets credits should be available to be earned by entities in uncapped sectors in order to encourage emission reductions that would have not otherwise been achieved.

Because the reduction of greenhouse gases is a global issue, the Utilities believe that the use of Offset credits should have no geographic restrictions. Offset credits provide a necessary alternative compliance mechanism, and limiting the geographic area from which Offset projects can be developed would defeat this purpose. Utilizing strict Offset protocols will provide adequate protections to ensure the benefits of real reductions are achieved and to prevent manipulation. This allows Offsets to achieve the goals of the cap-and-trade system in the most efficient manner.

Offset credits, once obtained, would have the same use as an Allowance – to ensure logistical capability of capped entities to meet their AB 32 obligations. The Utilities envision a 1 to 1 ratio of Allowance to Offset credit value. For example, if an Allowance represents one ton of carbon dioxide equivalent, an Offset credit would be awarded for one ton of carbon dioxide equivalent reduction achieved through the qualified Offset protocol and verified through the established procedures. Likewise, one Offset credit can be turned in as one Allowance during the compliance period. Offset credits should possess all other characteristics as Allowances, such as having an unlimited lifespan and can be bankable.

Because one ton of real emissions reduction would occur for every one ton of Offset credit created, the overall ratio of emission reductions under the cap-and-trade stays the same, protecting the integrity and the benefits and co-benefits of the program. The development of Offset credits essentially decreases the State’s overall emissions at a faster rate, allowing California to reach its AB 32 goals sooner. In contrast, if Offset protocols are not developed to encourage specific types of projects, emission reduction goals may not be reached.

Offset credits should not be taken out of the cap in any form of set asides for the reasons set forth above.

What Should the Offset Limit Be?

The Utilities acknowledge that a limit on the use of Offset credits has been proposed, however we believe such a limit is counterproductive. If a limit is to be imposed, the Utilities recommend setting a fixed limit on the quantity of Offsets that each entity can use towards meeting its
compliance obligation; this is the simplest approach. Any limit should be based on a percentage of each entity’s compliance obligation and not on the total amount of allowances.

There should not be a fixed limit on the amount of Offsets that could be created or accepted into the program. Such a criteria would limit the options for Offset projects that an entity could invest in, and has the potential to increase the total cost of the Allowance market while reducing the incentive for uncapped sectors to act.

A hybrid option should not be considered.

**How Should the Limit be Calculated and Applied Across the WCI?**

As described above, the Utilities do not believe a limit is necessary. However if a limit is imposed it should be based on each capped entity’s compliance obligation. Whatever calculation methodology is adopted should be applied uniformly across the WCI jurisdictions.

**Should the Offset Limit Change Over Time?**

To simplify the system, if a limit is imposed, the limit should remain constant over time. That said, the WCI has indicated a desire to reduce the amount of Offset credits a capped entity can use to meet its compliance obligation to 10% by 2020. This would indicate a desire to include a declining trajectory from 49% to 10% over time. The Utilities disagree with including a declining trajectory because this has the potential to complicate the cap-and-trade program. As set forth above, if the overall ratio of Allowances to Offsets, or emission reductions, under the cap-and-trade stays the same, the integrity and benefits of the program are maintained.

CARB must acknowledge that if a long-term viable Offset program is developed for a specific sector, this sector and the accompanying Offset program may need to eventually be included under the cap. Until such time, as stated above, the Utilities believe that imposing a limit is unnecessary and counterproductive.

**Conclusion**

The Utilities appreciate the opportunity to put forth the above proposal on Offsets and would welcome the chance to work with CARB and a designated working group to develop these concepts further.

Respectfully submitted,

Joy Warren  
MODESTO IRRIGATION DISTRICT

Elizabeth Hadley  
REDDING ELECTRIC UTILITY

Wes Monier  
TURLOCK IRRIGATION DISTRICT