Comments of the Western Power Trading Forum on the Proposed Amendment to the Regulation for the Mandatory Reporting of Greenhouse Gas Emissions

8/30/2012

Clare Breidenich

WPTF GHG Committee Director

Email: cbreidenich@aciem.us

I. Introduction

The Western Power Trading Forum[1] (WPTF) appreciates the opportunity to provide comments to the California Air Resources Board (ARB) on its consideration of proposed amendments to the Mandatory Reporting Regulation (MRR) for Greenhouse Gas Emissions. We provide an overview of our concerns under each of these broad categories below. We then provide detailed recommendations on changes to the MRR.

Additional changes to MRR are necessary to ensure consistency with the cap and trade regulation, improve clarity, and to avoid unintended consequences.

WPTF understands from the Initial Statement of Reasons that staff proposed changes to the MRR do not modify the scope of the regulation, nor make major changes to the reporting requirements,[2] but rather are intended to ensure consistency between the MRR and the cap and trade regulation, and to improve the clarity of the regulation. WPTF agrees with these objectives and supports the staff proposed changes. However, WPTF believes that some of the regulations, as written, will lead to unintended consequences that run contrary to the intent and spirit of ARB's greenhouse gas reduction goals. WPTF therefore recommends additional changes to the regulation to ensure that the regulation is clear and consistent with the cap and trade regulation, and to avoid unintended consequences. A summary of our recommended changes is as follows.

- Changes to the MRR's approach to claims to an Asset-Controlling Supplier's (ACS) emission rate are necessary to ensure consistency with the cap and trade regulation requirements regarding specification of imports, and to ensure uniform treatment of all specified imports.

- Changes are needed in the following areas to improve clarity and ensure uniform application by all electric power entities:
    - Requirements for registration as an ACS and implications for registration of resources within an ACS system as individual specified sources;
    - Requirements for Renewable Energy Credit (REC) retirement as a condition for use of the Renewable Portfolio Standard (RPS) Adjustment ;
    - Conditions under which an electric power entity is entitled to claim imported low-emission electricity from a specified source.

- Changes are needed to avoid unintended consequences in two areas:
    - By relying solely on contracts and NERC e-tags for verification of specified, low-emission imports, the MRR could result in over-reporting of directly delivered renewable energy;
    - The different reporting requirements for wheel-throughs and simultaneous exports would reduce efficiency in CAISO by providing a strong incentive for increased use

[1] WPTF is a diverse organization comprising power marketers, generators, investment banks, public utilities and energy service providers, whose common interest is the development of competitive electricity markets in the West. WPTF has over 60 members participating in power markets within California, western states, as well as other markets across the United States.

[2] Initial Statement of Reasons, page 10

of the less-flexible, single-tag wheel-throughs, over the more-flexible dual tag wheel-throughs.

We discuss each of these concerns in section II below, and provide textual recommendations in section III.

ARB must provide additional guidance and transparency to ensure uniform interpretation and application of the regulation

As a membership organization, WPTF has the opportunity to compare experiences of individual companies with the reporting and verification process. This shared experience suggests that reporting rules are being interpreted differently by different electric power entities, different verifiers and, in some cases, different ARB staff. While amendments to the MRR will help to clarify the rules, we believe that it is also import for ARB to provide additional guidance materials regarding questions/issues of broad interest. This could be in the form of guidance documentation or a "Frequently Asked Questions " link on the ARB cap and trade website. Development and publication of such guidance materials would help to ensure that regulation is correctly and uniformly applied by all regulated entities.

Additionally, WPTF continues to believe that there is a strong need for ARB to establish a process by which an individual entity can get an upfront, written determination by ARB on specific reporting questions, that will provide assurance that if the entity complies with ARB's determination that it will not later be deemed to be in violation of reporting requirements for following that guidance. We note that the United States Environmental Protection Agency Petition process for resolving issues related to its reporting program[3] could be used as a model.

Finally, we are aware that ARB has been advising Open Access Technology Information (OATI) on the design of its NERC tag query for imports to California and providing training to third-party verifiers. Given the relevance of these activities for implementation of the reporting regulation by electric power entities, we believe it would be extremely useful for ARB to publish a technical document on guidance that it provides to OATI regarding NERC tag queries, and to make publicly available the training materials it has used for the verifier training sessions. Such transparency would greatly facilitate compliance with the reporting regulation by electric power entities who do not use OATI, but conduct NERC tag data queries in-house, and help all reporting entities to avoid problems arising during the verification process.

Further revision of the MRR should occur next year.

Based on the letter to FERC Commission Moeller recently issued by ARB chairperson, Mary Nichols[4], WPTF anticipates that ARB will engage in rule-making next year to amend provisions of the cap and trade regulation relating to resource-shuffling. At its most basic level, implementation of a prohibition against resource shuffling determines the circumstances under which imported

[3] http://www.epa.gov/airmarkets/emissions/petitions.html
[4] http://www.arb.ca.gov/newsrel/images/2012/response.pdf

power must be specified and when it should be assigned the default emission rate for reporting purposes. For this reason, it is imperative that the reporting regulations and the cap and trade regulations are consistent. WPTF therefore recommends that amendments to the MRR related to electric entities, including revisions to the default emission rate for unspecified imports, be considered in conjunction with the rule-making to amend the cap and trade regulation with respect to resource shuffling.

In addition to amendments to ensure a consistent approach to resource shuffling, WPTF recommends that CARB also consider modifications to the approach for qualified exports. As we have previously commented, WPTF believes that there are two significant problems to the current rules. First, the rule that only allows netting of electricity exports that occur simultaneous to an import may significantly overestimate state-wide *net* imports, and as a result, will increase program costs due to the additional demand for allowances this creates. A survey of WPTF members suggests that the quantity of 'residual' exports under current program rules – i.e. those exports that cannot be netted due to the requirement that qualified exports be netted against simultaneous imports – may be as much as 70% of total exports, with the value ranging from 28% to 100% among individual WPTF members. When magnified system wide, this discrepancy would mean that power subject to the cap exceeds state-wide electricity consumption. For instance, if the true overall ratio of residual exports to total exports is 50%, and making the simple assumption that dynamics for the state are similar to the CAISO system[5], this would suggest that CARB's approach to qualified exports imports for 2011 over-states California load by nearly 3%[6]. For the CAISO system alone, that's equivalent to 2,573,888 additional tons of carbon at the default emission rate and $43,765,092 at $17/ton allowance price.

Now that a year's worth of data on implementation of the current 'Qualified Exports' approach is available, WPTF recommends that CARB analyze the emission reports of qualified exports to determine the extent to which the approach overstates net electricity imports. Specifically, CARB should quantify a) the total volume of imports subject to the program and b) the total volume of exports that have not been netted via the qualified exports adjustment. We would then ask ARB to work with the California balancing area authorities to compare the total volume of imports subject to the program to California-wide net interchange. If the difference between these numbers is significant, as we suspect it will be, ARB should revise the regulation to allow for netting of all electricity exports.

Second, the rule that quantified exports are assigned the lowest-emission rate of imports occurring in that hour could yield the unexpected and surprising result that importers of renewable energy incur a higher carbon compliance obligation than importers of fossil generation. For instance, an entity that imports 100 MHh of system power at the default rate and exports 75MWh, it would have

[5] While the CAISO is not synonymous with California as a whole, WPTF has made the above set of simple assumptions in an effort to characterize the potential magnitude of the issue.

[6] In 2011 gross imports into the California Independent System Operator (CAISO) system amounted to 63 million MWh, while net imports amounted to only 51 million MWh calculated on an hourly basis. Total system load was 226,055,605 MWh. Source: OASIS (http://oasis.caiso.com/mrtu-oasis/home.jsp)

a net carbon obligation of 10.7 tons of carbon (25Mwh x .428 tons/MWh)for that hour. Conversely, another entity that imports 50 MWh of power at the default rate and 50 MWH of renewable power and also exports 75MWh would have a net carbon obligation of 21.4 tons of carbon (50 MWh x .428 tons/MWh)!

WPTF recognizes that the rule for assigning emissions to qualified exports is set out in the cap and trade regulation rather than the MRR. Therefore, we recommend that this issue be reconsidered in both the MRR and cap and trade rule-makings next year.

Independent Verification of Imports

WPTF remains concerned about ARB's ability to verify that all importers of electricity have reported under the MRR. Without a mechanism for independent verification, an importer of electricity that does not participate in the cap and trade program will not be detected by ARB, and will incur a significant cost advantage in the wholesale electricity markets. While third-party verification will help ensure accuracy of reported information, it will not assist ARB in determining whether all importers of electricity have reported. As a result, electric power entities could avoid obligations under the cap and trade program by simply not reporting. The recent subpoena of the California Independent System Operator does not address this concern because the data request was limited to imports for which the CAISO was listed as the purchasing-selling entity on the NERC tags.

WPTF has previously suggested that ARB contract with OATI to provide independent data on the quantity of imports to California and the entity responsible for each import. If this is not possible due to OATI confidentiality restrictions, then ARB should collect this data annually from the California Independent System Operator and other California balancing area authorities.

II. Discussion

ACS Provisions.

Proposed changes to the MRR would allow entities other than just Bonneville Power Administration to be registered as an ACS. WPTF supports these changes but believes that additional changes are needed for consistency between the MRR and the cap and trade regulation, and to provide more clarity regarding eligibility requirements for registration as an ACS.

The first issue regards the conditions under which an ACS emission rate may be reported by an importer. Section 95111(a)(5) of the MRR would require an entity to report power from an registered ACS based solely on the fact that the ACS is listed as the Purchasing–Selling Entity ("PSE") on the first point of receipt on the NERC tag. WPTF considers this provision to be in direct conflict with the cap and trade regulation. The definition of specified source in the cap and trade regulation states that "electricity procured from an asset-controlling supplier" is considered a specified source, and further requires that "the reporting entity must have either full or partial ownership in the facility/unit or a written power contract to procure electricity generated by the facility/unit." This requirement for ownership or contract is not reflected in the MRR.

Further, as a general rule, the reporting regulation does not use NERC tags to assign emissions for imports. Rather, ownership, operational contract and contract rights determine whether power can be specified. ARB has proposed a revision to the definition of 'unspecified power' to clarify that power that is not specified at the time a power transaction is entered into, cannot later be assigned a specified emission rate. WPTF agrees with this provision, but considers that it should apply symmetrically to both high and low emission power. Thus, if an importer purchases "Schedule C"[7] power from the Intercontinental Exchange, that power should be assigned the default emission rate, regardless of whether the NERC tag shows the power as originating from a coal facility, or from the system of a low-emission ACS, such as Bonneville Power Administration.

For consistency between the two regulations, and to ensure that the same rules apply uniformly to all specified sources, ARB should modify the MRR to provide that an importer may only claim an ACS emission rate when the reporting entity is itself the ACS, or has a specified power contract for that power. (We provide comments on what a specified power contract should entail below.)

The second issue pertains to the eligibility conditions for registration as an ACS. The reporting requirements for ACS as set out in section 95111(f), sub-paragraph 4 seem to anticipate that an ACS's fleet comprises a single 'system', but this term is not defined in the regulation. WPTF understands that ARB's intent is that ACS registration is available to entities that own, operate or exclusively market resources that are interconnected within a single balancing area – the output of these resources could then be mixed and directly delivered to California on a single tag. WPTF therefore recommends that this requirement be explicitly stated in the regulation.

Provisions Related to Renewable Imports

WPTF has identified two distinct problems with the provisions regarding renewable imports: a lack of clarity regarding the requirements for retirement of associated RECs under the RPS adjustment and an unintended consequence of potential over-counting of renewable electricity that is directly delivered.

Regarding the first issue, WPTF understands from conversations with ARB staff that the proposed new requirements for reporting of RECs associated with the RPS adjustment is intended to facilitate monitoring implementation of the program, and that reporting of a REC's status as not retired would not prohibit the importer from using the RPS adjustment. If this understanding is correct, WPTF supports this proposal, but recommends that the regulation be amended to explicitly state that "reporting of a REC's status as not retired would not prohibit the importer from using the RPS adjustment."

On the second issue, WPTF is concerned that ARB's reliance on a combination of contracts and NERC tags to document direct delivery of low-emission power could result in over-counting of renewable imports specifically, and low-emission imports more generally. For instance, if an importer schedules 100 MW from a Northwest wind generator into CA, but in real-time the generator only generates 50 MWs, then the control area would firm the schedule with system

[7] Schedule C is a standard contract for firm power developed and used by members of the Western States Power Pool.

power. In this case, the NERC e-tag would show 100 MW of wind generation, but in reality only 50 MWs of zero emission power flowed. While the RPS program would allow only 50 MW to be credited toward 'category one imports', under the current MRR rules, 100 MW would be attributed a zero emission rate.

To address this problem, WPTF recommends that the MRR explicitly require that generation meter data be retained for documentation and to enable verification that actual facility generation matches the tag (i.e. the generation occurred within the same hour as the power was imported).

Specified Imports

WPTF has previously noted that the MRR does not provide sufficient detail with respect to conditions under which a written power contract entitles an electric power entity to claim electricity from a specified source. WPTF expects that wholesale electricity markets will evolve to accommodate the inclusion of carbon in power generated in, and imported into, California. Currently most physical power in the WECC is traded as bulk, system power, which does not differentiate the generation source. Now, as the participants in the power markets anticipate cap and trade implementation, new power products and contract types are being considered to accommodate different carbon obligations associated with specified and unspecified imports. These new products would help to ensure that the impacts of the cap and trade program on wholesale electricity markets can be managed, and that the program does not negatively impact liquidity or reliability.

For these reasons, we urge ARB to facilitate the evolution of the electricity markets by providing clear regulatory guidance on the requirements for specifying imports. Specifically, we recommend revisions of the definitions of Generation Providing Entity and Specified Source and the addition of a new definition for 'specified power contract', as the proposed revised definition of "power contract" applies to both specified and non-specified sources. We also suggest corresponding changes to relevant operational provisions.

Treatment of qualified exports

WPTF continues to be concerned that the MRR treats power that is wheeled-through California on a single tag, and power that is wheeled-through on two separate tags differently. As WPTF has noted previously, the CAISO uses two different types of schedules for handling wheeling of power through California. The first, called a wheel-through results in a single NERC tag, while the second, a simultaneous import/export, results in two separate NERC e-tags. The only difference between the two-types of schedules is simply that in a wheel-through, the participant has required a concurrent dispatch of its import and export bids, whereas in the simultaneous import/export, the participant will accept either the import or the export or both. The CAISO does not actually allocate physical or contractual transmission inside the CAISO between the two points. Rather, the CAISO effectively treats the import side and the export side of the wheel-through as if they are distinct physical deliveries into and out of the state respectively. The CAISO adds the concurrent imports/exports of a wheel-through schedule type to its own internal generation resource bids, load demand bids and

other import/export and wheel-through bids to derive a least cost overall portfolio solution for the CAISO.

The requirement that electric power entities report wheel-throughs by first point of receipt, but report simultaneous exports by final point of delivery, results in an different carbon compliance obligation for these two types of wheel-throughs, despite the fact that they have an identical impact on the electrical flows and generation dispatch both within and outside of the CAISO grid.

The following examples illustrate the disparate treatment of single and dual tag wheel-throughs. All three scenarios represent transactions where 100 MWh of power flows into California from Mid-C, 100 MWh flows out to Palo Verde, and 100 MWh flows back in from Palo Verde. These scenarios have identical impacts on net power flows and in terms of the volume of imports subject to the cap (100 MWh), but differ with respect to which the entity that bears the carbon obligation:

- Under the scenario 1 (single-tag), Entity A's wheel-through is exempted, and the carbon obligation for the net 100 MWh import falls on Entity B.
- Conversely, under the scenario 2 (Dual tag), the carbon obligation would fall on Entity A. This is because the export side of the wheel through cannot be deducted as a Qualified Export by entity A, due to the fact that the power ultimately sinks in California. Entity B has no carbon obligation because the power imported into California originated in California.
- Lastly under scenario 3 (also dual tag, but involving 3 different entities, rather than 2), the carbon obligation falls on Entity C.

Scenario 1 - Single Tag	**Scenario 2 - Dual Tag**	**Scenario 3 - Dual Tag**
Entity A purchases 100 MWh at Mid-C (unspecified), wheels power through CAISO to Palo Verde on single tag; Entity B purchases same power at Palo Verde and imports power into to California.	Entity A purchases 100 MWh at Mid-C (unspecified) to CAISO and simultaneously exports 100 MWH to Palo Verde on a separate tag; Entity B purchases power exported and sold by Entity A at Palo Verde and imports that power into California.	Entity C purchases 100 MWH at Mid-C (unspecified) and imports to CAISO, Entity A exports 100 MWH to Palo Verde. Entity B purchases power exported by Entity A at Palo Verde and imports power back to California.
Entity B has carbon obligation	Entity A has carbon obligation	Entity C has carbon obligation

The problem with these disparate outcomes lies in the fact that incidence of the carbon obligation in scenarios 2 and 3 is dependent on decision that are outside of each entity's control. In scenario 2, entity A's ability to deduct the qualified export transaction is dependent on whether the purchaser of the exported power (Entity B) sinks that power into California or elsewhere. Similarly, whether or not Entity B has a carbon obligation for its import transaction from Palo Verde depends not on Entity B's decision to import power to California, but on whether the power purchases happens to have originated in California (which will not be known for exchange-traded power).

WPTF consider the disparate treatment of single and dual-tag wheel-throughs to be arbitrary and unfair for electric power entities. Additionally it creates an incentive for use of single-tag wheel-throughs over dual tags. This incentive will reduce efficiency, because the dual tag import-export schedule gives the CAISO more flexibility in balancing its system than the single tag schedules.

To avoid this unintended consequence, WPTF recommends that both single tag wheels throughs and exports be reported and aggregated by first point of delivery outside California; that entities be allowed to deduct qualified exports, regardless of whether the final point of delivery is inside or outside California; and that importers incur a carbon obligation for all electricity imports, regardless of whether the first point of receipt is inside or outside California.

III. Detailed Comments and recommended textual changes

Definitions (Section 95102)

Asset-Controlling Supplier: WPTF recommends that the proposed definition of asset-controlling supplier be further amended to clarify that the resources operated or marketed by these entities must be inter-connected within the same balancing area.

> (19)"*Asset-controlling supplier" means any entity that owns or operates inter-connected electricity generating facilities within the same balancing area or serves as an exclusive marketer for certain ~~generating~~ these facilities even though it does not own them, and is assigned a supplier-specific identification number and specified source emission factor by ARB for the wholesale electricity procured from its system and imported into California."*

First Point of delivery outside California: WPTF recommends addition of a new definition 174(bis) for 'First Point of delivery outside California' to ensure equivalent treatment of wheel-throughs and qualified exports:

> *(175) "First point of delivery outside California means the first defined point on the transmission system located inside California at which exported electricity and electricity wheeled through California may be measured, consistent with defined points that have been established through the NERC registry.*

Generation providing entity: The proposed revised definition should be improved to clarify that more than one entity may be considered a generation providing entity. In the event that claims to a particular resource exceed actual facility generation, documentation of contract terms and

settlement provided by entities claiming a particular source should be sufficient to accurately apportion a facility's output to specific claimants, without the need to negate any individual entity's claim.

> *(182)Generation providing entity" or 'GPE' means a facility or generating unit operator, full or partial owner of the facility or unit, party to a contract for a fixed percentage of net generation from the facility or generating unit, ~~sole~~ party to a tolling agreement with the owner, or exclusive marketer recognized by ARB that is either the electricity importer or exporter with prevailing rights to claim electricity from the specified source.*

Specified power contract: The MRR currently contains a definition of "power contract" that is used in reference to both specified and unspecified sources of electricity. Because of this broad usage, the definition provides no clarity as to what conditions would make a contract eligible for claiming specified imports. Explanations from ARB staff suggest that there is an expectation that a power contract must be unit specific, but this is not explicitly articulated anywhere in the MRR. Further, the proposed revised definition of 'unspecified source of electricity' suggests that to be claimed as a specified source, the generation source must be known at the time of entry into the transaction to procure electricity. To eliminate any confusion, WPTF recommends that ARB add a new definition of 'specified power contract' to the MRR and use this term in operational provisions that apply to specified imports:

> "*Specified power contract" means a power contract that is contingent upon delivery of power from a particular facility, unit, or asset-controlling supplier's system that is designated at the time the transaction is executed.*

General Requirements for Electric Power Entities (Section 95111)

Section 95111 (a)(4) Imported Electricity from Specified Facilities or Units: WPTF recommends that the requirements for reporting of specified sources be modified as follows to incorporate reference to 'specified power contract' as we have proposed above, rather than the more generic 'written power contract'.

Additionally, WPTF recommends that the proposed new reporting of REC serial numbers, which WPTF supports, be moved from section 95111(g)(1) to this section. REC serial numbers are relevant for specific renewable import transactions, not facility registration, and should therefore required as part of the annual emissions report.

Lastly, ARB should clarify that reporting of a REC's status as 'non-retired' will not preclude use of the RPS adjustment and modify the reporting worksheet accordingly.

> *Imported Electricity from Specified Facilities or Units.* The electric power entity must report all direct delivery of electricity as from a specified source for facilities or units in which they are a generation providing entity (GPE) or for which they have a specified power contract. ~~have a written power contract to procure electricity~~. When reporting imported electricity from specified facilities or units, the electric power entity must

disaggregate electricity deliveries and associated GHG emissions by facility or unit and by first point of receipt, as applicable. The reporting entity must also report total GHG emissions and MWh from specified sources and the sum of emissions from specified sources explicitly listed as not covered pursuant to section 95852.2 of the cap-and-trade regulation.

…

3. Provide the serial numbers RECs associated with electricity procured from an eligible renewable energy resource and reported as an RPS adjustment as well as whether the RECs have been placed in a retirement subaccount and designated as retired for the purpose of compliance with the California RPS program.

2. RECs associated with electricity procured from an eligible renewable energy resource and reported as an RPS adjustment in a previous emissions data report year that later were withdrawn from the retirement subaccount, the associated emissions data report year the RPS adjustment was claimed, and date of REC withdrawal.

3. RECs associated with electricity generated, directly delivered, and reported as specified imported electricity and whether or not the RECs have been placed in a retirement subaccount.

Section 95111 (a)(f) Imported Electricity Supplied by Asset-Controlling Supplier: WPTF recommends that these requirements be modified to provide for importing of electricity by either an ACS itself (which would be considered a GPE) or by an entity that holds a specified power contract for ACS-sourced power. This change is necessary to ensure consistency between the MRR and the cap and trade regulation, which requires right of ownership or contract as a condition for claims to specified power.

Imported Electricity Supplied by Asset-Controlling Supplier: The reporting entity must separately report imported electricity supplied by asset-controlling suppliers recognized by ARB when it is the asset controlling supplier or when it has a specified power contract for electricity from an asset controlling supplier's system. The asset controlling supplier must be identified on the NERC e-tags as the PSE at the first point of receipt, regardless of whether the reporting entity and asset-controlling supplier are adjacent in the market path.

Section 95111 (a)(6) Exported Electricity: WPTF recommends that this provision be modified for consistent treatment of exports and wheeled-through power.

Exported Electricity The electric power entity must report exported electricity in MWh and associated GHG emissions in MT of CO_2e for unspecified sources disaggregated by each ~~final~~ first point of delivery outside the state of California and for each specified source disaggregated by each ~~final~~ first point of delivery outside the state of California, as well as the following information:

Section 95111(g) Requirements for Claims of Specified Source of Electricity for Eligible Renewable Energy Resources in the RPS Adjustment: WPTF recommends that the MRR be modified to require that generation meter data be retained for documentation and to enable verification that actual facility generation, matches the tag. This change is necessary to ensure that the regulation does not lead to the unintended consequence of over-accounting of low-emission generation. Additionally, under delivery tracking conditions, we recommended changing the term 'written power contract' to 'specified power contract.'

WPTF supports the proposed change to require reporting REC associated with renewable imports, but recommends these provisions be moved to section 95111(4) and incorporated into the annual reporting worksheet.

(1) *Registration Information of Specified Sources and Eligible Renewable Energy Resources in the RPS Adjustment.* The following information is required:

(A) …

(N) Retain for verification generation meter data to document that the power claimed by the reporting entity was generated by the facility or unit at the time the power was directly delivered;

…

(3) *Delivery Tracking Conditions Required for Specified Electricity Imports*

Electricity importers may claim a specified source when the electricity delivery meets any of the criteria for direct delivery of electricity defined in section 95102(a), and one of the following sets of conditions:

(A) The electricity importer is a GPE; or

(B) The electricity importer has a specified ~~written~~ power contract for electricity generated by the facilities or units.