

Environmental Tracking Network Stakeholder Meeting Summary

DAY 1: April 14, 2008

Introduction to ETNNA

Jan Hamrin, Secretary General of the Environmental Tracking Network of North America (ETNNA), began the meeting with a review of ETNNA's organizational governance. Jan introduced ETNNA's Board, and gave an overview of the organizational structure. She then led a discussion of ETNNA's mission and organizational goals, activities and services.

It was asked what would constitute "success" for ETNNA. Jan stated that while ETNNA will not set policy, success for the organization would be to build a foundation for tracking renewable energy and related emissions in a manner that is compatible with the Renewable Portfolio Standards and greenhouse gas (GHG) regulation of the various states, the voluntary markets for renewable energy and GHG emission reductions, as well as any federal GHG regulation that may come into effect. Other Board members added that success includes creating an active forum in which tracking systems participate to resolve seams issues, facilitate coordination between electricity and emissions tracking, and promote liquidity in the renewable electricity and carbon markets.

In terms of increasing ETNNA's organizational clout, the idea is to build participation among a broad base of stakeholders, without lobbying or direct political action by ETNNA itself.

Participation in Organization

Center for Resource Solutions (CRS) staff gave a brief presentation on the categories of membership:

- Council Members will set the policy for ETNNA. Currently the only Council is for certificate tracking systems, however, in the future this may change. Current Council members include the Western Renewable Energy Generation Information System (WREGIS) and the Midwest Renewable Energy Tracking System (M-RETS)
- Stakeholders will have an advisory role and can participate on the Stakeholder Advisory Committee: The fee for Stakeholders Members is \$450.
- Governmental representatives & 501(c)(3) nonprofit Stakeholder Members are free for 2008.

CRS staff noted that the decision making process for ETNNA is intended to be a consensus based process.

In response to a question about organizations that wish to follow ETNNA without actively participating, CRS staff stated that policy documents will likely be made publically available after consensus is reached, and that market reports and other items will be available to non-members for a fee.

CRS staff noted that the current plan is to hold monthly conference calls, and that ETNNA bylaws will be updated shortly.

Purpose and Goals for Meeting

CRS staff noted that the purpose of the meeting was to (1) discuss 4 issues related to the treatment of environmental attributes by tracking systems and (2) identify which of these issues are problems and to brainstorm possible solutions. The intended goal of the meeting was to identify steps/action items that ETNNA can take to help fix the problems; in effect, to develop a roadmap for ETNNA and its members for addressing these problems.

Staff Presentation: Issues with Tracking Environmental Attributes

Presentation posted at etnna.org

CRS staff gave a presentation on issues associated with the tracking of environmental attributes.

ETNNA hopes to identify issues and facilitate solutions. The task for the first day is to review the definitions of certificates in the various tracking systems focusing on four issues:

- Differences between definitions
- Tracking individual attributes
- Tracking derived attributes
- Attributes for null power

Certificate tracking originated as a tool to ensure Renewable Portfolio Standard (RPS) compliance. However, tracking systems also serve the voluntary markets for renewable energy.

Voluntary renewable energy certificates (RECs) sourced from all across North America (not just from adjacent regions) enable buyers to make claims about environmental benefits of renewable energy generation, and in some cases make specific claims about GHG emission reductions. However, there are issues with moving RECs from one region to another, even when accompanied by an energy delivery. Information may be difficult to verify because of how RECs are defined and what is tracked.

Tracking systems track the attributes of renewable energy generation, including region and type of generation. The tracking systems are generally policy neutral. However, they define the direct and indirect attributes of renewable energy somewhat differently.

Differences in definitions of RECs between tracking systems

In the presentation, CRS staff noted that in defining primary attributes of RECs, some tracking systems say RECs include all “renewable attributes,” others say all “renewable and environmental attributes,” while one other (NEPOOL GIS--New England Power Pool Generation Information System) does not specify but includes source and emission attribute data for each REC. Also, only GIS and PJM Generation Attribute Tracking System (GATS) record direct, non-zero emissions data for each certificate (i.e., for biomass facilities).

None of the tracking systems explicitly track derived (avoided) emissions. However, GATS, M-RETS, and WREGIS all say RECs include “all credits, benefits, emissions reductions, offsets, and allowances, however entitled, (directly)¹ attributable to the generation from the generating unit.” In contrast, Texas and GIS are silent on avoided emissions.

There was a brief side discussion about the methods for calculating the carbon value of renewable energy in various regions, and about whether the Regional Greenhouse Gas Initiative (RGGI) permits offsets based on renewable energy.

Are certificate definition differences important?

There was discussion of the importance of the difference between tracking systems, including the meaning of the word “directly” in the WREGIS definition of indirect attributes, and whether this is contradictory. There was also discussion of the need to clarify the distinction between attributes related to the generation of renewable energy versus those related to the destruction of methane.

With respect to derived attributes, tracking systems generally try to mirror what’s going on at the state level. Most state definitions are not explicit, however, some states are clear about expectations of derived attributes. For example, many WREGIS states require retirement of any emissions reduction allowance for compliance with RPS.

CRS staff noted that while avoided emissions values of renewable energy tracked in the various systems are sometimes reported (e.g. in GIS annual reports) this is not the same as that information being tracked within the system.

The APX tracking system under development will track emissions reductions based on North American Electric Reliability Council (NERC) region.

Furthermore, imminent GHG regulation, such as RGGI, AB 32 legislation, and the possibility of a federal cap-and-trade program, create additional complications for the tracking of the GHG value of RECs. There was discussion of the mechanisms for preserving the GHG value of renewable energy under a cap-and-trade program, such as an allowance carve-out system, and the fact that null power might pose a problem depending on the design of the GHG regulation.

There was consensus among the stakeholders that inconsistent definitions of REC attributes between tracking systems could create problems, although the nature and extent of the problem depends on how the RECs are used. It was also noted that consistent definitions and contractual language, as well as tracking systems that can track all REC attributes and show when they are retired, would greatly reduce transaction costs and promote liquidity in the market for renewable energy.

¹ The word “directly” appears only in the WREGIS definition.

Tracking systems and renewable attributes

There was discussion about the extent to which tracking systems need to track individual attributes to function as intended.

Re: Primary Attributes

With respect to primary attributes, the main issue is the direct emissions of biomass facilities. Those emissions data are monitored by air regulators. To be carbon neutral like other renewable facilities, any direct carbon emissions are netted out. Is there a need to have that data part of the biomass REC record? Other possible direct attributes were also mentioned, including:

- GHG emission reduction benefit of biomass fuel conversion that is generally presumed to be separate from RECs (although some contracts are ambiguous).
- Non-emission related peaking capacity of some renewable sources, e.g., for certain hydro facilities
- The geographic attributes of certain facilities

It was noted that at this time only air emissions (most notably carbon) are traded in a secondary market. Issues associated with the primary attributes of renewable energy might be minor enough that tracking them within tracking systems may not be cost effective, particularly since they are already monitored by air regulators.

Re: Derived Attributes (Avoided Emissions)

The tracking of derived attributes (e.g. avoided emissions) was then discussed. Issues identified include:

- How REC buyers can determine if avoided emissions attributes have been retired
- Whether separate tracking of GHG emission reductions in capped sectors would lead to double counting
- Whether renewable energy generation and emissions allowances should be tracked in the same system
- Whether and what sort of coordination is needed between renewable energy and GHG emission reduction registries.

It was noted that while verification of ownership of avoided emissions is currently dealt with through attestations, checkboxes in tracking systems could simplify the task.

DAY 2, April 15

A revised agenda Day 2 of the ETNNA Stakeholder Meeting was presented, with agenda items including a discussion of null power, a brainstorming session on the issues discussed and possible solutions, and a discussion of next steps.

Certificates of generation

A REC without any environmental attributes is called a Certificate of Generation in Europe. Jan expressed concern that using Certificates of Generation for RPS compliance could create a system where renewable energy is viewed as having no environmental benefit in the marketplace, which could limit the options of renewable generators and gut the voluntary market. Jan pointed out that this is what has happened in Europe.

Others argued that we must not assume that RECs have no value other than carbon, and suggested that permitting full disaggregation gives generators as much flexibility as possible. It was noted that the challenge is to meet the needs of all consumers and ensure everyone understands what they're getting. It was mentioned that RECs certainly can be fully disaggregated but if so, there is no REC remaining. Thus there is nothing for a tracking system to track unless it tracks the disaggregated attributes.

A question was asked about whether the double sale of GHG allowances based on RPS RECs would be allowed in GATS/PJM states such as Pennsylvania and Delaware. The Representative for PJM confirmed that PJM requires whole RECs. Ed Holt, consultant for ETNNA, stated that while Pennsylvania and Delaware don't expressly require derived attributes for emission reductions to be included in RECs, they do require the inclusion of all direct attributes, which includes emissions at or near zero.

Issues related to tracking of avoided emissions benefit of renewable energy

An in-depth discussion followed about issues related to tracking the avoided emissions benefits of renewable energy generation.

The fact that a regional or federal cap on carbon could strip RECs of their carbon value was discussed, as was the fact that RGGI has established an allowance set-aside mechanism to preserve the value of renewable energy within RGGI states. It was acknowledged that a poorly designed federal cap without a set-aside mechanism could destroy the markets for renewable energy. It may be important to note any state or regional laws or regulations that affect the environmental attributes associated with RECs produced or traded in that geographic area.

At this point, it was noted that the discussion should be refocused on ensuring that all essential attributes of RECs are tracked. The spokesperson for APX, which is designing the default tracking system, noted that the default system is being driven by the demands of the voluntary market. Purchasers need to understand what is and is not included in the RECs they purchase.

Recommendations

CRS staff asked for recommendations as to how ETNNA should address Certificates of Generation, disaggregation of attributes, and null power.

It was suggested that ETNNA should encourage certificate tracking systems to work with GHG registries to ensure that there is no double counting and best practices are implemented.

Regarding disaggregation, several stakeholders agreed that conceptually at least, as long as nobody in the chain has made claims about attributes, disaggregation is permissible. However, others argued that once RECs are disaggregated, they are no longer RECs—e.g. they can no longer be used in state RPS systems.

It was suggested that the ETNNA paper should acknowledge the possibility of certificates of generation, and that tracking systems should be capable of handling them. Specifically, certificates of generation could be a mechanism for dealing with regions with a GHG cap that does not create allowances for renewable energy and therefore extinguishes its avoided emissions value.

With regard to null power, it was suggested that any value assigned to null power-- whether or not a value is assigned, and if so what emission values should be applied to null power--is a policy decision that is made in the energy or environmental regulatory process or by specific renewable program administrators. Whether there is a role for tracking systems with regards to null power is unclear at this time.

It was agreed that at the very least tracking systems should be able to account for whether GHG emission reduction value of renewable energy exists, even if it is not specifically quantified.

Recap of Action issues

The consensus was that no action was needed with respect to direct emissions. Specific issues were then discussed, including who is responsible for attesting to the wholeness of RECs.

APX noted the default tracking system under development currently allows registering only whole RECs. From an administrative perspective, adding a check-box for REC attributes in the beginning is much lower cost than creating a system that can track subsequent disaggregation.

There was a discussion as to whether the benefits of adding the functionality to track disaggregated REC attributes, either at or after inception, outweighed the costs.

- Consensus ETNNA action item: Get states' input as to what functionality they need (*i.e.* engage regulators).

There was a brief discussion about the specific design of the RGGI cap, and the extent to which it preserves GHG emission reduction value for renewable energy generated within RGGI that is sold in voluntary markets. It was noted that RGGI may only preserve the GHG emission reduction value for renewable energy sold to buyers within RGGI states that have adopted such a rule.

Paul Helgeson, representative from M-RETS, stated that while he does not conceptually oppose tracking systems having boxes for various attributes, M-RETS would not accept a REC generated in RGGI if it did not contain avoided GHG emissions pursuant to the design of the RGGI cap.

It was suggested that the following changes be encouraged by ETNNA:

- Add a field to indicate the tracking system where a REC is generated
- Add fields to indicate what is included at the point of origin²
- Engage regulators about needed functionality
- In the future, consider adding functionality where a REC could be changed over its lifetime.

There was then a general discussion about the desirability of quantifying and tracking avoided emissions values for renewable energy within tracking systems. Several participants expressed the opinion that tracking an avoided emissions value would be valuable only if the methodology for calculating the value were universally agreed upon and that at this time the matter might be too controversial. It was noted that APX's default system is designed to track avoided emissions values based on the standards of EPA Climate Leaders and Green-e Climate. However, it was noted that the EPA Climate Leaders and Green-e methodologies are not universally accepted. Also, not all RECs pass the additionality criteria established by these programs.

CRS summarized the foregoing discussion as essentially four overlapping options for how tracking systems might deal with avoided emissions, each of which were discussed and voted upon:

1. Simple yes or no checkbox if avoided emissions are included or excluded (whether due to voluntary disaggregation or by virtue of the regulatory scheme in which the RECs were generated), without specifying avoided emissions values.

Some stakeholders saw a benefit in tracking systems continuing to only track whole RECs while explicitly tracking the attributes, as this would ease the contractual burden of parties to ensure that all attributes are transferred contractually, although others did not feel this was a significant concern.

Some stakeholders did not want tracking systems to preclude them from disaggregating REC attributes by virtue of their design. Others felt there was limited value in tracking disaggregated attributes as this was achievable by contract.

2. Yes or no checkbox specifying if avoided emissions are included or excluded (but with exclusions only due to regulation).

Option 2 was discussed, that tracking systems track only whole RECs and RECs generated in a capped region without GHG emission reduction value (e.g. RGGI). The fact that under the current RGGI rules only RECs sold to buyers within RGGI will have GHG emission reduction value was discussed.

It was noted that the status quo is essentially option 2: tracking systems track only whole RECs, unless those RECs lack certain attributes by virtue of regulation of a certain sector (e.g. SOx

² At the present time, with the possible exception of NE/GIS, the other tracking systems only track whole RECs and verify this through some type of attestation by the generator and possibly other market participants.

throughout the United States, and possibly carbon in RGGI going forward). However, explicitly tracking the remaining emissions benefits would help provide clarity.

3. Checkbox with tracking systems quantifying the avoided emission value for carbon (and possibly other avoided emissions such as CO, NOx, SOx and PMx).

The benefits of the various possibilities were discussed, including the costs and benefits of tracking avoided non-carbon emissions. Stakeholders raised concerns about increasing the administrative burdens for tracking systems, and creating a tracking system that was so complicated that it was routinely implemented incorrectly.

It was also noted that regulation may have established avoided emissions values for some commodities (e.g. NOx) that tracking systems might track.

- The consensus among stakeholders was that it is not realistic for tracking systems to establish a single methodology or value for calculating the avoided emissions benefit of renewable energy at this time.

4. Checkbox with various alternative methods for calculating the avoided emissions value for carbon (and possibly other avoided emissions).

The pros and cons of tracking systems supporting various methodologies for calculating avoided emissions values were discussed. Several stakeholders felt this would be a cleaner, less controversial approach. Tracking systems wouldn't need to provide the numbers themselves, merely methodologies for calculating avoided emissions values.

Others suggested that tracking systems could expose themselves to liability by providing numbers or methodologies for avoided emissions values, if these methodologies are challenged or discredited later in some legislative or regulatory action. It was also noted that it could burden tracking systems with maintaining regulatory knowledge and could decrease fungibility of RECs.

- The consensus was that tracking systems should not provide any methodologies for emissions benefit values of RECs.

5. Definition based designation—tracking two types of RECs, those with avoided emissions included (“capital R” RECs), and those generated in regions with GHG caps with no avoided emissions included (“lowercase r” recs).

The downsides of this last approach are that it is potentially confusing and could jeopardize the voluntary market. The upside is that this would be a way for renewable energy generated in capped regions to market and export *some* commodity.

- The consensus of the stakeholders was that this option would be confusing to consumers, not provide clarity, and would be an administrative burden.