

Credit Trading Workgroup Meeting & Workshop

Meeting Summary

December 7, 2000

RESOLVE, Inc.

Renaissance Madison Hotel
Seattle, WA

WELCOME AND INTRODUCTIONS

Facilitators: Abby Arnold and Gabe Petlin, RESOLVE, Inc. [Refer to Attachment A for the meeting agenda.] Also note that there is a participant's list from this meeting included at the end of this summary. After introductions and adoption of the agenda, Gabe Petlin reviewed the purpose of the meeting:

- *Provide an opportunity for NWCC Work Group Members, NWCC Members, and invited expert participants to hear an overview of the draft NWCC Credit Trading Report and to critically review and discuss the report's recommendations and principles.*
- *Hear presentations from several perspectives of other experts on credit trading which provide: a) a brief summary of credit trading activities they are involved in, and b) critical responses to the NWCC draft report.*
- *Identify how the report can be improved at the big picture level. Attempt to resolve issues or concerns if necessary.*
- *Discuss the recommendations and credit trading principles in detail and attempt to reach consensus on these sections for presentation to the NWCC.*
- *Discuss if any of the outreach and communication recommendations in the report should be conducted by the NWCC.*

OVERVIEW PRESENTATION OF DRAFT CREDIT TRADING REPORT

Kevin Rackstraw, Remote Power Group, LLC

*Overview presentation of entire report, recommendation, and principles.
Clarifying questions from participants.*

[Refer to Attachment B, Kevin Rackstraw Presentation Slides]

Kevin Rackstraw gave an overview presentation of the draft NWCC Credit Trading Report under review by the NWCC. Some highlights of his remarks are provided here.

Purpose of Report

- Educational piece on credit trading
- Catalogue of credit trading activities
- Credit trading opportunities for wind
 - describes and ranks key near-term opportunities
 - identified longer-term opportunities that are actionable within project's three-year timeframe
- Guidelines for credit trading market development
- Recommendations for NWCC outreach and communication

Why Should Wind Care About Credit Trading?

- Substantial new sources of revenue
- Taps existing & new expenditures on pollution reduction
 - Mechanism to reach new green markets
 - Applies to regulated and private markets
- Monetizes many of wind's benefits
- Credit markets operate independently of energy markets, can avoid technical issues
- Existing rules ignore non-emitting sources

Definitional Issues

- Allowance
 - A "quasi-right" to emit defined substances, which may be tradable, is "created" by regulation and granted
- Credit
 - Primary context is emissions avoidance and reduction but can also represent other benefits of renewable energy
 - "Earned" on basis of project activity vs. "Granted"
 - Vehicle for conveying or representing attributes
 - Broad definition of term can refer to reductions against a benchmark, earning of allowances
 - Can also be simply a vehicle for compliance
- Attributes:
 - performance or descriptive characteristics, direct or indirect
- "Unbundling" Tradable Attributes:
 - Separating specific attributes from source
 - Can also refer to unbundling or disaggregation of attributes from each other--can have the former without the latter
 - Allocates attributes to those who value them most
 - Increases flexibility and liquidity
 - Challenges include defining attributes, and tracking and verification (both to avoid double selling and sustain market credibility)
 - Different opinions on disaggregation of attributes. Some see it as potentially misleading consumers, others as maximizing renewable energy benefits. Many legal, consumer, and definitional issues to be worked out.

PRESENTATIONS OF INVITED PANELISTS

Jan Hamrin, Center For Resource Solutions (CRS)

CRS is preparing a white paper on definitional issues associated with renewable energy certificates. The paper may be ready by early spring. Ms. Hamrin provided the following remarks on the draft NWCC Credit Trading Paper (Note: her remarks were based on a reading of Draft I, not Draft II):

- AUDIENCE - The paper still needs to clarify who its audience is. Ms. Hamrin suggests that the audience should be the wind industry itself. She recommends that the message should be to identify the opportunities and swamps, i.e. what are the risks for the generator of green tags and credit trading?
- PITFALLS - Add guidelines that describe the pitfalls of credit trading.
- MARKET VALUE OF BUNDLED VS. UNBUNDLED ENERGY - Include discussion on what criteria wind developers should use in deciding whether to sell off green attributes. For example, the paper states that green attributes sell from 1.8 - 3.6 mills/kWh. The California green market gets 5 mills/kWh. Sometimes selling attributes separately adds value to the wholesale price of

energy, but sometimes the green market for bundled energy is more valuable. These opportunities need to be distinguished.

- CONSUMER DISCLOSURE - Discuss the liabilities generators face when they sell off attributes and do not inform their customers.
- NET METERING - Don't dismiss behind the meter questions.
- GREEN MARKETS - Need more emphasis on green markets.

Angus Duncan, Bonneville Environmental Foundation

Bonneville Environmental Foundation (BEF) is a collaborative organization which aims to help shape the green energy market in the Northwest. They partner with NRDC, Renewables Northwest Project to add revenue value to BPA green power. The organization has evolved from selling green power to selling green tags. The Northwest is a mix of regulated and non-regulated power with both private and public utilities. Green tags is the product that enables BEF to grow their markets for green energy. Regarding the NWCC draft report and green tags, Mr. Duncan made the following additional remarks:

- MARKET DEFINITIONS - The players in green tags are inventing definitions as we go along. We run the risk of getting out in front of the market for green tags, but also the risk of going to slow and letting others define the market. There are pros and cons to standardization and too much could stifle the market. In developing green tag guidelines and definitions there should be a balance between what is necessary to define the market and avoiding pre-maturely restricting or inhibiting innovation.
- DISCLOSURE - Consumer disclosure can in some instances inhibit green power products.
- TANGIBLE BENEFITS - A green tag product should convey tangible benefits.
- TRANSMISSION - Transmission access is still a major issue and the report appears to present green tags as a solution to transmission, but this is not in fact the case.
- LIQUIDITY VS. CREDIBILITY - Understand the trade-off between the two.
- VALUATION - More thought needs to be put into the convertibility of energy terms e.g. kWh or emissions offsets.
- UNBUNDLING - Of all the green energy attributes CO2 is the likely one to be most valuable, because of the potential for an international market. Note: some of BEF's clients are require by law to purchase carbon credits. Therefore, the question of unbundling can't be ignored.
- DOUBLE COUNTING - Need a narrow definition that errs on the side of consumer protection.
- TRANSACTION COSTS - Is an area of concern to watch.
- CAPS - The absence of caps (in emission trading) can limit the market for green tags.

Muir Davis, PG&E National Energy Group

PG&E National Energy Group has been a wholesaler, a trader, a renewable developer, and now a retailer with the introduction of the "Pure Wind Certificates" from the Madison Wind Farm in New York State. Mr. Davis made the following remarks in his talk about green tags and the draft NWCC report:

- ACCEPTANCE OF SEPARATE ATTRIBUTES - A paramount challenge for green tags is getting acceptance in the market place for selling separate attributes. Renewable energy producers and marketers should sell attributes to one market (when available) and null energy into the wholesale market so that renewables can capture as much value as possible. Under current cap and trade programs wind energy doesn't benefit and actually makes it easier for emitters to pollute.
- TEXAS RPS - The big question in Texas is whether the RPS market will be an energy-based market or a credit-trading market.
- TIME-OF-DELIVERY - should be separate from the green certificate.
- OWNERSHIP OF ATTRIBUTES - is an important question.
- NEAR-TERM - Recognize and highlight which markets exist that wind can participate in right now.

Participant Discussion of Panel Presentations

After the presentations there was a discussion and remarks from a variety of perspectives were offered:

- Advocacy is needed at the state level to get renewables included in cap and trade set-asides.
- The report should distinguish between voluntary credit markets and regulatory cap and trade markets.
- Stimulation of multiple markets is needed. First there were kWh markets, then green markets, now we need to stimulate the attributes market.
- What are the pros and cons of state vs. federal legislation on credit trading markets? Panelist reply: There is a need for some market structure, but caution is needed so as not to go too fast and stifle the market.
- It's important to clarify definitional issues before going onto recommendations, e.g. Can you sell separate attributes?
- Clarify what is meant by one market at time.
- What are your local, regional, and national markets?
- Voluntary green credits increase renewable development, but ease emission compliance.

DISCUSSION OF REPORT RECOMMENDATIONS AND GUIDELINES

- The bulk of the afternoon discussion focused on the "Recommendations" (to be renamed "Key Opportunities") and "Guidelines" sections of the report. At the end of the meeting additional issues remained to be resolved in the Recommendations and Key Opportunities sections. Participants felt it was important to take the time to complete these sections and eventually seek consensus from the NWCC. Within the time allowed some one-text editing of these sections was completed during the meeting. Kevin Rackstraw will incorporate additional changes into these sections for review by the Credit Trading Work Group in January 2001.

NEXT STEPS:

- One or two work group conference calls will be scheduled in January to reach closure on the Key Opportunities and Guidelines sections with the aim seeking the approval of the NWCC Steering Committee and then the full consensus of the committee.
- The workgroup will also consider recommending whether the full Credit Trading report (when complete) be put through the NWCC consensus process or be released as a resource document that does not require consensus to be published.

Discussion of Report Recommendations

Some of the comments made on this section were recorded directly on the one-text and are not all listed here. These are recommendations for the wind industry and affiliated stakeholders and not necessarily the NWCC. Specific action steps for the NWCC will be covered under Outreach and Communication.

- The "Recommendations" section will be renamed "Key Opportunities" or similar and the language will be adjusted to avoid endorsement of specific legislative policies and regulatory actions. Instead the potential impact of such measures on the wind industry will be described.
- Criteria were offered that should help the NWCC decide what actions to include in this section: actions that
 - expand the market for green tags and green power;
 - honor the customer;
 - are economically feasible;
 - contribute to the minimum market structure necessary to establish credibility; and
 - don't pre-maturely narrow options.

- Seams issues are important in RTO developments.
- Communicating disclosure issues is challenging.
- Document examples of what would constitute double-counting.
- Develop model for liquidity in the market.
- Develop options for System Benefit Charge (SBC) funds to implement that will aid and jump start the green tag market. Many SBC funds will be operational soon, so the issue is timely.
- Air quality regulators need to understand the benefits of wind energy when they write new regulations.
- Clarify what green certificates state, display, and what does the label look like?
- Develop steps for addressing the disclosure issued head-on.
- Local benefits issue needs to be aired among interested parties.
- Highlight the steps of different stakeholder groups.

Discussion of Credit Trading Guidelines

Most of the comments made on this section were recorded directly on the one-text document and are not listed here. The guidelines will be categorized as follows: Market definitions; Market Operation; and Accounting and Tracking. [Subsequent to the meeting the last category was combined into the Market Operation Category.] Additional comments include:

- Clarify double counting and recognize the need to minimize double counting.
- Address education on attributes issues; e.g. the acceptance of unbundled attributes and the need to be more explicit about severability.
- Argue for full disclosure: more information is better than less.

A revised "Key Opportunities and Guidelines" document will be circulated in January for review by the Workgroup and meeting participants.

NWCC OUTREACH AND COMMUNICATION

This discussion was only preliminary. Participants feel the NWCC should complete the Key Opportunities and Guidelines sections of the report and then develop a more specific NWCC Outreach and Communication Strategy, which is Phase III of this project. This future discussion will draw from the initial ideas captured in the Key Opportunities section. Some preliminary possible NWCC action steps suggested included:

- Development of case studies that illustrate the Credit Trading Guidelines;
- Case studies on green tag customers and providers;
- Conduct outreach to air quality regulators and SBC fund managers; and
- Get input on the Guidelines from the FTC and NAAG.

--The meeting adjourned at 4:00 PM--

MEETING SUMMARY ATTACHMENTS

- Attachment A - Agenda, December 7, 2000 Credit Trading Workgroup Meeting and Workshop
- Attachment B - Kevin Rackstraw Presentation Slides

A copy of these hard copy attachments can be obtained by contacting NWCC Staff at RESOLVE at (202) 965-6218 or nwcc@resolv.org.

National Wind Coordinating Committee
CREDIT TRADING WORK GROUP MEETING

December 7, 2000
Renaissance Madison Hotel
Seattle, WA 98104

Final Participants List

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