



Incentivizing Ocean Energy: Renewable Energy Credit Certification Process

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On behalf of Oregon Wave Energy Trust

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Oregon Wave Energy Trust (OWET) is a nonprofit public-private partnership funded by the Oregon Innovation Council. Its mission is to support the responsible development of wave energy in Oregon. OWET emphasizes an inclusive, collaborative model to ensure that Oregon maintains its competitive advantage and maximizes the economic development and environmental potential of this emerging industry. Our work includes stakeholder outreach and education, policy development, environmental assessment, applied research and market development.

Background

The Incentivizing Ocean Energy project, completed July 2011 by Robert K. Harmon, studies methods of bridging the gap between the cost of ocean energy and the price it can command in the marketplace, especially for early-stage technologies. Robert K. Harmon details strategies to reduce the cost of ocean energy, gain political support, advocate for favorable treatment in regulatory markets and make the best use of voluntary markets. Methods include building alliances, focusing on grants, benefiting from tax incentives, preferential siting, working collaboratively with other sectors and more. This report is a go-to guide on how early-to-mid stage businesses will best profit from ocean energy devices in both the short and long term.

Incentivizing Ocean Energy: Renewable Energy Credit Certification Process supplements the initial report with more current information and serves as a guide for businesses on how to attain ocean energy certification.

Executive Summary

Ocean energy promises endless delivery of renewable baseload power; yet, wave projects face daunting challenges, such as high capital costs, combined with 3¢-per-kWh electricity. Ocean energy projects will, therefore, require significant help to become commercially viable.

Development and monetization of Renewable Energy Certificates (RECs) offer one source of additional revenue for ocean energy projects. One Renewable Energy Certificate, Renewable Energy Credit or “REC” contains the green environmental attributes associated with delivery of one Megawatt hour (1 MWh) of renewable electricity to the public grid. Utilities, companies and private individuals value these environmental attributes because RECs can be used to mitigate greenhouse gas (GHG) emissions associated with electricity consumption, promote renewable energy projects and decrease the use of fossil fuel, promoting energy independence and economic activity in local, predominantly rural communities.

RECs fall into two categories: compliance-based and voluntary. Compliance-based RECs help utilities demonstrate their ability to deliver a specific percentage of their load from renewable resources, such as solar, wind, dairy-methane or ocean energy. In many US states, utilities are compelled to demonstrate that an increasing portion of their load is generated from such renewable resources, and, since utilities may purchase RECs to show compliance with states’ Renewable Portfolio Standards (RPSs), RECs offer a relatively simple, transparent and easily quantifiable mechanism for demonstrating a utility’s overall reliance on renewable energy.

Throughout the United States, more than 80 utilities also offer customers opportunities to voluntarily offset GHG emissions associated with personal electricity consumption by purchasing RECs through their utility’s voluntary “green power” programs. Green power programs aggregate RECs to make it easy and affordable for customers to offset their electricity emissions and support renewable energy projects.

This report summarizes alternatives for monetizing RECs, including steps that ocean energy business owners must take to secure maximum value. In addition, a list of useful names, phone numbers, e-mail addresses, and web sites is provided.

What are RECs worth?

As mentioned earlier, RECs fall into two categories: compliance-based and voluntary. We discussed REC demand & pricing with four utilities; we also discussed ocean energy

opportunities with eight developers or brokers of environmental attributes. Companies we consulted include:

Utilities:

- PacifiCorp
- Portland General Electric (PGE)
- Puget Sound Energy (PSE)
- Seattle City Light (SCL)

Brokers / Developers:

- 3Degrees, Inc.
- BGC Environmental Brokerage Services
- Element Markets
- Environmental Certificate Exchange
- Green Mountain Energy
- OneEnergy Renewables
- Renewable Choice Energy
- Sterling Planet

Compliance-Based RECs

Compliance-based RECs are tools to make it possible for utilities to demonstrate compliance with local Renewable Portfolio Standards (RPS). Each REC represents 1 MWh delivered from a renewable, rather than traditional or fossil-fuel-based, resource. In this way, RECs make it possible for utilities to quantify the percentage of their electrical load derived from renewable energy.

States have very different RPS requirements, and each RPS has its own set of targets, timetables, rules and idiosyncrasies. For example, Washington's RPS mandates 15% use of renewable energy by 2020 and this goal to be met in three phases: 3% renewables between 2012 through 2015, 9% renewables between 2016 through 2019, and 15% renewable energy from 2020 forward. Oregon's RPS requires that 25% of the state's electricity come from renewable resources by 2025, and as with Washington's RPS, this 25% target is met in various stages. Different states also have different rules about age classes, or "vintages," for RECs. For instance, when a utility needs to meet a 2014 compliance target in Washington, they may use RECs that were generated in 2013, 2014 or 2015. Oregon's RPS, on the other hand, is much less stringent with REC vintage. For instance, a REC generated in 2008 could be used to meet a 2020 compliance target. Finally, states may adopt their own rules governing use of out-of-state RECs to meet RPS quotas. In general and to varying degrees, western states allow use of RECs that are generated throughout the region, to meet RPS compliance goals.

Regardless of rules governing the use of RECs to meet RPS compliance targets, there is one major difference between compliance-based and voluntary RECs— price. Utilities do not pay top dollar for RECs used to meet RPS compliance. This is because utilities must meet specific compliance targets, regardless of a REC's efficiency. This means that RECs generated at a 100 MW wind farm are just as good for meeting RPS compliance as RECs generated at a 1.2 MW dairy digester.

Conversations with prospective buyers revealed that compliance-based RECs will command a price of \$0.60 - \$0.80 per REC.

Where future trends are concerned, prices for compliance-based RECs do not appear likely to change between now and 2018 – 2020. Four factors drive these trends:

- California allows limited use of unbundled RECs from out of state for RPS compliance purposes, and these allocations decrease over time. For example, utilities can use unbundled RECs (also known as "Bucket 3" RECs) to meet up to 25% of their compliance requirement from 2011 to 2013. During the 2014 to 2016 compliance period, utilities may only use 15%. Beyond 2016, use of Bucket 3 RECs drops to 10%.
- As Washington's RPS begins to demand higher compliance, California's RPS begins to accept lower percentages of out of state RECs for compliance purposes. As a result, California's demand for out of state RECs will fall just as Washington's RPS begins to demand more compliance-based RECs. Consequently, RECs generated in other western states that can no longer be sold into California will find their way into Washington, leveling supply and demand.
- Oregon's RPS will continue to serve as a REC market of last resort. This is because Oregon's RPS permits REC owners to bank compliance-based RECs for the entire duration of Oregon's current RPS. For example, RECs originating within the Western Electricity Coordinating Council (WECC) at any point between 2007 and 2025 may be used to meet Oregon's RPS compliance requirements at any point during this 18-year crediting period.
- Idaho does not have an RPS, and Nevada's and Montana's RPSs are small, inasmuch as few RECs are developed for and traded within these thin markets.

The landscape for RECs in the western United States, as briefly described above, has created a situation where California is perceived as the best and most lucrative market for RECs, so RECs will be sold into California whenever possible. As already noted, RECs cannot always be sold into California. As such, Washington often becomes the next best market for RECs. Nevada and Montana are small REC markets with thin volumes, so they do not absorb many RECs. With its extremely lenient rules about REC vintage, Oregon becomes a market of last resort for RECs. As a result of these factors, it seems unlikely that prices for compliance-based RECs will change in Oregon and Washington during the next several years.

At the end of the day, the price utilities are willing to pay for compliance RECs depends almost entirely on market conditions (in general), and on supply and demand (in particular). Bearing this in mind, project owners should appreciate that any number of factors may influence future REC pricing on compliance markets. For instance, adoption of a new RPS, or significant changes to an existing RPS, could dramatically shift supply of and demand for compliance RECs. Similarly, Congress's extension of, or failure to extend, the Production Tax Credit program for renewable energy will either increase or decrease future supply of renewable energy, and expansion or contraction of new renewable energy projects will have a direct impact both on REC supply and on corresponding prices paid for RECs.

Importantly, Washington's RPS allows projects with nameplate capacity less than or equal to 5 MW to generate so-called double RECs. Under this scenario, small-scale projects that sell compliance-based RECs into Washington will generate two RECs for each MWh that is delivered to a Washington-based utility. At \$0.60 - \$0.80 per REC, even double RECs have no real ability to compel REC sellers to sell into the compliance, rather than the voluntary, market.

Voluntary RECs

As their name implies, voluntary RECs are purchased "voluntarily." Companies and individuals may buy blocks of RECs to offset GHG emissions associated with their electricity-related carbon footprint. Typically, however, companies and individuals do not find it convenient or cost-effective to purchase RECs independently, and utilities have created green power programs to meet people's desire to mitigate their electricity-related carbon footprint and support renewable energy.

Since participation in green power programs is voluntary, these programs must convince companies and households to participate; in other words, green power programs must market themselves. Due to this marketing element, the least expensive RECs do not always provide the best fit for green power programs because green power customers want to encourage projects that make them feel good about deciding to support renewable energy. As a result, green power customers often prefer smaller projects that support a rural community and use a new or innovative technology rather than large projects that use proven technology to fill corporate coffers. In this way, smaller local projects, such as dairy-digester projects, capture green power customers' imaginations far more than large-scale wind projects owned by distant corporations. The first waves of ocean energy projects are likely to be well received by utility green power programs.

Interviews with utilities and brokers revealed a wide price range for voluntary RECs. Prices can range between less than a dollar, on the low end, and to the mid-single digits, on the upper end. Factors that effect prices for voluntary RECs include project location, type and story. For example, a wind REC generated in Texas may be worth less than a dollar, while a dairy-methane-derived REC generated in Oregon or Washington could be worth \$2.50 - \$4.00. With the above backdrop in mind, we feel confident that owners of ocean energy projects can secure at least \$2.50 for their projects' RECs. We furthermore feel that project owners can probably sell their RECs for between \$4.00 and \$6.00 and that project owners can likely demand a price escalator to ensure increasing value, such as an annual price increases of 5%.

Owners of ocean energy projects may be able to secure higher prices in the event they can independently identify buyers who will purchase their RECs. For example, project owners can respond to Requests for Proposals (RFPs) issued from time to time by local utility green power programs, or they can conduct an independent search for companies that support ocean energy and want to mitigate their electricity-related GHG emissions. Puget Sound Energy, for example, charges members of its green power program \$12.50 per REC, and companies that support the ocean energy industry may have an appetite to pay a premium for ocean-derived Renewable Energy Certificates. Several factors can be employed to entice buyers. For example, project owners can:

- secure Green-e Energy Certification for the projects (this will be covered later in this document);
- prepare brochures & videos that both explain & promote their project;
- prepare a logo for the project and empower REC buyers to place this emblem on company products and promotional materials; and,
- organize project tours and other events to educate key stakeholders and generate excitement about the project.

Table: Sample REC Categories & Prices

REC Category:	REC Price:
Compliance	\$0.60 - \$0.80
Voluntary, small-scale, boutique project, using a technology favored by green power customers, e.g.: a dairy-digester project	\$2.50 - \$4.00
Voluntary, small-scale, boutique project, using new or relatively unproven technology, where RECs are sold via a broker / developer of environmental attributes	\$4.00 - \$6.00
Voluntary, small-scale, boutique project,	\$5.00 - \$8.00

using new or relatively unproven technology, where RECs are sold directly to a utility or to a company, e.g.: via an RFP	
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Given intricacies related both to marketing directly to end customers, as well as to managing REC development, such as organizing Green-e Energy's annual audit, only owners of large-scale ocean energy projects will likely undertake all of the responsibilities associated with marketing directly to end customers. Most project developers may want to focus on securing the third pricing tier, as set forth above. This noted, an opportunity may exist for an aggregator of ocean energy RECs to fill this space and to secure the highest price level by taking on all responsibilities involved with REC development and by marketing a high-quality REC product to utilities and corporations. Such an aggregator could be a private developer of environmental attributes, or an industry organization, such as the Oregon Wave Energy Trust (OWET) or the Ocean Renewable Energy Center (OREC).

Project Tracking through WREGIS

Established by The Western Governors' Association, the Western Regional Air Partnership and the California Energy Commission, the Western Renewable Energy Generation Information System (WREGIS) provides a transparent platform for registering, tracking and retiring RECs generated within the Western Electricity Coordinating Council (WECC) territory. In this way, WREGIS serves as an impartial mechanism for generating, tracking and retiring RECs throughout the western United States. Specifically, one WREGIS Certificate is created for each MWh of renewable energy that is produced and is assigned a unique serial number. These WREGIS Certificates may be used by electricity suppliers, and by other market actors, to comply with state renewable portfolio standards or to support green power programs. Many buyers and sellers of RECs view a project's WREGIS registration important to ensuring that project's credibility.

There are two principle steps associated with WREGIS project registration. First, a project owner must register as a WREGIS account holder. To register a WREGIS account, visit: <http://www.wecc.biz/WREGIS/Pages/AccountHolderRegistration.aspx>. Next, project owners must register their project's Generating Unit(s). Required documents include:

- The Energy Information Agency's "860 Form" may be found at www.EIA.gov and applies to all facilities with a nameplate capacity greater than 1 MW.
- A Utility-Interconnection Agreement.
- Manufacturer's Specifications.
- Proof of Revenue-Meter ID.
- Notification of Commercial Operation.
- Among other required documentation, such as the Review of WREGIS PA Advice Letter and Submission WREGIS' Acknowledgement of Station Service.

"Commercial operation" may be established in stages (e.g.: one buoy at a time) and is called "phasing."

To register a Generating Unit, please visit:

<http://www.wecc.biz/WREGIS/Pages/GeneratingUnitRegistrationProcess.aspx>.

Project owners may delegate registration with WREGIS to a third party; however, the entity registering the unit in WREGIS must provide documentation showing they have the rights to register the unit.

WREGIS will not approve a Generating Unit until it both becomes commercial and is grid-tied. The Interconnection Agreement can show that the Generating Unit is grid-tied, and a Notification of Commercial Operation can show that the project is commercial.

Roughly one month is needed to register both an account holder and a Generating Unit. About one week is needed for WREGIS to approve a new account holder. Once all required documentation has been received, WREGIS needs roughly one more week to process the verification documentation for a new Generating Unit. After the Generating Unit registration process has been completed, the Unit will be reviewed for approval, and this step can take an additional week.

Each Account Holder incurs an annual fee of up to \$1,500. There are also additional volumetric fees: issuance, transfer, retirement and export fees, as well as other service fees. Typically, small and medium-sized project owners will pay 3¢ for each MWh that is registered with WREGIS. For more information about WREGIS, please see the WREGIS operating rules:

<http://www.wecc.biz/WREGIS/Documents/WREGIS%20Operating%20Rules%20v%205%2031%202012.pdf>, as well as the WREGIS user training slides:

<http://www.wecc.biz/WREGIS/WREGIS%20Training%20Documents/WREGIS%20USER%20TRAINING%20Slides.pdf>.

A final note regarding WREGIS involves Qualified Reporting Entities (QREs), organizations that provide renewable generation data with the goal of creating WREGIS certificates. QREs may include: balancing authorities, the interconnecting utility, a project's scheduling coordinator, an independent third-party meter reader, a generator owner or a generator owner's designated agent. QREs are WREGIS-approved organizations entrusted to impartially and transparently report generation data. Typically, however, a project's interconnecting utility will serve as that project's QRE. Some organizations, such as the Bonneville Power Administration, will serve as a project's QRE free of charge when that project interconnects with a local People's Utility District. Many utilities, on the other hand, will charge owners a fee for serving as the project's QRE. See Section 10 of the WREGIS Operating Rules for further details about cooperation with QREs.

Green-e Energy Certification



Green-e

Based in San Francisco, the Center for Resource Solutions (CRS) administers The Green-e Energy Certification Program. More than 90% of voluntary REC transactions involve purchase and sale of Green-e Energy Certified RECs. Many utility-scale green power programs, such as Puget Sound Energy's award-winning green power program, require that RECs sold into the program are eligible for Green-e Energy certification. Given the value associated with voluntary RECs, Green-e Energy certification is imperative when project owners want to maximize their projects' REC values.

Founded as a non-profit organization in 1997, CRS was established to "promote global renewable energy development with the knowledge that developing clean energy generation is the solution to many of our most pressing environmental issues." In its 2011 annual report, CRS promotes, "clean energy development by creating policy and market solutions to advance sustainable energy and climate-change-mitigation strategies." CRS does this through its, "market-leading Green-e Energy programs and also by advocating for policies and market mechanisms that encourage clean energy and carbon emission reduction project development." These goals are met primarily by ensuring REC credibility with the Green-e Energy logo, a

symbol that is respected by the renewable energy sector throughout North America as a sign of environmental credibility.

Since there has never been a commercial-scale, grid-connected, ocean energy project in the United States or Canada, CRS has not had an opportunity to weigh the environmental costs and benefits associated with large-scale development of ocean energy projects. As such, ocean energy projects are not yet eligible to receive Green-e Energy certification. CRS's National Standard Version 2.1 states that, "Green-e Energy will consider adopting ocean-based resources and will review these technologies as they mature and as practical application reaches near term." Furthermore, extensive discussions with CRS staff, including Alex Pennock, Robin Quarrier and Rachael Terada, have confirmed that Green-e Energy's Governance Board (the Board) will be happy to review ocean energy as a renewable resource that may be eligible for Green-e Energy certification. (See Appendix C for a list of voting board members at the time this report was written.)

The Board's review of ocean energy with a view to securing Green-e Energy eligibility will consist of four phases:

- (1) Information Gathering and Due Diligence.
- (2) Board Approval to Proceed with the Stakeholder-Comment Process.
- (3) The Stakeholder-Comment Process.
- (4) Adoption of Final Rules by the Board.

Where timing requirements for ocean energy projects to secure "Green-e Eligibility" are concerned, we believe that the entire process will require between six and twelve months, depending on factors, such as:

- The degree to which OWET, The Northwest National Marine Renewable Energy Center (NNMREC), OREC and other supporting organizations can provide environmental analysis of potential effects from ocean energy projects;
- Plans for large-scale development of ocean energy projects;
- Stakeholder feedback.

In all probability, we will require between two and three months to gather data for The Board's preliminary review. This material must be synthesized and presented to The Board at a quarterly meetings held in February, May, August or November.

Depending on Board questions and stakeholder feedback, we expect the Green-e Energy approval process to take about nine months, as outlined below:

- (1) Prepare data for The Board's review: two to three months.
- (2) Present information to and answer Board questions: two weeks.
- (3) Address stakeholder concerns: three to six months.
- (4) Secure ability to count ocean energy projects as "Green-e Energy eligible."

In total, CRS estimates that The Board will require up to 10 days from each contributing organization to facilitate this process (e.g.: approximately 10 days from OWET, 10 days from NNMREC, 10 days from OREC and 10 days from Carbon Solutions Northwest).

Following a successful stakeholder process, ocean energy projects will be "Green-e Energy eligible" and eligible for favorable treatment on voluntary REC markets.

During the above-summarized process what energy feedstocks to consider for Green-e Energy eligibility will be determined. For example, the stakeholder comment process could review only ocean wave energy. Alternatively, the process could look at all hydro-based ocean energy feedstocks, including wave, tidal and thermal energy. Both WREGIS and CRS will treat offshore

wind separately from hydro-based, ocean energy feedstocks. WREGIS, for instance, will treat offshore wind as “wind.”

An important distinction exists between “Green-e Energy eligible” and “Green-e Energy certified.” Projects’ RECs are “Green-e Energy eligible” once their form of renewable energy generation has been approved as “Green-e Energy eligible” by The Green-e Energy Governance Board. For example, wind, solar and dairy-methane projects have been approved as “Green-e Energy eligible” by The Green-e Energy Governance Board. As described earlier, ocean energy projects are not yet “Green-e Energy eligible”, but they may become eligible once this project type has undergone stakeholder review and once The Green-e Energy Governance Board provides its approval.

“Green-e Energy eligible” RECs are not yet “Green-e Energy certified.” For a project’s RECs to become “Green-e Energy certified,” they must be certified via an approved Green-e Energy seller. 3Degrees, OneEnergy Renewables, Renewable Choice Energy and Sterling Planet, among others, are examples of approved Green-e Energy sellers. Discussions with approved Green-e Energy sellers have revealed that to become an approved Green-e Energy seller, you must undergo a review process and pay an annual \$4,500 fee. Green-e Energy sellers must also conduct an annual audit of their REC sales. This audit must confirm that:

- (1) The seller did not sell more RECs than purchased.
- (2) All RECs bought and sold were “Green-e eligible.”
- (3) End purchasers have adhered to Green-e Energy’s marketing policies.

According to one certified internal auditor with experience conducting Green-e Energy audits, Michael Lortz of Geffen Mesher, a Green-e Energy audit is a “very arduous” task that is, “extremely detail oriented.” Mesher noted, for example, that it is not uncommon for such audits to exceed 20 pages in length. Mesher said that Green-e Energy’s recent addition of electronic tracking systems around Green-e Energy products has both streamlined the audit process and reduced opportunities for human error. He also pointed out that Green-e Energy does not compel project owners to outsource the auditing process, and larger brokers and developers of environmental attributes, such as 3Degrees, keep this project “in house.” Having said this, a project owner or developer of environmental attributes will need significant volume to justify time and expense associated with carrying out Green-e Energy audits on an annual basis.

At present, CRS’s Green-e Energy Certification Program does not require WREGIS registration in order to certify RECs with the Green-e Energy logo. Green-e Energy’s Governance Board is currently considering amendments to Green-e Energy’s operating rules which, if implemented, would continue to waive WREGIS registration for smaller projects with nameplate capacity of less than 10 MW. If Green-e Energy’s Governance Board adopts the proposed rule, larger projects will need to register and track RECs via WREGIS if they wish to secure Green-e Energy certification. In practice, however, most project owners already register their energy production via WREGIS, as many buyers, such as utilities, require WREGIS registration in order to participate in their green power programs.

Acknowledgements

Naturally, I want to thank OWET’s Executive Director, Jason Busch, for the chance to prepare this analysis. Similarly, I also take this opportunity to thank OWET’s Matt Sanders for his guidance while preparing this report.

Others deserve special thanks as well. For example, Scott Eidson from 3Degrees offered very helpful observations regarding REC prices and price trends, and his remarks figure prominently in Section II re: What Are RECs Worth. Similarly, Kevin Maddaford from Renewable Choice Energy offered extensive remarks, which proved helpful when preparing Section II. Along similar lines,

Puget Sound Energy's Heather Mulligan shed extensive light on green power pricing of voluntary RECs. Bill Eddie of OneEnergy Renewables has always proven an excellent mentor and source of information, particularly with respect to interpretation of Washington state and California's Renewable Portfolio Standards, including analysis of potential price trends associated with such portfolio standards.

Mary Frantz with WECC was an invaluable guide with regard to the byzantine world, which is WREGIS, and without her guidance I would have become lost in WREGIS's labyrinth of operating rules and corresponding guidelines.

Finally, I can't find enough good things to say about The Center for Resource Solutions. CRS's Renewable Energy Markets conference, held in September of 2012, offered an exceptional opportunity both to learn about RECs and to network with leaders within the renewable energy space. In particular, Robin Quarrier offered excellent preliminary guidance and Alex Pennock supplied excellent follow-up assistance regarding opportunities to incorporate ocean energy under the Green-e Energy umbrella, and I feel confident that this good working relationship will extend well into the future.

Appendix A: Timetable for REC Development

Step:	Time Requirement:
Identify power & REC off-take opportunities, including determination & resolution of interconnectivity issues	12 - 24 months prior to project kick-off
Ensure Green-e Energy eligibility by conducting the Green-e Energy Stakeholder Process	6 – 12 months prior to project kick-off
Secure Interconnection Agreement & Notification of Commercial Operation	3 – 6 months prior to project kick-off
Secure Account Holder & Generating Unit status in WREGIS	1 – 3 months prior to project kick-off

Appendix B: List of Resources

Utilities:

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Important Web Addresses:

WREGIS Account Holder Registration:
<http://www.wecc.biz/WREGIS/Pages/AccountHolderRegistration.aspx>

Generating Unit Registration:
<http://www.wecc.biz/WREGIS/Pages/GeneratingUnitRegistrationProcess.aspx>

For more information about WREGIS and how it works, please see the WREGIS Operating Rules:
<http://www.wecc.biz/WREGIS/Documents/WREGIS%20Operating%20Rules%20v%205%2031%202012.pdf>

WREGIS USER TRAINING Slides:
<http://www.wecc.biz/WREGIS/WREGIS%20Training%20Documents/WREGIS%20USER%20TRAINING%20Slides.pdf>

Center for Resource Solutions: www.resource-solutions.org

Green-e Energy – Frequently Asked Questions: http://green-e.org/learn_re_faq.shtml

Green-e Energy 2011 Annual Report: http://www.resource-solutions.org/pub_pdfs/CRS_2011_AR.pdf

Current Green-e Energy Governance Board list: http://Green-e.org/about_who_gov_bd.shtml

Description of Green-e Energy's Verification Process: http://green-e.org/getcert_re_veri.shtml

Fees for sellers of Green-e Energy certified products can be found here: http://Green-e.org/getcert_re_fees.shtml

Appendix C: Green-e Energy Governance Board Voting Members

Not surprisingly, The Green-e Energy Governance Board's role is to ensure that Green-e Energy standards and policies, "are appropriate and necessary to meet its stated goals and objectives, and that certification and verification are handled in a credible and effective manner." Voting Board members include:

- (1) Bud Beebe, Chair – Sacramento Municipal Utility District (Retired);
- (2) Anne Blair – Southern Alliance for Clean Energy;
- (3) Pierre Bull, Natural Resources Defense Council;
- (4) Megan Decker – Renewable Northwest Project;
- (5) Jeff Deyette – Union of Concerned Scientists;
- (6) Barry Friedman – National Renewable Energy Laboratory;
- (7) Susan Innis – Vestas – American Wind Technology, Inc.;
- (8) Lars Kvale – NYSE Blue;
- (9) Jennifer Martin – CRS; and,
- (10) Blair Swezey – SunPower Corporation.