



July 24, 2023

Oregon Public Utility Commission (OPUC)  
201 High St. SE, Suite 100  
Salem, OR 97301-3398

**RE: Docket UM 2273. Interested Person Comment. Comments of Center for Resource Solutions in Response to Order No. 23-194 and the June 29, 2023 Commission Workshop on Renewable Energy Certificates**

Dear Commissioners,

Center for Resource Solutions (CRS) appreciates this opportunity to submit these comments as an interested person in response to Order No. 23-194 (“Scoping Order”) and information and questions presented by Commission and Department of Environmental Quality (DEQ) Staff and discussion among Staff and Commissioners at the June 29, 2023 Commission Workshop on Renewable Energy Certificates (RECs) (“June 29 REC Workshop”). Our comments are focused on “Issue I(a)(1) – RECs” in the Scoping Order.

**Background on CRS and the Green-e® Program**

CRS is a 501(c)(3) nonprofit organization that creates policy and market solutions to advance sustainable energy. CRS provides technical guidance to policymakers and regulators at different levels on renewable energy policy design, accounting, tracking and verification, market interactions, and consumer protection. CRS also administers the Green-e® programs. For over 20 years, Green-e® has been the leading independent certification for voluntary renewable electricity products in North America. In 2021, Green-e® certified retail sales of over 110 million megawatt-hours (MWh), serving over 1.3 million retail purchasers of Green-e® certified renewable energy, including over 309,000 businesses.<sup>1</sup>

**Source-based (or Generation-based) and Load-based (or Consumption-based) Greenhouse Gas (GHG) Emissions Accounting in the Context of HB 2021**

The difference between source-based and load-based accounting for GHG emissions from electricity generation is the difference between accounting for production versus consumption. A source-based (or generation-based) policy measures and regulates emissions associated with electricity generated within a geographic boundary or at a group of defined sources. A load-based policy measures and regulates emissions associated with electricity generation that is consumed, sold or purchased within a geographic boundary or by a defined group of sellers or

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<sup>1</sup> See the 2022 (2021 Data) Green-e® Verification Report here for more information: <https://resource-solutions.org/g2022/>.

consumers.<sup>2</sup> Both are accounting for emissions to the atmosphere. The difference is simply regarding which generation is included.

Accounting for production (source-based accounting) involves selecting sources and measuring emissions at the source. Accounting for emissions associated with electricity consumption on the grid (load-based accounting) is more difficult because electricity from different sources (with different emissions) is mixed together and cannot be directed to load. It means determining the generation and emissions that have been allocated to load (i.e. verifying delivery and use of specified power) contractually. This requires “market data” about transactions of generation and attributes in addition to source emissions data, to determine what generation is being delivered or consumed. One must consider transactions and market instruments (e.g. purchase contracts and certificates). REC data is a part of that, as they are used in Oregon, across the West, and across the country, to allocate renewable generation to customers and to purchase green power. Accurate accounting of load-based emissions reflects the contractual distribution of renewable electricity generation and RECs.

For HB 2021, the retail electricity provider is the regulated and reporting entity. The question is whether the retail electricity provider is responsible for reporting and reducing emissions associated with generation delivered to customers (load-based emissions) or emissions associated with selected generation sources but which is not necessarily delivered to customers (source-based emissions).<sup>3</sup> For a source-based emissions policy for load-serving entities (LSEs),<sup>4</sup> the sources can be selected to be the sources from which the LSE procures energy to serve load (and excluding owned sources for which the energy is sold to a different provider). In that case, the policy regulates emissions associated with the sources from which the utility procures electricity. This is essentially using market data (energy transaction data) to select sources for source-based accounting, rather than for load-based accounting and attribution to load. This is the interpretation of references to electricity sold to Oregon customers in statute as “scoping phrases” for a generation-based program, in the words of Commissioner Decker at the June 29 REC Workshop.

The difference between this and a load-based policy for LSEs is that the generation attributes are not necessarily delivered to customers, and as a result it does not represent the LSE’s delivered electricity. A load-based emissions policy for LSEs, by contrast, regulates emissions associated with the generation sold and contractually delivered to an LSE’s retail customers. These emissions reflect all market transactions, procurement, and purchasing decisions by the LSE to represent the generation attributes delivered to customers.

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<sup>2</sup> For full definitions and descriptions, see CRS. (2022). *Guide to Electricity Sector Greenhouse Gas Emissions Totals*. Available at: <https://resource-solutions.org/wp-content/uploads/2022/11/Guide-to-Electricity-Sector-Greenhouse-Gas-Emissions-Totals.pdf>.

<sup>3</sup> In our 2022 *Guide to Electricity Sector Greenhouse Gas Emissions Totals*, this is the difference between Totals 7 and 2, load-based and source-based totals for load-serving entities.

<sup>4</sup> A source-based program for LSEs is described in two different papers: as “Total 2” in our 2022 *Guide to Electricity Sector Greenhouse Gas Emissions Totals*, and as “metric #3” in our 2021 *Measuring What an LSE Manages Under a Federal Clean Energy Standard* paper, available at: <https://resource-solutions.org/wp-content/uploads/2021/07/Measuring-What-an-LSE-Manages-Under-a-Federal-CES.pdf>.

This interpretation on HB 2021—as a source-based program for LSEs covering emissions from the sources from which the utility procures electricity—would be confusing to customers and other states and programs. We are not aware of any other source-based program where the LSE is the regulated entity and regulated emissions are based on LSE procurements to serve load. Intuitively, it is difficult to understand electricity from sources that LSEs use to serve load but that is not delivered to load. It reflects a policy decision to regulate delivered electricity that may be different from what is actually delivered. Specified electricity is not delivered to load if the attributes are sold off.<sup>5</sup> It is much easier to understand electricity from generation that is sold and delivered to customers. But that requires delivery of the attributes, in which case you have a load-based program. Customers are defrauded unless the attributes are delivered in a load-based program. Customers are misled in a source-based program that implies or characterizes delivery of specified electricity to load (in this case, emissions reductions from electricity delivered to load) without delivery of the attributes. The confusion results from bending the definition of source-based to be closer to load-based so that LSEs are not required to deliver the attributes.

## **RECs and Load-based Emissions Accounting**

RECs do not change source-based accounts of emissions or reporting of emissions by generators. But they do affect load-based accounts and reporting by providers about the generation that is delivered to customers. In other words, REC retirement is not required for source-based reporting—to report that generation occurring at a certain location, or that owned or contracted generation, is emissions-free. RECs are required to report sold or delivered generation from a renewable resource as renewable or emissions-free. For a load-based program—reporting renewable generation sold to customers in terms of either GHG emissions or renewable fuel type—RECs are required to avoid double counting. Where electric companies report that they are selling or supplying Oregon customers with zero-emissions electricity from renewable sources (to meet the emissions reduction requirements in HB 2021) without the REC, the REC may be sold and used to verify delivery of the same generation to different customers and potentially a different state, as zero-emissions generation, renewable generation, or both. This results in double counting of that generation.

The allocation of emissions from renewable electricity generation to load must match the allocation of renewable energy to load. Emissions and fuel type cannot be separated in terms of where they occur or where they are delivered. Accounting should be consistent among load-based programs, whether they account for emissions or fuel type or both, to avoid false discrepancies between fuel type and emissions accounting.

RECs unequivocally convey both the renewable fuel type and the direct GHG emissions of renewable energy generation. RECs are defined by the state, in the Western Renewable Energy Generation Information System (WREGIS), and in contracts. In Oregon, a REC is defined as a “unique representation of the environmental, economic, and social benefits associated with the generation of electricity from renewable energy sources.”<sup>6</sup> The direct GHG emissions of renewable generation, or the zero emissions benefit, are not excluded. In fact, there are no states

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<sup>5</sup> See CRS. 2023. *The Legal Basis for Renewable Energy Certificates*. v2.0. Available at: <https://resource-solutions.org/wp-content/uploads/2015/07/The-Legal-Basis-for-RECs.pdf>.

<sup>6</sup> OR. ADMIN. R. § 330-160-0015 (17).

where direct GHG emissions are excluded from a REC.<sup>7</sup> REC definitions used by all other major regional renewable energy tracking systems across the country,<sup>8</sup> and certification standards for the voluntary renewable energy market<sup>9</sup> also include the emissions. RECs also convey GHG emissions benefits in energy contracts across markets. RECs would have to be redefined not only in Oregon, but across the West to avoid double counting of emissions, in the case of load-based accounting without RECs. And even were the fuel type and emissions attributes to be separated nationwide to avoid double counting of emissions, each MWh of generation is still double counted, producing suboptimal outcomes for both renewable energy and carbon reduction programs.

RECs may also be used to account for avoided grid emissions associated with delivered or purchased renewable generation.<sup>10</sup> But to be clear, this is not what is being measured or regulated under HB 2021, and neither would RECs be used “as offsets” to adjust reported emissions based on avoided emissions value of the generation. Again, it is the direct emissions attribute associated with generation that is potentially double counted if generation from a renewable generator is counted as delivered to customers in Oregon for HB 2021 compliance and the associated REC is used to demonstrate retail sales of the same generation to different customers.

RECs are used for load-based emissions accounting programs in Oregon and throughout the West, including the following.

- *Clean Fuels Programs (CFPs) in Oregon and Washington and the Low Carbon Fuel Standard (LCFS) in California.* In all three programs, RECs are used to demonstrate use of electricity as a transportation fuel with the emissions rate of renewable electricity generation for calculation of CFP and LCFS credits.
- *The California Renewable Portfolio Standard (RPS) and SB 100.* The California RPS has an explicit GHG reduction purpose,<sup>11</sup> which it could not meet if direct GHG emissions were not included in the compliance instrument. SB 100—California’s “zero-carbon” resources for 100% of retail electricity sales to California end-use customers—will be enforced and verified in part using the existing RPS and RECs.<sup>12</sup>
- *The California Power Source Disclosure program.* RECs are required in order for LSEs to report emissions associated with renewable electricity generation in GHG emissions intensity calculations by retail electricity suppliers.<sup>13</sup>

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<sup>7</sup> See CRS. 2023. *The Legal Basis for Renewable Energy Certificates*. v2.0. Available at: <https://resource-solutions.org/wp-content/uploads/2015/07/The-Legal-Basis-for-RECs.pdf>

<sup>8</sup> See for example, Western Electricity Coordinating Council, Western Regional Generation Information System (WREGIS) Operating Rules (July 15, 2013). Section 2, pg. 2, 4-5. Available at: <https://www.wecc.biz/Corporate/WREGIS%20Operating%20Rules%20072013%20Final.pdf>.

<sup>9</sup> See <https://www.green-e.org/glossary>.

<sup>10</sup> See “consequential” emissions totals in CRS. (2022). *Guide to Electricity Sector Greenhouse Gas Emissions Totals* (available at: <https://resource-solutions.org/wp-content/uploads/2022/11/Guide-to-Electricity-Sector-Greenhouse-Gas-Emissions-Totals.pdf>). RECs contain both the direct and avoided emissions attribute because a MWh of generation from a renewable resource is both zero-emitting (for wind and solar, for example) and has an emissions effect on the grid. Keeping these attributes together in the REC allows for load-based and REC-based programs to deliver both zero-emissions generation from renewable resources and generation that avoids emissions.

<sup>11</sup> See CAL. PUB. UTIL. CODE § 399.11(b)(4)

<sup>12</sup> See Section 1(c) of SB 100. See CAL. PUB. UTIL. CODE § 454.53(a) and (b)(4)

<sup>13</sup> 20 CCR 1393(b)(1) and 20 CCR 1393(c)(1)(B)

- *The Washington Clean Energy Transformation Act (CETA)*. This is a load-based emissions policy for LSEs, regulating the emissions from purchased/sold generation in Washington. RECs are used to verify compliance using renewable resources under CETA.<sup>14</sup>

In Washington, all stakeholders, including PacifiCorp, agreed that RECs associated with energy sold into California with specified emissions should not be available to be counted toward CETA, a load-based emissions standard for LSEs. In other words, they recognized that counting the emissions attribute for delivered electricity in one state affects the eligibility of the REC in other states. At an August 12, 2021 workshop on “interpretations of use,” the joint utilities proposed to put “strong double counting protections in place” requiring that specified source sales to other states are excluded from all compliance.<sup>15</sup> That included ensuring that RECs associated with specified sales for programs that do not require RECs are also excluded. Use of RECs associated with nonemitting energy sold into California was provided as an example of double counting. Regulators in Washington subsequently agreed and determined that those RECs are not eligible under CETA based on its prohibition against double counting, with agreement from all parties.

To dispel a misconception, requiring REC retirement for HB 2021 compliance would be entirely consistent with California policy. In California, emissions are an attribute included in the REC<sup>16</sup> and RECs are used for emissions accounting (see above). California agencies have only determined that RECs should not be used for GHG accounting in the context of the cap-and-trade program and under the Mandatory Reporting Regulation (MRR), and that unbundled RECs may not be reported under the California PSD program. A requirement to retire RECs for HB 2021 compliance would not create a potential conflict with renewable imports to California under the cap-and-trade program because unbundled RECs associated with renewable generators selling electricity into California cannot be used for HB 2021 compliance. It would simply require retail electricity providers to keep the RECs in Oregon.

Comments made by DEQ Staff following its presentation at the June 29 REC Workshop about RECs and GHG accounting perhaps unintentionally but unfortunately omitted distinctions between source-based and load-based policies and as a result misrepresented the consistency of the DEQ’s GHG emissions accounting (and a corresponding HB 2021 program that does not require REC retirement) with neighboring state programs. DEQ Staff noted that not requiring RECs is consistent with GHG programs in other states, presumably referring to cap-and-trade

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<sup>14</sup> RCW 19.405.040(1)(c).

<sup>15</sup> See Slide 4 of Multi-year Compliance with Annual Surplus Accounting, Joint Utility Compromise Compliance Proposal, August 12, 2021, available at: <https://www.commerce.wa.gov/wp-content/uploads/2021/08/Multi-year-Compliance-with-Annual-Surplus-Accounting-Presentation-8-11-21-Final-CLEAN1-Read-Only.pdf>.

<sup>16</sup> RECs are defined as including “all renewable and environmental attributes” (CAL. PUB. UTIL. CODE § 399.12(h)(2)). Language excluding “emissions reduction credits” from the attributes included in a REC refers to credits issued by local district air boards for reductions in the emission of air contaminants that can be used to offset certain future increases. It is not related to the direct GHG emissions factor attribute of renewable energy contained in the REC or avoided grid GHG reduction claims for REC consumers. The California Energy Commission’s RPS Eligibility Guidebook also does not say that the direct emissions attribute of generation is not included in the REC. Rather, it says that renewable energy reported as a specified import under cap-and-trade can also be used for RPS compliance in California.

programs in California and Washington. But not all GHG accounting is source-based and there are several load-based GHG programs in neighboring states that DEQ Staff failed to mention. Their comments also misrepresented regional discussions, e.g. as a part of the Western Climate Initiative (WCI), about the role of RECs in GHG accounting. It is agreed that RECs are not needed for source-based emissions accounting and they do not confer avoided emissions value under a cap-and-trade program. RECs do not change the emissions profile of a generator any more than a power contract does. But like a contract, RECs are used to determine the generation that is used or purchased, and associated emissions, for load-based accounting. DEQ uses power contracts in precisely this way for its GHG accounting program, but not RECs, which it nevertheless characterized as source-based.

However, ORS 468A.280(4)(a) refers to “electricity that is purchased, imported, sold, allocated or distributed for use in this state by an electric company.” Guidance from DEQ for GHG Emissions Accounting for House Bill 2021<sup>17</sup> repeatedly refers to “the emissions associated with the electricity sold/supplied to Oregon” and includes a section on “removal of non-retail sales.” DEQ Staff’s presentation at the June 29 REC Workshop describes reporting “emissions from the generation of electricity supplied to end users in Oregon.” DEQ uses power contracts and market data to track electricity to Oregon load and account for “emissions associated with electricity use” in Oregon. In that case, it is unclear how the sale of generation attributes (in the form of a REC) to a different entity in Oregon or outside of Oregon would not constitute double counting if those attributes can be used to report emissions.

The Brattle Group recently released a *Greenhouse Gas and Clean Energy Accounting Methodology Catalog*<sup>18</sup> that evaluates types of GHG programs in the West and includes perspectives from utilities in Western states on these programs, including perspectives on the use of RECs for different GHG programs. These perspectives acknowledge the value of RECs for RPS but express that they are not clearly aligned with GHG emissions accounting and can create inconsistencies. But to the extent that RECs correspond to a MWh of renewable energy delivered to a particular customer or customer group, which is precisely their purpose under all RPS programs, they also correspond to a MWh of GHG-free supply delivered to those customers (where the resource is GHG-free, e.g. wind, solar, hydro). RECs are used in exactly the same way in an emissions accounting context as they are for fuel type accounting in an RPS context—to verify delivery of specified power—and they are just as important in that context for the same reason. RECs are consistently used to track attributes, and emissions from generation (e.g. zero) in particular, to load, both within and outside of RPS programs. While it is true that certificates are not issued in WREGIS for all resources, RECs should be used to track the attributes of generation for which they are issued. Not doing so risks double counting. And expansion of certificate systems to all resources would provide greater consistency and additional benefits. While RECs are disconnected from reliability and transmission constraints that govern utilities’ operational decisions, this disconnect does not affect the importance of REC retirement for accurately accounting for emissions delivered to retail load. Utility perspectives referring to

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<sup>17</sup> Oregon DEQ. (Updated Dec 2022). *GHG Emissions Accounting for House Bill 2021: Reporting and projecting emissions from electricity using DEQ methodology*. Available at:

<https://www.oregon.gov/deq/ghgp/Documents/HB2021EFGuidance.pdf>

<sup>18</sup> The Brattle Group. (June 2023). *Greenhouse Gas and Clean Energy Accounting Methodology Catalog*. Available at: [https://www.brattle.com/wp-content/uploads/2023/07/2023-06-27-GHG-Accounting-Catalog\\_v2.pdf](https://www.brattle.com/wp-content/uploads/2023/07/2023-06-27-GHG-Accounting-Catalog_v2.pdf).

other inaccuracies and inconsistencies associated with use of RECs for GHG accounting are not substantiated in the report. However, utility perspectives in the report do recognize that RECs are used for GHG accounting or emissions rate calculations and required in state policies, which supports the idea that RECs should be considered in GHG policy to ensure accurate accounting across the region.

In summary, if HB 2021 is load-based and REC retirement is not required for renewable energy used for compliance, double counting is unequivocal. Double counting would mean that Oregon customers are not getting clean energy and the emissions associated with electricity delivered to customers are not actually being reduced.

### **Effects of the Commission's Decision on RECs on Other Programs**

The Scoping Order invites identification of programs and issue areas that the Commission should revisit in the case that REC retirement is not requirement for HB 2021. If HB 2021 is load-based, this would result in double counting. We have previously commented on the potential impacts of double counting to other programs, both inside and outside of Oregon.<sup>19</sup> The Oregon RPS program and CFP in particular would be affected. For both programs, RECs associated with renewable energy counted toward compliance with HB 2021 by a retail electricity provider should not be used under these programs by a different entity. The Commission should not seek to limit the use of RECs for compliance in these programs in order to avoid these impacts. That would further limit the effectiveness of Oregon's programs and increase the risk of double counting with programs outside of Oregon.

Outside of Oregon, double counting would mean less incremental impact for Oregon's programs on regional emissions and renewable energy development. Regulators in other states and voluntary programs would need to limit the eligibility of Oregon RECs (and RECs associated with all generation reported for HB 2021 compliance) to prevent double counting in their load-based programs. Washington in particular should not accept Oregon RECs for CETA alternative compliance. More broadly, double counting could result in legal challenges to contracts for power and REC purchases, damage the integrity of RECs and REC-based programs more broadly, and slow overall progress toward state and regional climate and renewable energy goals.

If HB 2021 is source-based, there are both potential environmental disadvantages for the region and consumer protection (claims and disclosure) obligations for Oregon retail electricity providers and the state. Regionally, this would produce a situation wherein there is a source-based GHG program for LSEs (in Oregon) located next to a load-based program for LSEs (e.g. CETA in Washington). Technically there would not be double counting of attributes, but utilities could use the same generation for compliance in multiple states (for both source-based and load-based compliance), which means less incremental impact for both programs on regional clean energy development. There is also the potential for consumers to nevertheless misunderstand the program, what they can claim, and marketing and claims made by the utilities. If HB 2021 is

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<sup>19</sup> See CRS's comments under Docket UM 2225 dated Jan 11, 2023 (<https://edocs.puc.state.or.us/edocs/HAC/um2225hac16462.pdf>), Sept 30, 2022 (<https://edocs.puc.state.or.us/edocs/HAC/um2225hac144239.pdf>), and June 10, 2022: <https://edocs.puc.state.or.us/edocs/HAC/um2225hac93431.pdf>.

source-based, we request a written Order by the Commission stating that there are no retail claims for Oregon customers under this program. Utilities should not make renewable energy delivery claims to customers, or claims that may be understood by consumers as renewable energy delivery claims, without retiring RECs on their behalf.<sup>20</sup>

There are additional implications for required climate-related disclosures per U.S. Securities and Exchange Commission (SEC) proposed regulation and environmental, social, and corporate governance (ESG) reporting more broadly. A source-based accounting program will not produce the consumption information that consumer companies reporting market-based scope 2 emissions will need. There will be a discrepancy between the utilities' reporting to the state and the load-based figure that they will need to provide to customers (reflecting attribute ownership). CRS has recommended in comments to the SEC that it should not accept scope 2 calculations based on utility data from state disclosure/compliance programs unless that data reflects attribute transactions and ownership.<sup>21</sup>

## Centralized Wholesale Electricity Markets and RECs

The latter portion of the June 29 REC Workshop was dedicated to the topic of emissions accounting in centralized markets and how an interpretation of HB 2021 as either load-based or source-based, and a potential requirement for REC retirement, may affect participation in and the program's general compatibility with centralized markets, per Sec 15 of HB 2021. OPUC Staff concluded that interpreting HB 2021 as a generation-based standard will allow utilities to operate most effectively in a centralized market. But interpreting HB 2021 as a generation-based standard will not change HB 2021 into a GHG pricing program or obviate the need for resource-specific attribution in the market. In fact, HB 2021's compatibility with and effect on centralized regional wholesale markets does not hinge on a decision about RECs. But double counting does.

In general, both source-based and load-based policies can coexist with an organized market. The regions of the country with organized markets (except Texas) all include states with load-based programs that use RECs (e.g., for load-based RPS) and cap-and-trade (source based). However, when states require tracking of attributes (e.g. emissions) *with* energy, whether RECs are used for verification or not, that limits the size of the market for clean energy and from which the state can serve its consumers. That can look like a state that mandates delivery of specified power or power with specified emissions from neighboring states to their state, or a state that puts a price on emissions associated with imported power, or a state that requires emissions reductions from generation procured to serve load in the state. Washington requires bundled RECs and energy for primary compliance with CETA. California assigns attributes (emissions) to delivered energy without the RECs for imported electricity under cap-and-trade. Oregon will either require bundled RECs with energy (load-based) or specified energy to serve load without RECs (source-

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<sup>20</sup> See Letter from James A. Kohm, Assoc. Dir., Div. of Enf't, Bureau of Consumer Prot. to R. Jeffrey Behm, Esq., Sheehey, Furlong & Behm, P.C. (FTC Feb. 5, 2015),

[https://www.ftc.gov/system/files/documents/public\\_statements/624571/150205gmletter.pdf](https://www.ftc.gov/system/files/documents/public_statements/624571/150205gmletter.pdf).

<sup>21</sup> CRS. (June 17, 2022). *Comments of Center for Resource Solutions in Response to the Enhancement and Standardization of Climate-related Disclosures for Investors*. Sec. III.C.2.e. Market-based Data Considerations. Pg. 19-20. Available at: <https://resource-solutions.org/wp-content/uploads/2022/06/s71022-20132151-302642.pdf>.

based) for compliance with HB 2021. The effect on the market is the same because the market must provide resource-specific attribution.

Ignoring the REC does not improve alignment with organized wholesale markets. It would only double count. The market will still need to accommodate requirements to report specified generation to load. Alternative methods to allocate specified power in these markets are effectively performing the same function as RECs, but they create inconsistency. Requiring RECs, on the other hand, will force alignment of accounting and potentially prevent the invention of alternative allocation instruments. Consistent accounting and tracking methods and avoiding double counting support market efficiency.

At the June 29 REC Workshop, OPUC Staff presented slides 32 and 33 on how “RECs don’t follow market dispatch” and “challenges using RECs for compliance,” respectively. The “Imports to Oregon” example and question on slide 33 says: “If the market dispatches excess solar generation from California to serve Oregon load, there is no way for the Oregon utility to acquire (and retire) RECs for that imported electricity. If RECs are required, how would imports be counted toward HB 2021 requirements?” The correct question is not about RECs, but rather specified energy delivery, procurement, or reporting requirements that tie the attributes to the energy in an organized market. State programs must demonstrate specified imports somehow, whether they use RECs for verification or not. Replacing the word “RECs” with the word “attributes” makes this clear. It is not that there is no way to acquire RECs for that imported electricity. It is that there is no way to verify resource-specific attributes (emissions) for that imported electricity from the market because it is unspecified. If resource-specific attributes (emissions) are required, how will market imports be counted toward HB 2021 requirements? It is not the RECs, but rather the tying of attributes to the power at all that creates the challenge. This was confirmed by the California Independent System Operator (CAISO) in its Final Proposal for the Extended Day-Ahead Market (EDAM), which recommends unbundling in state programs and emphasizes that dispatch in the market does not convey attributes.<sup>22</sup>

The solution is not to ignore RECs. That will not solve the problem of tracking the energy. On the contrary, using RECs can avoid double counting and provide solutions in the future. In fact, it is not true that “there is no way for the Oregon utility to acquire (and retire) RECs for that imported electricity.” The Oregon utility could have a contract with the solar generator to buy the RECs associated with generation bid into the market. The state determines whether that transaction is eligible to meet specified delivery reporting requirements. In the end, we see this question as a red herring with respect to whether or not REC retirement should be required to avoid double counting for HB 2021.

Slide 33 also included an example and question about exports from Oregon: “If the market dispatches excess wind generation from Oregon to serve Washington load, the wind will be

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<sup>22</sup> California Independent System Operator. (Dec 2022). *Extended Day-Ahead Market Final Proposal*. Pg. 110: “The ISO makes no claim to a resource’s environmental attributes, either for itself or on behalf of its market participants, as a result of a dispatch in its markets” and “some states require deliverability to the service territory of the purchasing utility for a utility to claim the REC. This type of policy can prohibit market participation and, consequently, efforts to lower emissions in the west.” Available at:

<http://www.caiso.com/InitiativeDocuments/FinalProposal-ExtendedDay-AheadMarket.pdf>

treated as emissions-free in Washington's cap-and-invest program, even without RECs. Would that make the wind ineligible to count toward Oregon's RPS?" The answer is yes if Oregon interprets the emissions-free import under cap-and-invest to represent a claim on the renewable energy attributes by Washington. This would be consistent with Washington's interpretation of California imports under cap-and-trade (with agreement from all stakeholders, including the joint utilities) and its decision not to allow RECs associated with California imports to be eligible under CETA. Ensuring that the attributes are delivered to and used in Washington, and not used for the Oregon RPS, will be easier to track with RECs. Oregon could instead interpret the Washington import as not representing a claim on the attributes for Washington, in which case the Oregon RPS could decide to allow those RECs for compliance.

Underlying this discussion of RECs and centralized markets is the fact that CAISO is not using RECs to attribute emissions in their markets to states/zones with GHG pricing programs and the assumption that therefore Oregon should also not use RECs to attribute emissions in its programs, given the expected expansion and benefits of these markets in the West. In fact, the opposite is true. There are key differences between CAISO's attribution and Oregon's: 1) CAISO is allocating emissions to states/zones with carbon pricing programs, 2) the GHG attribution mechanism in the market does not attribute to utility load and still needs to be reconciled with whatever accounting the state does for emissions delivered to utility load, and 3) "the ISO makes no claim to a resource's environmental attributes, either for itself or on behalf of its market participants, as a result of a dispatch in its markets."<sup>23</sup> Requiring the RECs for state programs that require/regulate specified energy (or accounting of specified energy) actually brings CAISO's allocation into harmony with REC systems and prevents double counting resulting from having two different methods/instruments for allocating emissions (one with the energy in the market and one with the REC). Not requiring the RECs for state programs does not necessarily bring state programs into alignment with the CAISO allocation, it simply creates the potential for double counting. CAISO should also coordinate that allocation with REC systems, again to prevent a misunderstanding of the effect of their allocation on attributes and claims. But regardless, states should require RECs for specified renewable energy if they intend for those programs to deliver attributes.

Other arguments that RECs cannot be used because future markets will not necessarily allocate at all or it is unclear how they will allocate, do not change the fact that state policy requires allocation and only open the door for alternative allocation and accounting methods that could introduce greater inconsistency and double counting. State program rules can also be changed in the future to accommodate new market and procurement realities and new tracking systems and methods, per Section 15(d) of HB 2021. Whereas, double counting resulting from not requiring REC retirement for load-based accounting would occur now.

## **Regulatory Surplus for Voluntary Buyers of Renewable Energy**

Both the Scoping Order and the Staff presentation slides for the June 29 REC Workshop briefly address HB 2021's impact on voluntary renewable energy programs in Oregon,<sup>24</sup> though this

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<sup>23</sup> California Independent System Operator. (Dec 2022). *Extended Day-Ahead Market Final Proposal*. Pg. 110. Available at: <http://www.caiso.com/InitiativeDocuments/FinalProposal-ExtendedDay-AheadMarket.pdf>.

<sup>24</sup> See Slide 4 of the Staff Presentation Slides for the June 29 REC Workshop and pg. 9 of the Scoping Order.

issue was not discussed at the June 29 REC Workshop. While we understand that this may be the subject of future Staff-led work addressing HB 2021's impacts, we provide some comments here.

Double counting refers to the situation where the same renewable energy generation or its attributes are counted or claimed multiple times or by multiple parties. This would mean that the generation and attributes are not real. "Regulatory surplus," on the other hand, refers to renewable energy generation and associated benefits that are beyond what is required by laws and regulations. For this reason, regulatory surplus has been essential to voluntary claims. Without regulatory surplus, voluntary consumers—while they can credibly claim to be using renewable energy, provided the RECs are exclusively delivered—may not be having the impact that they expect. Voluntary procurement simply subsidizes compliance for regulated entities, and voluntary demand for renewable energy and investment may suffer as a result.

First and foremost, the state should avoid double counting. If HB 2021 is load-based and REC retirement is not required, RECs associated with generation used for HB 2021 compliance cannot be used for voluntary program sales by a different entity because that would represent double counting. But HB 2021's required reductions at sources of purchased electricity or from electricity sold to customers in Oregon mean that voluntary renewable energy counted toward this required reduction target would not be surplus to regulation. If HB 2021 is load-based and REC retirement is required or where RECs are nevertheless retired by the same entity reporting the generation for compliance, renewable generation and RECs used for HB 2021 compliance would not be surplus to regulation. And if HB 2021 is source-based, renewable generation used for HB 2021 compliance would also not be surplus to regulation.

The Green-e® Energy program currently requires that supply used for Green-e® certified sales be surplus to regulation. According to current Green-e® program rules, renewable energy from post-baseline facilities (i.e. with an online date after 2012) that is counted toward HB 2021 would not be eligible for Green-e® certified sale. In 2022, over 2 million MWh of renewable energy from Oregon supplied Green-e® certified sales and nearly 6 million MWh of Green-e® certified renewable were purchased by Oregon customers. That makes Oregon one of the most vibrant and important voluntary markets for renewable energy in the country.

Without further action by the Commission, voluntary buyers in Oregon must purchase their certified renewable energy (from post-2012 facilities and from all facilities after 2027) from outside of the state or region. In this case, voluntary purchasers will be supporting economic investments in other states or regions. To the extent that some voluntary purchasers may only be motivated to purchase local or in-state renewable energy, counting voluntary renewable energy toward GHG compliance may reduce overall voluntary demand. Either result would have negative impacts on the growth of renewable investments in the region and eliminate any potential compliance contributions that strong voluntary programs would otherwise offer. Use of generation sold in voluntary programs for HB 2021 compliance may also conflict with marketing for those programs by utilities that has claimed that voluntary customers will go further and faster than regulation.

In addition, the Oregon CFP requires Green-e® certification for RECs.<sup>25</sup> If RECs from post-2012 facilities associated with generation counted toward HB 2021 are not eligible for Green-e® certification, these RECs are also not eligible for the Oregon CFP. Furthermore, the Green-e® program requires allowance retirements on behalf of RECs from both California and Washington,<sup>26</sup> and RECs retired for any LCFS or CFP cannot use the voluntary renewable energy allowance set-aside mechanisms in those states for free allowances.<sup>27</sup> As a result, RECs from California and Washington used for the Oregon CFP must independently purchase allowances, increasing their cost. As a result, it may be that nearly all RECs used for the Oregon CFP come from outside of Oregon, Washington, and California.

To restore regulatory surplus and protect the voluntary market in Oregon, voluntary renewable energy generation must not be reported for HB 2021 compliance. One solution could be to remove the retail load of voluntary renewable energy customers (the load for which voluntary renewable energy is purchased) from HB 2021 compliance plans and reporting. According to DEQ Staff, the DEQ GHG accounting program currently requires utilities to include all retail sales. However, HB 2021 does not appear to either specify that voluntary customer retail load or all retail load must be included, or prohibit voluntary customer load from being excluded. We ask the Commission to investigate whether the load of customers participating in voluntary renewable energy programs can be excluded from HB 2021 compliance, or whether it can clarify reporting requirements for HB 2021 such that retail electricity providers report compliance with clean energy targets for retail load of customers not participating in voluntary renewable energy programs.

The voluntary market leverages private investment to reduce the environmental and health impacts of electricity generation. In general, we recommend that states design GHG regulations to support and enhance, rather than undercut, voluntary markets and motivate more businesses to invest in clean energy with their private funds.

## Conclusion

If the Commission interprets HB 2021 to be generation-based, then REC retirement is not required. But there should be clarification in an Order by the Commission, and disclosure by utilities, that there are no retail claims for Oregon customers. If the Commission interprets HB 2021 to be load-based and REC retirement is not required, then there can be double counting. In this case, HB 2021 is not actually delivering clean power to Oregon. Therefore, the only way for HB 2021 to deliver clean power to Oregon customers is for the Commission to interpret it as a load-based policy and require REC retirement for renewable generation. In addition, we recommend that the load of voluntary renewable energy customers in Oregon be excluded from HB 2021 compliance plans and reporting in order to facilitate voluntary renewable energy purchasing and investment.

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<sup>25</sup> OAR 340-253-0470(5)(a)

<sup>26</sup> Green-e® Renewable Energy Standard for Canada and the United States v4.2, Sec. A.5 and A.8

<sup>27</sup> California Air Resources Board (CARB). (September 2020) Guidance on Retiring Allowances from the Voluntary Renewable Electricity Reserve Account. Pg. 3 [https://ww2.arb.ca.gov/sites/default/files/cap-and-trade/guidance/vre\\_guidance.pdf](https://ww2.arb.ca.gov/sites/default/files/cap-and-trade/guidance/vre_guidance.pdf)

CARB. (April 2019). Low Carbon Fuel Standard (LCFS) Guidance 19-01. Book-and-Claim Accounting for Low-CI Electricity. Pg. 2. [https://ww2.arb.ca.gov/sites/default/files/classic/fuels/lcfs/guidance/lcfsguidance\\_19-01.pdf](https://ww2.arb.ca.gov/sites/default/files/classic/fuels/lcfs/guidance/lcfsguidance_19-01.pdf)

Please let me know if we can provide any further information or answer any other questions.

Sincerely,

/s/  
Todd Jones  
Director, Policy