

## DOCKETED

<b>Docket Number:</b>	16-RGO-01
<b>Project Title:</b>	Regional Grid Operator and Governance
<b>TN #:</b>	212192
<b>Document Title:</b>	Sierra Club Comments on Regional Grid Operator and Governance Workshops
<b>Description:</b>	N/A
<b>Filer:</b>	System
<b>Organization:</b>	Sierra Club California/Travis Ritchie
<b>Submitter Role:</b>	Public
<b>Submission Date:</b>	7/7/2016 5:03:01 PM
<b>Docketed Date:</b>	7/8/2016

*Comment Received From: Travis Ritchie*

*Submitted On: 7/7/2016*

*Docket Number: 16-RGO-01*

## **Sierra Club Comments**

*Additional submitted attachment is included below.*



July 7, 2016

California Energy Commission  
Docket Office  
1516 Ninth Street  
Sacramento, California 95814

Re: Regional Grid Operator and Governance (Docket No. 16-RGO-01)

### **Sierra Club Comments**

Sierra Club California appreciates this opportunity to submit these comments to California Energy Commission Docket No. 16-RGO-01, regarding recent Regional Grid Operator and Governance workshops and the California Independent System Operator's (the "CAISO") Proposed Principles for Governance of a Regional ISO ("Governance Proposal"). Sierra Club does not address each of the eight topics put forth in the Governance Proposal. Rather, these comments address Sierra Club's overall concern about the timing of the process and the need to develop clear greenhouse gas ("GHG") policies before granting CAISO authority to form a regional market.

#### **A. Sierra Club Recommends That California Refrain From Authorizing CAISO to Form a Regional Organization with PacifiCorp at This Time.**

Sierra Club supports the work currently being conducted by the California Legislature, the Governor's Office, several state agencies, and numerous stakeholders across the region to discuss and advance the goal of developing a regional system operator ("RSO"). The development of a region-wide Western RSO may, under the right conditions, provide substantial benefits that accelerate the development of renewable resources, decrease regional GHG emissions, and increase the efficient commitment of energy resources in California and the region. However, those conditions do not currently exist. The Governance Proposal put forth by the CAISO is a useful tool in the ongoing development of an RSO, but the current Proposal does not ensure that California will be able to maintain its progress in advancing toward the goal of a clean and carbon-free electric grid. Before authorizing the expansion of CAISO into a Western RSO, California must confirm that it will continue to hold the necessary authority to establish and enforce policies to ensure that consumption of electricity by its citizens does not increase coal plant dispatch and GHG emissions in the region.

Sierra Club agrees with proponents of an RSO that better regional coordination can reduce the costs of renewable energy development and facilitate better integration of renewable generation into the system. However, regional markets have also historically provided a benefit

to incumbent coal plants.<sup>1</sup> CAISO's SB 350 studies confirmed this effect, showing an increase in coal plant dispatch of up to 3% in 2020.<sup>2</sup> Although that effect leveled off and returned to current production levels by 2030, coal plants remained a significant source of energy generation in the expanded market modeling throughout the study period.

California has taken a leadership role in establishing policies to promote a sustainable energy future that reduces GHG emissions and encourages energy efficiency and renewable resources. These policies – not just markets – are responsible for the dramatic decline in California's reliance on coal generation over the past ten years. In 2006, with the passage of California's emission performance standard, SB1368 (Perata, Chapter 598, Statutes of 2006), the Legislature found and declared that, "[i]n order to have any meaningful impact on climate change, the Governor's goals for reducing emissions of GHGs must be applied to the state's electricity consumption, not just the state's electricity production."<sup>3</sup> As a result of that statute and implementing regulations, as well as other important policies established by the state, California's investor-owned and public utilities eliminated long term investments in out-of-state coal plants, and California is on course to be nearly coal-free in the coming years. However, that law does not apply to PacifiCorp's investments in its extensive coal fleet, despite the fact that PacifiCorp's system would be relied on to serve California loads in an expanded RSO.

The threat of the RSO leading to increased coal dispatch in the region is an issue that should be addressed through policy mechanisms, and as discussed in more detail below, those policies must be established before the RSO is formed. As it stands today, there is no "off-the-shelf" solution to address the risk that the RSO will result in increased coal dispatch in the region or otherwise extend the lives of PacifiCorp's numerous coal plants. To the extent proponents have pointed to the EIM GHG adder mechanisms as a potential solution, recent problems related to the accounting of GHGs in the EIM show that the GHG adder mechanism is flawed, which in turn further emphasizes the need for California to retain its authority to develop and refine environmental policy solutions that will be effective in a regional day-ahead market. Sierra Club therefore recommends that the stakeholders in this process continue to build on the good work that has already been done, but that California refrain from granting CAISO unconditional authority to form a RSO unless and until clear mechanisms have been established to ensure that coal units do not benefit from expanded access to California customers.

---

<sup>1</sup> See, B. Babcock, *et al.*, "Price Signals and Greenhouse Gas Reduction in the Electricity Sector," Navigant Consulting, 2009 (finding large coal unit heat rates improved by 9.4% from 1998 to 2007); H.S. Chan, *et al.*, "Efficiency and Environmental Impacts of Electricity Restructuring on Coal-fired Power Plants," August 2012 (finding that the efficiency of coal plants improved by 2%–3% from 1991 to 2005 in restructured markets).

<sup>2</sup> CAISO, "Clean Energy and Pollution Reduction Act Senate Bill 350 Study: Preliminary Results," May 24, 2016, p. 152-153; *see, also*, K. Woodruff, "Efficient Electricity Markets v. GHG Reduction: The Coal Conundrum," CRR 29th Annual Western Conference, June 23, 2016.

<sup>3</sup> SB1368, Section 1(k).

## B. Greenhouse Gas Policies Must be Established Before Granting CAISO Authority to Form a Regional Market

The establishment of a RSO threatens to increase regional coal dispatch and side-step the emissions performance standard if proper policies are not put in place before the regional market is established. PacifiCorp owns and operates the largest fleet of coal generating units in the Western United States, and coal accounts for over 60% of PacifiCorp's energy mix. The establishment of the RSO could result in the increased dispatch of those out-of-state coal units to serve California loads, or - and just as concerning - the market could result in the secondary dispatch of out-of-state coal to serve loads outside of California that had previously been served by cleaner resources that are re-dispatched into California (i.e. resource shuffling). In either scenario, California's participation in the market creates the risk that coal dispatch in the region will increase.

The potential to increase the utilization and profitability of coal plants in a regional market is particularly concerning for PacifiCorp because that utility is facing a series of near term capital expenditure decisions related to its coal fleet. For example, under the Clean Air Act's Regional Haze Rule, PacifiCorp must install expensive pollution controls (SCRs) at eight of its coal units in Utah and Wyoming to control oxides of nitrogen ("NOx") pollution. Based on the current economics of those units, many if not all of those retrofits are likely unfavorable compared to other alternatives. However, increasing the efficiency and dispatch of those units in a regional market would improve their economic viability, which in turn adds an incentive for PacifiCorp to pursue those expenditures and extend the lives of those plants. The following is a table of SCRs that are required in Wyoming and Utah. Note that this is just a portion of the coal units currently operating in PacifiCorp's system.

Unit	Location	Size (MW)	CO2 (tons/year) <sup>4</sup>	SCR Deadline
Jim Bridger 1	WY	608	3,673,605	2021
Jim Bridger 2	WY	617	4,086,673	2022
Wyodak	WY	402	3,406,657	TBD <sup>5</sup>
Dave Johnston 3	WY	255	1,757,772	TBD <sup>5</sup>
Huntington 1	UT	541	3,285,650	2021
Huntington 2	UT	496	3,451,638	2021
Hunter 1	UT	525	3,344,103	2021
Hunter 2	UT	525	3,478,945	2021
<b>Total = 26,485,043 CO2 tons/yr</b>				.

If the RSO provides the wrong incentives, California's electricity consumption could provide a lifeline to some or all of these coal units that otherwise are likely to retire. The detrimental GHG impacts that would result from saving just a couple of these units, let alone all eight, would quickly swamp the overall GHG benefits predicted by the SB350 studies in 2030. This risk is something that can and should be addressed through policies that provide a backstop

<sup>4</sup> Table shows higher of 2014 and 2015 emission data.

<sup>5</sup> SCR requirement is currently stayed pending appeal.

to ensure that the market does not create an incentive to keep coal plants online. Exactly what those policies look like is unclear at this time, and a substantial amount of work will be required to craft effective solutions that promote California's environmental and energy goals without running afoul of legal challenges. However, it is clear that this work must be completed, or at a minimum substantially developed, prior to establishing the regional market because California will be severely limited from making policy changes after the market is up and running.

### **C. Constraints on California Policy Development Post-RSO**

Once California joins a regional market, it will become much more difficult for the state to develop effective policies to promote a transition away from coal generating resources. While California agencies would likely retain the authority in an expanded market to regulate the long-term investments of California-based utilities, under the current proposals those agencies would have no such power over the generation and procurement decisions of PacifiCorp or other participants in a RSO. Furthermore, recent case law suggests that California may face substantial hurdles in maintaining its existing environmental policies in a regional market, let alone developing policy solutions for problems that have yet to be confronted or anticipated.

The Federal Power Act gives the Federal Energy Regulatory Commission ("FERC") authority to regulate wholesale rates for interstate electricity markets. 16 U.S.C. § 824(a). Under the Supremacy Clause of the Federal Constitution, this statute preempts state efforts to set wholesale electricity rates. *See* U.S. Const. art. VI, cl. 2; *Hughes v. Talen Energy Marketing*, 136 S. Ct. 1288, 1297 (2016). There are multiple examples of state laws being struck down for crossing into FERC's regulatory domain of wholesale rates for transmission of electricity. *See e.g., Hughes*, 136 S. Ct. at 1292, 1299 (holding that Maryland's program to provide subsidies to new energy generators effectively set wholesale electricity rates and was consequently preempted by FERC's authority under the Federal Power Act); *North Dakota v. Heydinger*, \_\_\_ F.3d \_\_\_ (8th Cir. 2016) (holding that Minnesota law restricting contracts for coal power was invalid); *PPL EnergyPlus, LLC v. Solomon*, 766 F.3d 241, 252-53 (3d Cir. 2014) (finding that New Jersey's Long-Term Capacity Pilot Project, incentivizing construction of new power plants by fixing rates received by new electric generators, conflicted with FERC's rate-setting power). Similarly, state-based regulations affecting out-of-state generation also risk constitutional challenge if not properly formed. *See, North Dakota v. Heydinger*, \_\_\_ F.3d \_\_\_ (8th Cir. 2016).

These examples are not to say that California cannot craft policy solutions that support its clean energy goals without violating federal law. To the contrary, California has worked carefully with CAISO to ensure that its energy laws and regulations are permissible. For example, FERC recently approved CAISO's tariffs that implemented the GHG adder mechanism ("GHG Adder") for the EIM, which was intended to address costs to comply with California's GHG regulations for resources that are deemed to have been imported into California. 147 FERC ¶ 61231, 62412 (June 19, 2014).<sup>6</sup> That policy was the result of careful collaboration between

---

<sup>6</sup> Notably, FERC approved the tariff based on its finding that participating resources could avoid California regulation by signaling through the GHG Adder that they do not wish to be dispatched into California. This type of "opt-out" would not be available or applicable in a day-ahead

CAISO and the California Air Resources Board. However, that type of close collaboration that provides deference to California policies may be difficult, if not impossible, under the restructured RSO Governance Proposal.

The GHG Adder also highlights the need for ongoing scrutiny and authority from California policy makers to manage its policies because that mechanism is failing. CAISO and CARB recently conducted a workshop on June 24, 2016 to address significant shortcoming in the GHG Adder mechanism. CARB raised the concern that, “EIM optimization results may not in all cases report full GHG burden experienced by the atmosphere as a consequence of electricity consumed in CA.”<sup>7</sup> In other words, the policy mechanism carefully developed by CARB and CAISO may not be working. CAISO further explained how the mechanism may be failing: “Least cost dispatch can have effect of sending low emitting resources to CAISO, while not accounting for secondary dispatch of other resource to serve external demand.”<sup>8</sup> This type of resource shuffling is precisely the type of effect that Sierra Club is concerned about in a regional market: coal plants dispatching more frequently within the region, whether to serve California load directly or to backfill for low emitting resources that are redirected to serve California load.

Fixing the GHG Adder in the EIM will require substantial work on the part of CAISO, CARB and other stakeholders. It is unclear whether a solution is even available that would ensure that the EIM does not contribute to excess emissions into the atmosphere. However, whatever solution is ultimately adopted, it is almost certain to be inapplicable to the day-ahead market. It is critical, therefore, to develop GHG policies for an expanded RSO before the RSO is formed. However, this work has not even started.

At this point in time, there has been no work done on the GHG policies that would be applicable in an expanded RSO. The Governance Proposal emphasizes the desire to preserve state authority, but that power would likely include the ability of states with different perspectives on climate change risks to veto new proposals put forth to manage greenhouse gas emissions. This raises the question of whether a mechanism to address greenhouse gas emissions would even be possible to develop once changes to CAISO’s governance are made. California cannot relinquish its climate goals in exchange for a regional market. The economic benefits that will accrue to California and other states through a regional market will still be substantial if robust mechanisms are put in place ahead of time to ensure that greenhouse gas emissions do not increase.

Furthermore, non-California states and other stakeholders have expressed concern about California environmental policies being exported elsewhere in the region. For example, the Wyoming Office of Consumer Advocate commented, “Devising a policy and method for accounting for GHG emissions would serve no useful purpose in achieving energy policy goals in Wyoming. Rather, imposing a greenhouse accounting protocol, and its associated costs, at the

---

market, and therefore it remains uncertain whether FERC would approve a similar mechanism in a regional day-ahead market.

<sup>7</sup> CARB, “Mandatory GHG Reporting and Cap-and-Trade Program Workshop,” June 24, 2016, p.9.[http://www.arb.ca.gov/cc/capandtrade/meetings/062416/arb\\_and\\_caiso\\_staff\\_presentations\\_updated.pdf](http://www.arb.ca.gov/cc/capandtrade/meetings/062416/arb_and_caiso_staff_presentations_updated.pdf)

<sup>8</sup> *Id.* at p.11

RSO level would only serve to achieve California environmental policies and those of other states with similar environmental policies.”<sup>9</sup> Similarly, the Utah Division of Public Utilities commented, “Utah will not pay for mechanisms created to meet California’s or another state’s greenhouse gas requirements.”<sup>10</sup> Rather than delaying the development of GHG policies that are critical to California’s climate goals until after the RSO is established, which would likely trigger intense disagreements with other participating states, California should clearly establish a baseline for its GHG rules and requirements before authorizing CAISO to form a regional market so that other states may clearly judge whether the benefits of regional coordination justify their participation in a RSO that is designed in the first instance to uphold California’s climate policies.

For these reasons, Sierra Club recommends that California refrain from authorizing CAISO to form a regional market unless and until clear greenhouse gas policies are established to ensure that California’s participation in such a market does not reverse the progress made on eliminating coal from California’s electricity consumption. Stakeholders need time to work through the details of these complicated policies before California grants CAISO the unconditional authority to form a regional market.

Sierra Club appreciates the opportunity to provide these comments.

Sincerely,

Travis Ritchie  
Staff Attorney  
Sierra Club Environmental Law Program  
2101 Webster Street, Suite 1300  
Oakland, California 94612  
(415) 977-5727  
travis.ritchie@sierraclub.org

---

<sup>9</sup> Wyoming Office of Consumer Advocate Comments: on California ISO Governance, Docket 16-RGO-01, July 7, 2016.

<sup>10</sup> Utah Division of Public Utilities Comments on ISO Governance, Docket 16-RGO-01, July 7, 2016.