DOCKETED	
Docket Number:	17-MISC-01
Project Title:	California Offshore Renewable Energy
TN #:	248892
Document Title:	Commissioner Brian L Stone Comments on Energy Commission Workshop on AB 525, Assessing Transmssion Upgrades and invest
Description:	N/A
Filer:	System
Organization:	Commissioner Brian L. Stone
Submitter Role:	Other Interested Person
Submission Date:	2/21/2023 10:03:13 AM
Docketed Date:	2/21/2023

Comment Received From: Commissioner Brian L. Stone
Submitted On: 2/21/2023
Docket Number: 17-MISC-01

California Energy Commission Workshop on AB 525, Assessing Transmssion Upgrades and investments in Offshore Wind

Additional submitted attachment is included below.

February 21, 2023

Commissioner Noemí O. Gallardo
California Energy Commission
715 P Street
Sacramento, CA 95814

Docket 17 MISC-01:
California Energy Commission Workshop on AB 525: Assessing Transmission Upgrades and Investments for Offshore Wind Development off the Coast of California November 10, 2022

Dear Commissioner Noemí O. Gallardo,

I would like to thank you for taking a moment of your time to read this letter on the very important topic of Offshore Wind (OSW). As you are aware, the Biden Administration and the California Energy Commission have set ambitious goals of 25 gigawatts of new electrical energy for California by the year of 2045 to help fight climate change. The use of OSW will be one of the key components in meeting these goals.

California Assembly Bill 525 (Chapter 231, Statutes of 2021) requires the California Energy Commission ("CEC") to develop a permitting roadmap and submit the same to the Natural Resources Agency and the relevant fiscal and policy committees of the California Legislature. The permitting roadmap is required to describe time frames and milestones for the permitting process for offshore wind energy facilities and associated electricity and transmission infrastructure off the coast of California. The CEC has issued the initial AB 525 Draft Conceptual Permitting Roadmap for OSW energy facilities originating in federal waters off the coast of California. But, one of the major stumbling blocks to OSW is the lack of transmission corridors off of the Northern California coast, and specifically from Del Norte County.

In addition, there currently is a misalignment between the existing state boarder between California and Oregon and the existing balancing areas between the California Independent Systems Operator (CAISO) and the Oregon Balancing Authority (OBA). Very simply put, all of Del Norte, Siskiyou and portions of Shasta and Modoc Counties are all lying within the Oregon Balancing Area (note: we will come back to this problem later, see "Misalignment of State lines and Balancing Areas").

Overland Transmission versus Undersea Cable Transmission

One of the major problems is a full and complete discussion of the use of overland transmission

facilities versus the use of undersea cables and their access points along the California coast. A potential new corridor came to our attention as a result of recent comments that were made at the Pacific Ocean Energy Trust (POET) meeting that Brian Stone attended in early November. Basically, the presentation stated that the transmission of wind power over land would be higher than the overall cost of transmitting the power using an undersea cable to bring the power south to Humboldt County.

After reviewing the existing CEC, Pacific Corporation (PC) right of way information and maps from the United States Forest Service (USFS) we question that assumption. It may be correct if a new corridor would require the purchase of many easements, dealing with many landowners in order to acquire the right of way, and the time and expense of filing eminent domain proceedings where necessary with the courts. As we discovered there is a possible right of way that would require less than 10 landowners and possibly as few as two or three.

Currently, PC owns an existing right of way running from just east of the Crescent City Harbor down to the town of Klamath. For the newly proposed route here the PC right of way could be utilized. From the town of Klamath running southerly a new right of way could be created using existing USFS and Bureau of Land Management (BLM) land down to the existing Pacific Gas and Electric (PG&E) substation at Willow Creek, California.

We agree with the assumption that the cost of purchasing right of ways across privately owned land would drive up the cost to the State of California and federal government. Since the federal government, and specifically the Biden Administration, is behind the push for wind power, it makes sense that the federal government should provide a new right of way (see Exhibit A) for the necessary transmission facilities. When you take out the cost of purchasing new right of ways the cost of the new suggested routes make better economic sense than an undersea cable.

Overland Cost Comparison:

Overland costs:

Utilizing a new overland route over federal properties would require about 46 miles of new lines to get the power down to the PG&E substation at Willow Creek, CA. The current cost of construction for a new transmission line over land will cost approximately $3.5 million a mile. The new right of way would be about 60 miles when you include the upgrade to the existing PC right of way and the construction costs across the new segment of the right of way. Therefore, the total cost of construction would be approximately **$161 million** at current costs.

Underwater costs:

The cost to run an undersea cable from the Crescent City call area down to Arcata, California, would be more expensive. The current cost of construction for an undersea cable would cost about $8 million a mile. Using a distance of 70 miles, the construction of an undersea cable would be approximately **$560 million** to construct. This does not include the cost of upgrading the existing transmission lines running overland to the PG&E Willow Creek substation east of McKinleyville, California. The overland segment would be about 30 miles at a cost of $3.5 million a mile. This would add an additional **$105 million** to the cost of the project. All total, the undersea segment and the overland improvements would cost approximately **$665 million**.

It should be noted that numbers provided herein are for comparison purposes only. The estimates included herein are based upon current estimates given to us by transmission planners and are most likely going to be significantly higher since the date of construction could be 5 to 10 years into the future causing the cost to be as much as 50 to 100% higher than the amounts shown herein.

Misalignment of State lines and Balancing Areas

In addition to the overland transmission versus undersea cable problem, there is the following concern. The physical state lines between California and Oregon do not coincide with the electrical balancing grid line between the two states. The balancing area for the California Independent Systems Operators (CAISO) stops at the southern boundary of Del Norte, and Siskiyou counties and it includes a portion of both Shasta and Modoc counties. This came about due to the fact that the PC has a series of dams that generate power along the Klamath River. The California Energy Commission (CEC) and the Public Utilities Commission (PUC) are both aware of this problem. In addition, it should be noted that PC is not part of CAISO, and they are part of the Oregon Balancing Area (OBA).

This means that any of the future OSW call areas located off the coast of Del Norte County technically lies wit in the OBA. The reason for this concern is that there are tariffs on the power originating from the OBA. If the balancing area in question is not resolved, the California ratepayers will be the ultimate loser in this process. The California ratepayers will be paying the tariffs for the life of the wind industry if the existing right of ways owned by PC are used to export the power out of Del Norte County.

Also, if this problem is not resolved the California ratepayers could be saddled with this problem for the life of the offshore wind projects which are now being projected to cover the next 150 to 200 years. The net result will be that the California ratepayers could be paying Billions of dollars in tariffs over the life of the projects.

Yes, the use of undersea cables is a very expensive way around the balancing area problem. If BOEM were to recognize the Oregon Balancing areal line as the dividing area for the two states call areas, then the Del Norte and Brooking call areas would be in effect one call area. The net result is that the rate payers in California are going to be the ones to ultimately pay for this problem with increased cost for the undersea cables that could be in excess of **One Billion dollars** or more when constructed. In addition, the California ratepayers will be paying the increased cost on the money borrowed to finance the undersea cable for the 30 or 40 years once the cable is laid down. But, by recognizing the actual physical state lines as being part of California's area of influence then we have the problem of the tariffs between the two states.

The answer to both of these problems is for the creation of an overland transmission corridor that is for all practical purposes part of the California Balancing Area (CaBA). If the new Corridor were to be part of the PG&E system, we could get around the balancing area problem.

Since the development of OSW is a federally conceived project, then the federal government can and should be willing to provide a transmission corridor over federal lands to help facilitate the development of OSW. The federal government can and should provide federally owned land across existing Bureau of Land Management (BLM) properties and that of the United States Forest Service (USF) to provide the solution to this problem.

Development of a New Public Utility or transfer of authority from PC to PG&E

A possible third solution to these problems would be to create a new public utility or have the existing PC territory that lies within the area of California be included in the PG&E service area. Currently, PC is currently divesting itself from the three dams lying within California on the Klamath River to the Klamath River Restoration Corporation (KRRC). This might be the appropriate time to consider the realignment of the California Balancing area to the actual California and Oregon Border. Currently, Berkshire Hathaway (BH) owns the controlling interest in PC and they may be interested in either of these options.

Therefore, this would be the appropriate time to bring the Department of Energy (DOE) and the Federal Energy Regulatory Commission into this discussion. Since the federal government has the ultimate authority to either create a new utility or have the northern California area transferred from PC to PG&E they need to be brought into the process.

Conclusion

The citizens of Del Norte County needs your help to address these problems. If the problems are not addressed, the California ratepayers will ultimately pay the price in the long run. We would like both the federal and state governments to make informed decisions about the transmission process. It is our belief that an overland transmission corridor would be the most economic path forward for the rate payers by saving them millions if not billions in

infrastructure costs. In addition, By creating a new transmission corridor over federal land would go a long way to alleviating these problems.

We have provided some possible solutions to these problems and the policy makers now need to make an informed decisions on how to resolve the problems.

Again, thank you for your time and interest in this subject. If you have any further question, please contact Commissioner Brian L. Stone at (707) 501-7419 or at brian.louis.stone@gmail.com.

Sincerely,

Brian L. Stone

Brian L. Stone, Commissioner, Crescent City Harbor District and
Board member of the Tri-Agency Economic Development Authority

Wes White

Wes White, Commissioner, President of the Crescent City Harbor District Board, and
President of the Tri-Agency Economic Development Authority

BLS/WW/bls

CC Commissioner David Hochschild
California Energy Commission
715 P Street
Sacramento, CA 95814

CC Commissioner Siva Gunda
California Energy Commission
715 P Street
Sacramento, CA 95814

CC Commissioner J. Andrew McAllister, PHD
California Energy Commission
715 P Street
Sacramento, CA 95814

CC Commissioner Patty Monahan
California Energy Commission
715 P Street
Sacramento, CA 95814

CC: California Energy Commission
c/o Eli Harland, Policy Advisor
715 P Street
Sacramento, CA 95814

CC: Lieutenant Governor Eleni Kounalakis, Commissioner
State Lands Commission
100 Howe Avenue, Suite 100 South
Sacramento CA 95825

CC: Jennifer Lucchesi, Executive Officer
State Lands Commission
100 Howe Avenue, Suite 100 South
Sacramento CA 95825

Exhibit A

Proposed Right of Way