EC&R Development, LLC
353 N. Clark St., 30th FL
Chicago, IL 60654

March 21, 2019

Original Submittal January 25, 2019

Jean Thurston
BOEM, Office of Strategic Resources
760 Paseo Camarillo (Suite 102)
Camarillo, California 93010

RE: Bureau of Ocean Energy Management [Docket No. BOEM–2018–0045] Commercial Leasing for Wind Power Development on the Outer Continental Shelf (OCS) Offshore California—Call for Information and Nominations (Call)

Dear Ms. Thurston,

EC&R Development, LLC appreciates the opportunity to respond to the Bureau of Ocean Energy Management (BOEM) *Call for Information and Nomination for Commercial Leasing for Wind Power Development on the OCS Offshore California* [Docket No BOEM-2018-0045] (the "Call").

EC&R Development, LLC (BOEM Company #15080), a subsidiary of E.ON Climate and Renewables (EC&R), submits with this letter, nominations for proposed commercial wind leases as part of the Call Areas on the OCS offshore California.

To date, EC&R has constructed eleven, and currently operates nine, offshore windfarms in European waters, delivering a capacity of more than 2,400 MW. Additionally, by the end of 2018, EC&R has constructed more than 3,800 MW of onshore wind capacity in the US alone. With its substantial capabilities in offshore wind, onshore wind and solar PV, EC&R is a global leader in the renewables business. With our competencies in developing, constructing and operating offshore windfarms, EC&R has built the knowledge base necessary to successfully deliver projects safely, on time and on budget.

1. Required Nomination Information

Per the Call requirements outlined in Section 7 *Required Nomination Information*, EC&R submits, for BOEM consideration, the following nominations for commercial wind energy leases:

1.1 Commercial Lease Area Nominations

EC&R has conducted an initial evaluation of the **Humboldt**, **Morro Bay**, and **Diablo Canyon** Call Areas using significant and extensive publicly available resources, meteorological and metocean modeling data, and expert review. EC&R's nominated lease areas consider the initial findings from these evaluation efforts, with a specific focus on defining lease areas that are of a suitable and appropriate size to support the potential construction of an up to 800MW or larger

offshore wind farm. Further, the nominated lease areas should allow the space necessary to optimally site potential future facilities with consideration for the needs and uses of all ocean stakeholders, as identified through subsequent outreach and consultation efforts. Maps of the four (4) nominated commercial lease areas are available in Appendix I, as well as in digital spatial format, per the Call requirements.

In general, **EC&R would have interest in leasing one, or more, of the potential commercial wind energy lease areas** that may be defined as part of the area identification process, and as such, requests that BOEM consider there to be competitive interest for each eventual wind energy area, if any, defined within the three subject Call areas.

1.1.1 Humboldt Lease Area

The nominated **Humboldt Lease Area** covers 132,369 acres (536km^2). Sea depth in the eastern part of the lease area is about 550 meters and descends to 1,150 meters in the westernmost part. The site is located 35-55 km west from the coastline and the closest city is Eureka. The nominated lease area description is summarized in the following table:

Protraction name	Protraction No.	Block No.	Sub-block
Crescent City	NK10-07	6975	I, J, K, L, M, N, O, P.
Crescent City	NK10-07	6976	B, C, F, G, I, J, K, M, N, O.
Crescent City	NK10-07	7023	L, M, N, O, P.
Crescent City	NK10-07	7024	C, D, E, F, G, H, I, J, K, L, M, N, O, P.
Crescent City	NK10-07	7025	All.
Crescent City	NK10-07	7026	A, B, C, E, F, G, I, J, K, M, N, O.
Crescent City	NK10-07	7072	D, G, H, K, L, O, P.
Crescent City	NK10-07	7073	All.
Crescent City	NK10-07	7074	All.
Crescent City	NK10-07	7075	All.
Crescent City	NK10-07	7076	A, B, C, E, F, G, I, J, K, M, N, O.
Crescent City	NK10-07	7122	C, D, G, H, J, K, L, O, P.
Crescent City	NK10-07	7123	All.
Crescent City	NK10-07	7124	All.
Crescent City	NK10-07	7125	All.
Crescent City	NK10-07	7126	A, B, C, E, F, G, H, I, J, K, L, M, N, O, P.
Eureka	NK10-10	6023	D.
Eureka	NK10-10	6024	A, B, C, D, E, F, G, H, I, J, K, L, N, O, P.
Eureka	NK10-10	6025	All.
Eureka	NK10-10	6026	All.
Eureka	NK10-10	6027	A, B, C, D, E, F, G, H, I, J, K, M, N.
Eureka	NK10-10	6074	B, C, D, G, H, K, L, O, P.
Eureka	NK10-10	6075	All.
Eureka	NK10-10	6076	All.
Eureka	NK10-10	6077	A, B, E.
Eureka	NK10-10	6124	D, H.
Eureka	NK10-10	6125	All.
Eureka	NK10-10	6126	A, B, C, E, F, G, I, J, K, M, N.
Eureka	NK10-10	6175	All.
Eureka	NK10-10	6176	A, B, E, I.
Eureka	NK10-10	6225	A, B, C, D, E, F, G, I, J, K, M, N.
Eureka	NK10-10	6275	A, B.

1.1.2 Morro Bay Lease Area

The nominated **Morro Bay Lease Area** covers 199,266 acres (806 km2). Sea depth in the eastern part of the lease area is about 900 meters and it descends to 1,100 meters in the westernmost part. The site is located 30-60 km west from the coastline and the closest city is Cambria, located around 45 km from the area. The nominated lease area description is summarized in the following table:

Protraction name	Protraction No.	Block No.	Sub-block
San Luis Obispo	NI10-03	6102	L, P.
San Luis Obispo	NI10-03	6103	M.
San Luis Obispo	NI10-03	6152	D, L, P.
San Luis Obispo	NI10-03	6153	A, B, E, F, I, J, K, M, N, O.
San Luis Obispo	NI10-03	6202	D, G, H, K, L, N, O, P.
San Luis Obispo	NI10-03	6203	All.
San Luis Obispo	NI10-03	6204	I, M.
San Luis Obispo	NI10-03	6251	D, H, K, L, O, P.
San Luis Obispo	NI10-03	6252	All.
San Luis Obispo	NI10-03	6253	All.
San Luis Obispo	NI10-03	6254	A, B, E, F, G, I, J, K, L, M, N, O, P.
San Luis Obispo	NI10-03	6301	C, D, G, H, K, L, M, O, P.
San Luis Obispo	NI10-03	6302	All.
San Luis Obispo	NI10-03	6303	All.
San Luis Obispo	NI10-03	6304	All.
San Luis Obispo	NI10-03	6305	A, E, I, M.
San Luis Obispo	NI10-03	6351	All.
San Luis Obispo	NI10-03	6352	All.
San Luis Obispo	NI10-03	6353	All.
San Luis Obispo	NI10-03	6354	All.
San Luis Obispo	NI10-03	6355	A, B, E, F, I, J, M, N.
San Luis Obispo	NI10-03	6401	All.
San Luis Obispo	NI10-03	6402	All.
San Luis Obispo	NI10-03	6403	All.
San Luis Obispo	NI10-03	6404	All.
San Luis Obispo	NI10-03	6405	A, B, E, F, G, I, J, K, L, M, N, O, P.
San Luis Obispo	NI10-03	6406	M.
San Luis Obispo	NI10-03	6451	A, B, C, D, E, F, G, H, I, J, K, L, N, O, P.
San Luis Obispo	NI10-03	6452	All.
San Luis Obispo	NI10-03	6453	All.
San Luis Obispo	NI10-03	6454	All.
San Luis Obispo	NI10-03	6455	All.
San Luis Obispo	NI10-03	6456	A, B, E, F, G, H, I, J, K, L, M, N, O, P.
San Luis Obispo	NI10-03	6457	E, F, I, J, M, N, O.
San Luis Obispo	NI10-03	6501	B, C, D, G, H.
San Luis Obispo	NI10-03	6502	A, B, C, D, E, F, G, H, I, J, K, L.
San Luis Obispo	NI10-03	6503	A, B, C, D, E, F, G, H, I, K, L.
San Luis Obispo	NI10-03	6504	All.
San Luis Obispo	NI10-03	6505	All.
San Luis Obispo	NI10-03	6506	All.
San Luis Obispo	NI10-03	6507	All.
San Luis Obispo	NI10-03	6508	I, M, N.
San Luis Obispo	NI10-03	6554	D.
San Luis Obispo	NI10-03	6555	A, B, C, D, G, H.
San Luis Obispo	NI10-03	6556	A, B, C, D, E, F, G, H.
San Luis Obispo	NI10-03	6557	A, B, C, D, E, F, G, H.

Protraction name	Protraction No.	Block No.	Sub-block
San Luis Obispo	NI10-03	6558	A, B, C, E, F, G, H.
Sur Canyon	NI10-02	6340	O, P.
Sur Canyon	NI10-02	6390	B, C, D, F, G, H, J, K, L, M, N, O, P.
Sur Canyon	NI10-02	6440	A, B, C, D, F, G, H, J, K, L, N, O, P.
Sur Canyon	NI10-02	6490	C, D, H.

1.1.3 Diablo Canyon Lease Areas

The larger size of the Diablo Canyon Call Area may, after full consultation with all interested stakeholders, eventually allow for two, or more, commercial wind energy lease areas. **The significant outreach efforts undertaken as part of the area identification process will be crucial in defining lease areas that best meet the needs of all potential stakeholders**, but for the purpose of providing initial, illustrative lease area nominations as part of this Call, EC&R proposes the following two commercial wind energy lease areas for BOEM consideration:

1.1.3.1 Diablo Canyon North Lease Area

The nominated **Diablo Canyon North Lease Area** covers 171,985 acres (696 km^2). Water depth in the eastern part of the area is about 650 meters and descends to 1,100 meters in the westernmost part. The area is located from 30-70 km west from the coastline and the closest city is Morro Bay located around 40 km from the project area. The nominated lease area description is summarized in the following table:

Protraction name	Protraction No.	Block No.	Sub-block
San Luis Obispo	NI10-03	6756	M, N, O, P.
San Luis Obispo	NI10-03	6757	M, N, O, P.
San Luis Obispo	NI10-03	6758	M, N, O, P.
San Luis Obispo	NI10-03	6759	M, N, O, P.
San Luis Obispo	NI10-03	6760	M, N, O, P.
San Luis Obispo	NI10-03	6761	M, N, O, P.
San Luis Obispo	NI10-03	6762	M, N, O, P.
San Luis Obispo	NI10-03	6763	M, N, O, P.
San Luis Obispo	NI10-03	6764	M.
San Luis Obispo	NI10-03	6806	A, B, C, D, F, G, H, J, K, L, N, O, P.
San Luis Obispo	NI10-03	6807	All.
San Luis Obispo	NI10-03	6808	All.
San Luis Obispo	NI10-03	6809	All.
San Luis Obispo	NI10-03	6810	All.
San Luis Obispo	NI10-03	6811	All.
San Luis Obispo	NI10-03	6812	All.
San Luis Obispo	NI10-03	6813	All.
San Luis Obispo	NI10-03	6814	A, E, I, M.
San Luis Obispo	NI10-03	6856	C, D, G, H, K, L, P.
San Luis Obispo	NI10-03	6857	All.
San Luis Obispo	NI10-03	6858	All.
San Luis Obispo	NI10-03	6859	All.
San Luis Obispo	NI10-03	6860	All.
San Luis Obispo	NI10-03	6861	All.
San Luis Obispo	NI10-03	6862	All.

Protraction name	Protraction No.	Block No.	Sub-block
San Luis Obispo	NI10-03	6863	All.
San Luis Obispo	NI10-03	6864	A, B, E, F, I, J, M, N.
San Luis Obispo	NI10-03	6906	D, H.
San Luis Obispo	NI10-03	6907	All.
San Luis Obispo	NI10-03	6908	All.
San Luis Obispo	NI10-03	6909	All.
San Luis Obispo	NI10-03	6910	All.
San Luis Obispo	NI10-03	6911	All.
San Luis Obispo	NI10-03	6912	All.
San Luis Obispo	NI10-03	6913	All.
San Luis Obispo	NI10-03	6914	A, B, C, E, F, G, I, J, K, M, N, O, P.
San Luis Obispo	NI10-03	6957	A, B, C, D, E, F, G, H.
San Luis Obispo	NI10-03	6958	A, B, C, D, E, F, G, H.
San Luis Obispo	NI10-03	6959	A, B, C, D, E, F, G, H.
San Luis Obispo	NI10-03	6960	A, B, C, D, E, F, G, H.
San Luis Obispo	NI10-03	6961	A, B, C, D, E, F, G, H.
San Luis Obispo	NI10-03	6962	A, B, C, D, E, F, G, H.
San Luis Obispo	NI10-03	6963	A, B, C, D, E, F, G, H.
San Luis Obispo	NI10-03	6964	A, B, C, D, E, F, G, H.
San Luis Obispo	NI10-03	6965	A, E, F.

1.1.3.2 Diablo Canyon South Lease Area

The nominated **Diablo Canyon South Lease Area** covers 184,217 acres (745.5 km^2). Water depth in the eastern part of the area is about 560 meters which decreases to about 450 meters in the center of the area and further descends to 1,050 meters in the westernmost part. The area is located from 30-70 km west from the coastline and the closest city is Morro Bay located around 40 km from the project area. The nominated lease area description is summarized in the following table:

Protraction name	Protraction No.	Block No.	Sub-block
San Luis Obispo	NI10-03	6957	J, K, L, N, O, P.
San Luis Obispo	NI10-03	6958	I, J, K, L, M, N, O, P.
San Luis Obispo	NI10-03	6959	I, J, K, L, M, N, O, P.
San Luis Obispo	NI10-03	6960	I, J, K, L, M, N, O, P.
San Luis Obispo	NI10-03	6961	I, J, K, L, M, N, O, P.
San Luis Obispo	NI10-03	6962	I, J, K, L, M, N, O, P.
San Luis Obispo	NI10-03	6963	I, J, K, L, M, N, O, P.
San Luis Obispo	NI10-03	6964	I, J, K, L, M, N, O, P.
San Luis Obispo	NI10-03	6965	I, J, K, M, N, O.
San Luis Obispo	NI10-03	7007	C, D, H.
San Luis Obispo	NI10-03	7008	All.
San Luis Obispo	NI10-03	7009	All.
San Luis Obispo	NI10-03	7010	All.
San Luis Obispo	NI10-03	7011	All.
San Luis Obispo	NI10-03	7012	All.
San Luis Obispo	NI10-03	7013	All.
San Luis Obispo	NI10-03	7014	All.
San Luis Obispo	NI10-03	7015	All.
San Luis Obispo	NI10-03	7016	I, M.
San Luis Obispo	NI10-03	7058	A, B, C, D, F, G, H, J, K, L, O, P.
San Luis Obispo	NI10-03	7059	All.

Protraction name	Protraction No.	Block No.	Sub-block
San Luis Obispo	NI10-03	7060	All.
San Luis Obispo	NI10-03	7061	All.
San Luis Obispo	NI10-03	7062	All.
San Luis Obispo	NI10-03	7063	All.
San Luis Obispo	NI10-03	7064	All.
San Luis Obispo	NI10-03	7065	All.
San Luis Obispo	NI10-03	7066	A, E, I, M.
San Luis Obispo	NI10-03	7108	C, D, G, H, K, L, N, O, P.
San Luis Obispo	NI10-03	7109	All.
San Luis Obispo	NI10-03	7110	All.
San Luis Obispo	NI10-03	7111	All.
San Luis Obispo	NI10-03	7112	All.
San Luis Obispo	NI10-03	7113	All.
San Luis Obispo	NI10-03	7114	All.
San Luis Obispo	NI10-03	7115	All.
San Luis Obispo	NI10-03	7116	A, E, I, M.
Santa Maria	NI10-06	6008	B, C, D, F, G, H.
Santa Maria	NI10-06	6009	A, B, C, D, E, F, G, H.
Santa Maria	NI10-06	6010	A, B, C, D, E, F, G, H.
Santa Maria	NI10-06	6011	A, B, C, D, E, F, G, H.
Santa Maria	NI10-06	6012	A, B, C, D, E, F, G, H.
Santa Maria	NI10-06	6013	A, B, C, D, E, F, G, H.
Santa Maria	NI10-06	6014	A, B, C, D, E, F, G, H.
Santa Maria	NI10-06	6015	A, B, C, D, E, F, G, H.
Santa Maria	NI10-06	6016	A, E.

1.2 Objectives

EC&R seeks to participate in a future competitive OCS auction to obtain a commercial wind energy lease area offshore California. After the lease area has been obtained, EC&R's objective would be to **develop, construct and operate an offshore wind energy project**, with the ultimate goal of assisting the state in achieving its greenhouse gas (GHG) reduction and renewable energy targets. To successfully achieve this goal, the offshore wind energy project would be developed via the following example processes:

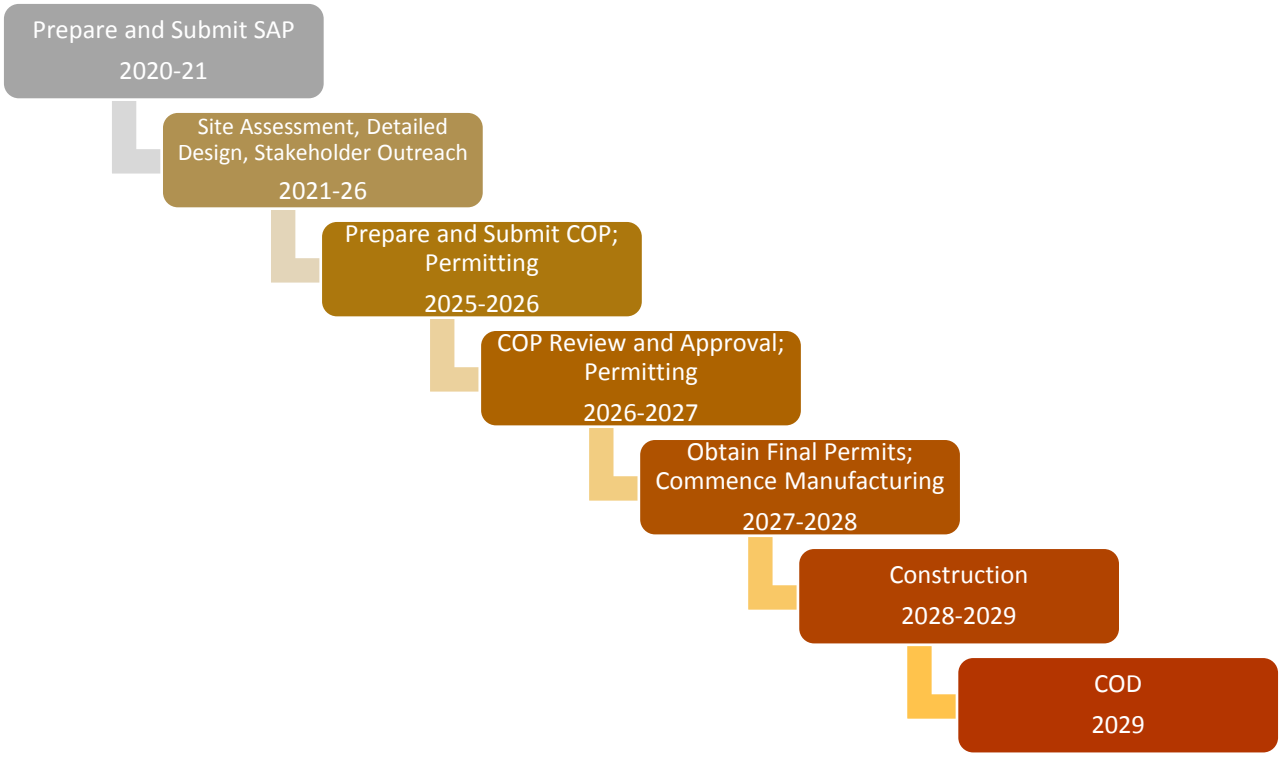
- Complete all necessary Federal, State and local permitting activities, including developing and filing a Site Assessment Plan (SAP) and Construction and Operations Plan (COP) for BOEM review and approval
- Conduct extensive outreach and consultation efforts to fully assess the many uses and needs of ocean stakeholders that may be interested or otherwise impacted by development of offshore wind energy facilities within the commercial wind energy lease area
- Collect in-situ wind, wave and current measurements to define the met ocean characteristics; met buoys and floating LiDAR(s) would typically be employed for this purpose
- Conduct wind analysis to understand and optimize for the site-specific wind resource and essential design loads

- Conduct offshore surveys to investigate bathymetric and soil profiles, including geophysical and geotechnical analysis
- Complete design of a floating wind farm concept that is capable to function in all meteorological and metocean conditions throughout the lifetime of the project; floating wind farm facilities subject to site-specific design criteria may include, for example: wind turbines, floating foundations for wind turbines and offshore substations (where utilized), inter-array and export cabling, etc.

In parallel, EC&R will engage with the greater Offshore industry to facilitate the development of the ports, supply chain and infrastructure necessary to support the manufacturing, construction and maintenance of floating offshore wind farms on the west coast, thereby creating new, high-paying jobs and providing a new economic growth driver in the region.

1.3 Preliminary Schedule

EC&R proposes that an offshore windfarm on the OCS California has the potential to be fully constructed within a timeframe of approximately ten years. This would include all necessary site assessment activities, stakeholder outreach and consultations, permitting, design, manufacturing and installation. An example high-level project schedule for an 800 MW floating offshore project is provided for reference below (*Note: schedule assumes 2020 Lease Auction*):



EC&R Development, LLC
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1.4 Renewable Energy Resources & Environmental Conditions

EC&R's initial assessment identified the following information concerning renewable energy resources and environmental conditions within the nominated commercial wind energy lease areas:

1.4.1 Wind Resource

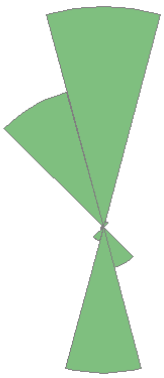
EC&R conducted a preliminary assessment of the wind resources for all four (4) nominated commercial wind energy lease areas.

Based on virtual met mast (VMM) data from the providers 3Tier and Vortex, the estimated wind resources within the nominated commercial lease areas are in the following approximate ranges at a height of 120m:

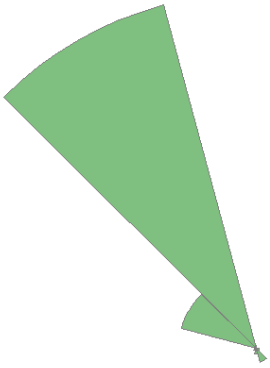
Humboldt: 7.9 m/s to 8.8 m/s
Morro Bay: 8.0 m/s to 8.7 m/s
Diablo Canyon North & **South:** 7.7 m/s to 8.3 m/s

These approximate wind speed ranges would suggest offshore wind energy projects in the IEC class I or II category, requiring more robust turbines, as is typically standard for offshore wind energy projects.

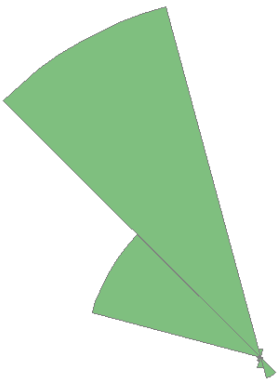
At **Humboldt** the strongest winds are predominately from the north-northwest and the south. At **Morro Bay** and **Diablo Canyon North & South** the strongest winds are predominately from the northwest. The power density roses are pictured below.



Humboldt



Morro Bay



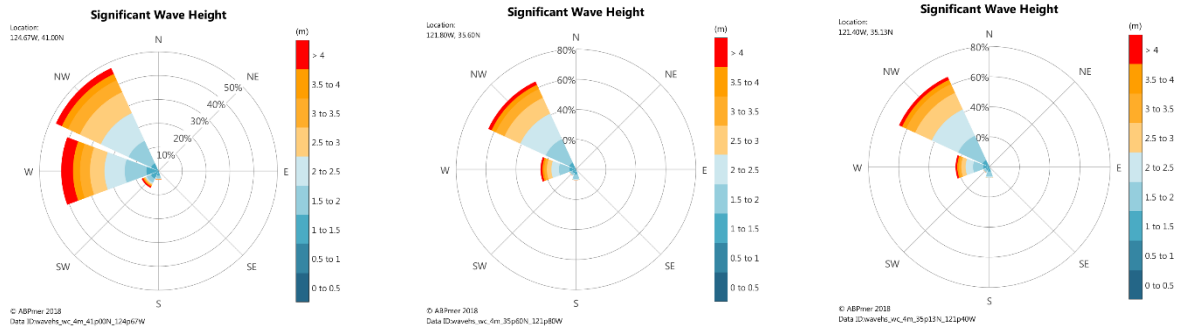
Diablo Canyon North & South

Additional in-situ wind measurement with floating lidars, or similar technologies, will be required in the development stage to achieve a more comprehensive understanding of the onsite wind resource characteristics.

1.4.2. Metocean

EC&R conducted a preliminary assessment of metocean conditions for all four (4) nominated commercial wind energy lease areas.

Analysis has shown that the **Morro Bay** and **Diablo Canyon North & South** lease areas have an almost mono-directional wave climate from the Northwest with significant wave height distributions in the range that would be expected in Europe (where EC&R has significant experience in successfully delivering offshore construction projects). The **Humboldt** lease area has a wider envelope of wave direction, reaching from Westerly to Northwesterly, and a significant wave height distribution in line with the other three nominated commercial lease areas.



Humboldt **Morro Bay** **Diablo Canyon North & South**

Wave roses for Humboldt, Morro Bay and Diablo Canyon North & South respectively from the site [https://www.seastates.net/.](https://www.seastates.net/)

1.4.3 Environmental Conditions

EC&R conducted a preliminary assessment of environmental conditions for all four (4) nominated commercial wind energy lease areas.

1.4.3.1 Environmental Conditions – Humboldt

The nominated lease area does not overlap with a National Marine Sanctuary (NMS) or Marine Protected Areas (MPA). Further, no Important Bird Areas (IBA) have been identified within or nearby the lease area. No essential fish habitat conservation areas were identified within the area. Some temporary conflicts with fisheries-use may occur during the construction phase of potential future facilities, but use conflicts during the operation phase will likely be low.

The potential visual impact of future facilities is regarded to be minimal due to the distance offshore, the location of the nominated lease area neighboring a less-populated coastal area,

and through potential night-time lighting reduction technologies that may be utilized at time of construction and operation.

1.4.3.2 Environmental Conditions – Morro Bay

The nominated lease area is adjacent to the Monterey NMS. A large portion of this area is within the Morro Bay to Santa Barbara MPA, as well as within an essential fish habitat conservation area. The southeastern part of the lease area may also overlap an Important Bird Area. Any eventual development activities will require additional evaluation and assessment of these important areas of the marine environment. Some temporary conflicts with fisheries-use may occur during the construction phase of potential future facilities, but use conflicts during the operation phase will likely be low.

The potential visual impact of future facilities will need further assessment due to the lease area location along a more-populated coastal area with many scenic view points along Highway 1. Wind farm array siting and night-time lighting reduction technologies may be utilized at time of construction and operation to help mitigate any potential viewshed impacts.

1.4.3.3 Environmental conditions – Diablo Canyon North & South

The nominated lease areas are not located within an NMS, but some parts are located within the Morro Bay to Santa Barbara MPA. A portion of the areas are designated as an essential fish habitat conservation area. The nominated lease areas are situated close to two Important Bird Areas. Any eventual development activities will require additional evaluation and assessment of these important areas of the marine environment. Some temporary conflicts with fisheries-use may occur during the construction phase of potential future facilities, but use conflicts during the operation phase will likely be low.

The potential visual impact of future facilities will need further assessment due to the lease area location along a more-populated coastal area with many scenic view points along Highway 1. Wind farm array siting and night-time lighting reduction technologies may be utilized at time of construction and operation to help mitigate any potential viewshed impacts.

1.5 Legal Qualification

On June 30, 2018, BOEM assigned EC&R Development, LLC **BOEM Company Number 15080** following the successful determination that EC&R Development, LLC was legally qualified to hold a lease in accordance with the requirements of 30 CFR 585.106-107.

Per the requirements of the Call, please see Appendix II for documentation demonstrating that EC&R Development, LLC continues to be legally qualified to hold a lease in accordance with the requirements set forth in 30 CFR 585.106 and 585.107(c).

1.6 Technical and Financial Qualification

On June 30, 2018, BOEM assigned EC&R Development, LLC **BOEM Company Number 15080** following the successful determination that EC&R Development, LLC was technically and financially qualified "to construct, operate, maintain, and decommission the type and scope of project which [EC&R requested] authorization (30 CFR 585.106-107)."

Per the requirements of the Call, please see Appendix II for documentation demonstrating that EC&R Development, LLC continues to be technically and financially capable of constructing, operating, maintaining, and decommissioning facilities as contemplated in Section 1.2 above, in accordance with the requirements of 30 CFR 585.107(a).

2. Presentation of E.ON and EC&R

Within the E.ON Group, EC&R is responsible for the generation, acquisition, transport and sale of energy, in particular from renewable energy sources, including project development and construction and the operation of plants for energy production at home and abroad. EC&R is held by the parent company E.ON, which retains a 100% stake in EC&R. E.ON is recognized as one of the first major energy companies in the world to have integrated the energy transition at the heart of its corporate values. With a corporate strategy and structure that reflects some of the key issues in regard to the transition towards cleaner energy sources, such as the global growth of renewable energy sources (in particular wind and solar), the deployment of smart grids, and the growing demand for innovative and decentralized customer solutions, E.ON is a major global actor in the energy world. As a committed actor for the German energy transition, E.ON has decided at an early stage to focus its development on renewables (particularly wind and solar), and has developed in this area a unique expertise that is recognized around the world.

EC&R, with its subsidiary EC&R Development, LLC, is one of the world's largest owners of renewable power projects and is rapidly expanding its wind, solar and energy storage portfolio. The company develops, owns, and operates some of the most efficient, highest performing renewable energy projects in the United States.

2.1 Technical capabilities of EC&R

EC&R has developed a leading expertise and extensive knowledge in the development, construction and operation of offshore wind farms. We have been operating a commercial fleet of offshore wind farms since the early 2000's, giving us over two decades of valuable experience. Since the development and installation of the first prototypes, EC&R has developed and built, alone or in partnership, all the offshore wind farms currently in its possession. Our current fleet is the second largest in the offshore wind world with eleven offshore wind farms.

Based on this renowned expertise in the development, construction, operation, maintenance and decommissioning of wind farms, EC&R was also able to develop a complete range of services related to offshore wind projects. As such, it offers services for companies investing in

the renewable energy sector, while also providing technical expertise in the development, construction and operation of several offshore wind projects, for companies such as Nordex, Vestas and Siemens. In this respect, the EC&R focuses particularly within the following areas:

- **Development**: consulting on technological choices, feasibility assessment, and planning of the various stages of the project.

- **Construction**: managing construction, cost control, definition and application of HSSE standards.

- **Operation, maintenance** and **optimization**: wind farm management, planning and optimization, improvement of productivity and operating life of the farm.

2.1.1 Floating Offshore Wind Experience

EC&R has been an active participant in the Carbon Trust's Floating Offshore Wind Joint Industry Project since early 2016. As part of this project, EC&R has obtained floating offshore wind knowledge covering the following assessment areas, for example:

- 2016 Stage 1: Policy & Regulation; Cost Analysis; Technology & Risk
- 2017 Stage 2 Phase 1: Electrical Systems; Mooring Systems; Infrastructure & Logistics
- 2018 Stage 2 Phase 2: Dynamic Export Cable Development; Monitoring & Inspection; Heavy Lift Offshore Operations; Turbine Requirements & Foundation Scaling; Cost Analysis
- 2019 Stage 2 Phase 3: Dynamic Export Cable Development; Mooring Systems for Challenging Environments; O&M Offshore Maintenance; O&M Tow to Port Maintenance

Additionally, EC&R has held regular meetings with a selection of floating foundation suppliers and has maintained active engagement in floating wind markets around the world.

EC&R Development, LLC
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Chicago, IL 60654

EC&R appreciates this opportunity to submit commercial wind energy lease area nominations for BOEM consideration. For any questions or clarifications needed in association with this submittal, please contact Douglas Perkins or Andreas Hammar at the contact information provided below.

Sincerely,

Tom Festle, Chief Financial Officer
EC&R Development, LLC

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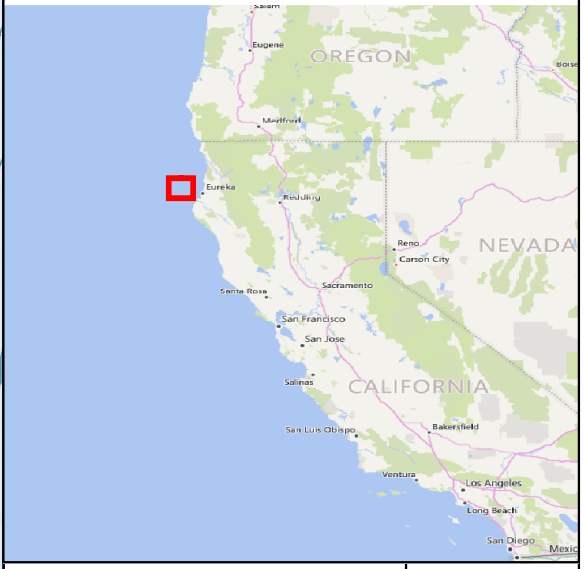
Appendix I - Maps of the four (4) nominated commercial lease areas

Legend

- Humboldt Blocks
- Humboldt Lease Area Nomination

Distance to shore (km):	33
Total block area (km²):	536



BOEM offshore California (USA)

E.ON Climate & Renewables GmbH
Steindamm 98
D-20099 Hamburg

Scale 1:276 474
Paper Size: A4
0 2 4 Nm
0 2,5 5 Kilometers

N

Humboldt Rev: 00

Coordinate System: GCS North American 1983
Datum: North American 1983

CAL_3_areas_Overview_20190110.mxd

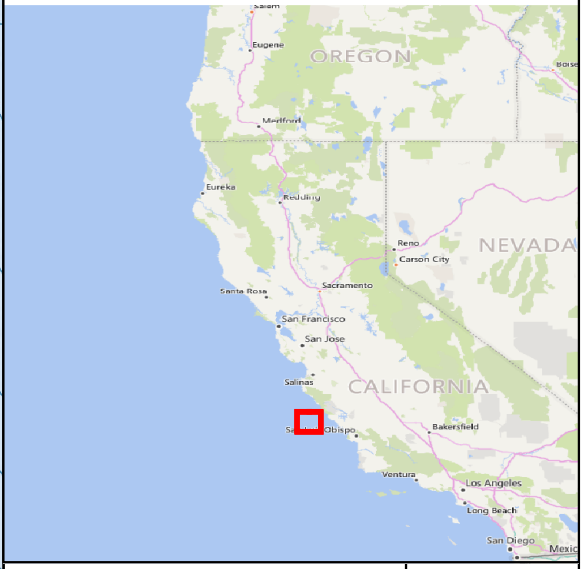
Rev:	DWN	CHKD	APVD	Date:
00	ES			2019-01-24
01				

Legend

- Morro Bay Blocks
- Morro Bay Lease Area Nomination

Distance to shore (km): 32

Total block area (km²): 806



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D-20099 Hamburg

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Paper Size: A4

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0 2,5 5 Kilometers

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Morro Bay Rev: 00

Coordinate System: GCS North American 1983
Datum: North American 1983

CAL_3_areas_Overview_20190110.mxd

Rev:	DWN	CHKD	APVD	Date:
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Legend

- Diablo Canyon Blocks North
- Diablo Canyon North Lease Area Nomination

Distance to shore (km): 31

Total block area (km²): 696

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D-20099 Hamburg

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0 2,5 5 Kilometers

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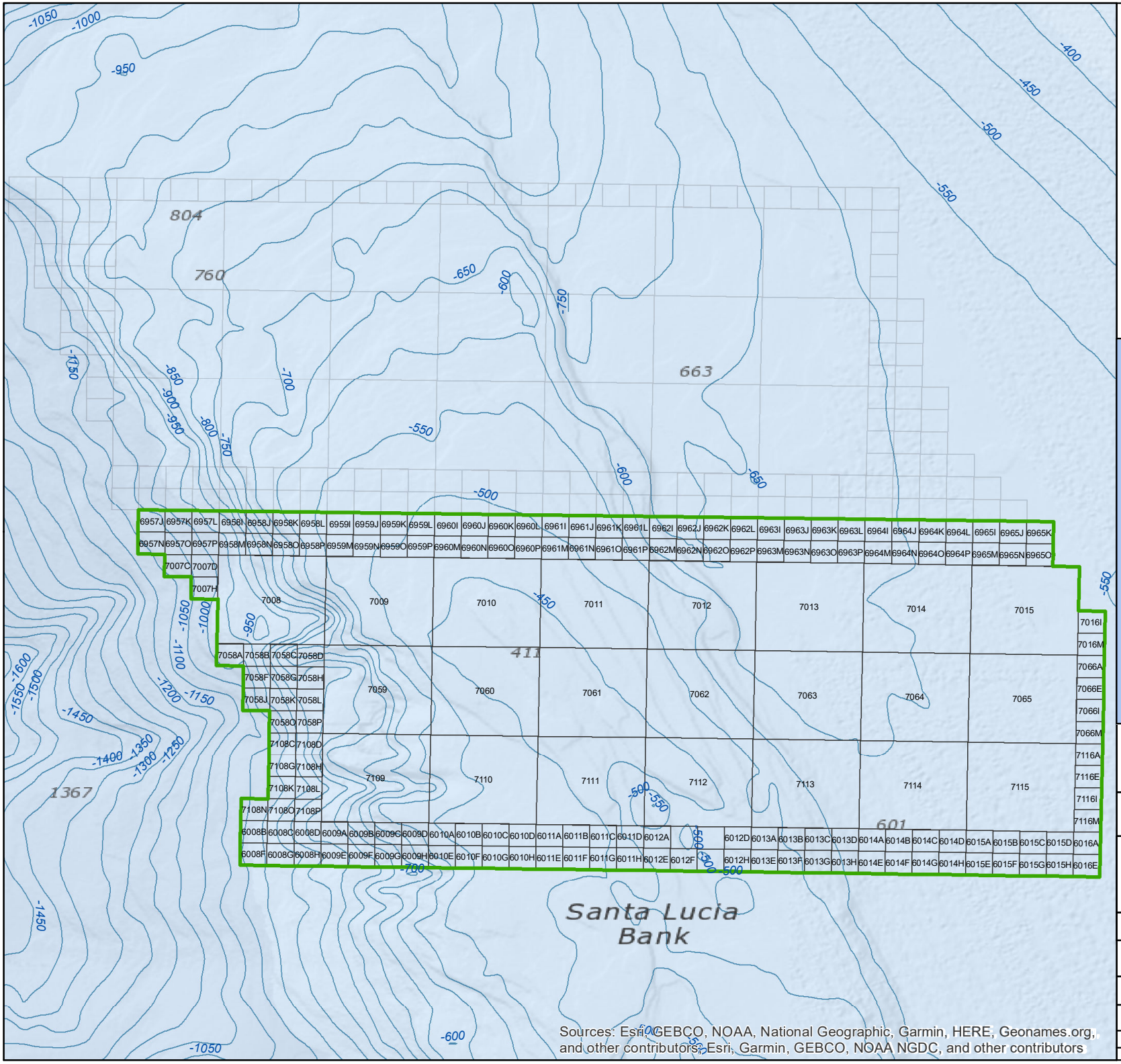
Diablo Canyon North Rev: 00

Coordinate System: GCS North American 1983
Datum: North American 1983

CAL_3_areas_Overview_20190110.mxd

Rev:	DWN	CHKD	APVD	Date:
00	ES			2019-01-24
01				

Sources: Esri, GEBCO, NOAA, National Geographic, Garmin, HERE, Geonames.org, and other contributors, Esri, Garmin, GEBCO, NOAA NGDC, and other contributors



Legend

- Diablo Canyon Blocks South
- Diablo Canyon South Lease Area Nomination

Distance to shore (km): 31

Total block area (km²): 745.5

BOEM offshore California (USA)

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Paper Size: A4

Diablo Canyon South Rev: 00

Coordinate System: GCS North American 1983
Datum: North American 1983

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Rev:	DWN	CHKD	APVD	Date:
00	ES			2019-01-24
01				