

STAKEHOLDER ENGAGEMENT IN CALIFORNIA OFFSHORE WIND

A Summary from CLEE's 2022 Convenings
and a 2023 Outlook

MARCH 2023
Policy Report





ABOUT THE CENTER FOR LAW, ENERGY, & THE ENVIRONMENT

The Center for Law, Energy & the Environment (CLEE) channels the expertise and creativity of the Berkeley Law community into pragmatic policy solutions to environmental and energy challenges. CLEE works with government, business, and the nonprofit sector to help solve urgent problems requiring innovative, often interdisciplinary approaches. Drawing on the combined expertise of faculty, staff, and students across the University of California, Berkeley, CLEE strives to translate empirical findings into smart public policy solutions to better environmental and energy governance systems.

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INTRODUCTION

This document provides a high-level summary of key themes identified in the Center for Law, Energy, and the Environment's (CLEE) 2022 convening series on offshore wind development in California.

These themes reflect the perspectives of those who will drive—and be most impacted by—offshore wind as the state embarks on the initial implementation phases of this new industry following the Bureau of Ocean Energy Management (BOEM) lease auction on December 6-7, 2022. This document represents CLEE's impressions from conversations held in 2022, not official positions from any industry representatives, stakeholder groups, or federal, local, state, or tribal governments involved.

- More than 100 participants attended CLEE's 2022 convenings, representing a diverse array of stakeholders (fishing, tribal government, state/local/federal government, labor unions, environmental groups, wind developers, environmental justice and community groups, and more).
- CLEE completed more than 60 individual interviews with stakeholders throughout the project to better understand specific interests and perspectives.
- Twenty-four offshore wind and other professional experts contributed to the convenings, either through background context and information in individual interviews or through live presentations at the convening themselves.
- Several state government agencies attended the convenings, including the California Energy Commission (CEC), State Lands Commission, Coastal Commission, Ocean Protection Council, and Department of Fish and Wildlife. Representatives from BOEM also attended CLEE's convenings and CLEE communicated with BOEM about the federal offshore wind leasing process.

CLEE is a neutral convener and designs convenings to provide space for the full range of viewpoints and opinions. CLEE does not endorse the statements included in this document but presents this document as a summary of interested parties' viewpoints.

Throughout the series, CLEE coordinated closely with CEC in particular to ensure alignment with CEC's ongoing work as the state's lead agency on this issue.

At times, the CLEE convenings provided the only statewide space in which diverse interests could come together and exchange information and views. Based on our interviews with participants, these sessions provided a space to dialogue with organizations outside of participants' usual affinity groups and coalitions. Participants also shared that the convenings were a valuable means by which to obtain information about some topics that were otherwise difficult for non-experts to understand (for example, transmission). Staff from multiple agencies expressed appreciation for the convenings as a chance to hear stakeholder concerns firsthand. Having spaces like these that enable cross-cutting dialogue with the major stakeholders involved in offshore wind will be critical to ensuring just and equitable implementation.

The 2022 CLEE stakeholder convening sessions included an overarching introduction to offshore wind, a session on federal lease stipulations, a primer on transmission infrastructure, and an overview of perspectives and lessons learned from projects in Europe and along the US East Coast. These convenings were among the first California statewide conversations in which stakeholders could engage with each other, discuss issues, and share information across affinity groups. For a more detailed overview of each session, please see the [Appendix](#).



SUMMARY OF KEY THEMES

This section summarizes themes that emerged from our 2022 convenings and individual conversations with stakeholders. Comments are organized by topic (equity and environmental justice, environmental protection, tribal government input, developer input, and fishing industry input).

GENERAL PROCESS THEMES: TRANSPARENCY, DATA, AND REPRESENTATION

Among the themes heard most frequently in 2022 were requests for agencies to *increase transparency in data sharing and decision making*. Many participants felt that existing data (spatial, environmental, economic, etc.) could be presented in a more accessible and understandable format, while also urging that future data should be easy to access and easy to use. Some existing platforms already aggregate datasets relevant to the planning process, such as the California Offshore Wind Energy Gateway.

There was some disagreement about when in the planning process to share information with stakeholders. Some participants urged agencies to share information even if unknowns still exist so that stakeholders can inform the decision-making process rather than having a chance to comment only when plans are complete. Others, however, felt that access to more complete development plans and identification of long-term impacts would enable communities to weigh in with full information.

In general, participants were not uniform in their perspectives about how much information/data is necessary to proceed with offshore wind project planning and project execution. Some participants felt that a substantial amount of additional data is still needed (e.g., more complete information on wildlife impacts, clarity on economic impacts) before certain decisions can be made and construction occurs. Others felt that it is impossible to have complete information, especially before projects begin surveying and construction, and

therefore advocated for as much information to be gathered as possible while still proceeding with development. Some of these participants suggested adaptive management or specific mitigation strategies to address impacts that do arise.

In addition, many participants had equity concerns around the offshore wind development process, suggesting that additional efforts would be valuable to ensure that equity is factored into decision making. Attendees urged that environmental justice and tribal communities be full partners in the planning and development processes and share in some of the benefits of development. Fishing representatives also felt that they had been excluded from decision making and expressed a desire to be more intentionally involved in decision-making processes.

EQUITY AND ENVIRONMENTAL JUSTICE INPUT: INCLUSION, PARTNERSHIP, AND PRIORITIES

Participants advocated for *greater inclusion of and engagement with environmental justice communities*, noting that projects should be carried out such that these communities see economic and environmental benefits from offshore wind. *An ideal leasing process would continually engage local, underserved, and frontline communities (including tribal nations) as full partners; create strong Community Benefits Agreements (CBAs); and establish, identify, and fund workforce development programs and pathways* for the aforementioned communities.

In addition, environmental justice advocates urged the use of *zero-emissions technology in onshore infrastructure and supply chains*, including electric trucks that would be driving through communities. Participants also advocated for *reasonable electricity rates* for consumers and *improvements in electricity supply* for communities that will be affected by offshore wind development, especially tribal communities on the North Coast. Attendees further advocated that the *new energy supply from offshore wind development be used to replace polluting fossil fuel plant output*, such as coastal peaker plants, and that these old fossil fuel plants be retired as part of offshore wind development. Lastly, advocates urged the consideration of *community benefit funds to help orchestrate the cleanup of legacy coastal/offshore fossil fuel infrastructure* (mainly concentrated in the Central Coast) to mitigate the increase of coastal/offshore industrial infrastructure needed for offshore wind. Advocates noted that this is especially important since old fossil fuel industrial infrastructure is often abandoned by fossil fuel companies, thus leaving the burdens and costs of cleanup to local communities.

Lastly, environmental justice advocates felt that *workforce development should include targeted hiring and high road labor standards*. Attendees also requested more information on offshore wind jobs (where, how many, and what kinds are expected). Participants cautioned that jobs and economic benefits should be *long term and not transitory*.

ENVIRONMENTAL INPUT: TRANSPARENT ENVIRONMENTAL REVIEW AND HOLISTIC PLANNING

Several different types of participants, including tribal government representatives, fishermen, and environmental advocates, expressed a desire to *protect California's coast and offshore habitats and wildlife*. Many participants—especially environmental advocacy groups—expressed concern about the current federal environmental review process and urged agencies to conduct additional environmental review and provide better data transparency, both before and during project operations. Participants pointed to a lack of *transparent, robust environmental review processes* prior to the leasing phase, and said that stronger review processes up front would enable better avoidance of environmental impacts and potentially faster permitting of individual projects. Some participants specifically called for a programmatic environmental impact statement (PEIS) before the BOEM lease auction, which could then guide planning and review for each lease area.

Several participants urged California and federal agencies to take a more holistic approach to planning and said that they felt the AB 525 process had not adequately addressed environmental issues to date. Several participants also called for *greater environmental review before future state planning and federal Call Area identification*.¹ Many participants supported *least conflict planning processes for identifying future Call Areas*. Generally, environmental stakeholders noted that *more data should be collected to understand baseline and cumulative impacts*, and emphasized the importance of building mitigation and adaptive management measures into the lease and development process based on the data collected. For example, some participants suggested requiring developers to monitor for fishing gear potentially entangled on inter-array cables, which could ensnare marine life. Some participants supported the creation of a *West Coast collaborative like the Regional Wildlife Science Collaborative* on the East Coast.

TRIBAL GOVERNMENT INPUT: INCLUSION AND ECONOMIC DEVELOPMENT

Many different tribes are affected by offshore wind development, and while CLEE's convenings did not gather input from every affected tribe, multiple representatives participated in the conversations and expressed differing perspectives and needs.

1. For more information about the federal process, including differentiation of Call Areas, Wind Energy Areas, and leased areas, see US Energy Information Administration, "Federal leasing for offshore wind grows as first U.S. offshore wind farm comes online" (webpage), available at <https://www.eia.gov/todayinenergy/detail.php?id=28992>.

The most common themes among tribal representatives were requests for more information and *more comprehensive inclusion* to enable participation as equal partners in decision making and development, and to ensure that they *benefit from offshore wind projects both economically and environmentally*. Tribal representatives expressed concerns about offshore wind's *impacts on tribal communities*, including habitat, wildlife (for example, migratory sea mammals), and cultural impacts (for example, traditional paddling trips). Tribal stakeholders advocated for *increased access to fishing and fishing rights, land return, and investment in community social services*. Funding for any cleanups or industrial accidents was also identified as a priority. Participants cautioned that tribal needs differ in the North and Central Coasts and that the development process should respect that. Attendees also cautioned that comprehensive engagement with non-federally recognized tribes, as well as federally recognized tribes, is critical throughout the decision-making process.

Some participants expressed concern that no studies have yet looked at the impacts of offshore wind development on indigenous fishing and fisheries. Data transparency and zero emissions supply chains were identified as priorities. Lastly, tribal representatives remarked that investment over the long term is important, noting the importance of *funding for compliance and enforcement* over multiple decades.

North Coast attendees expressed a desire that offshore wind not generate boom and bust extraction, as other industries in the region historically have. One way to prevent this cycle would be to create *permanent local investments*, including in education and infrastructure. For example, attendees highlighted the need to create sustainable jobs over time and invest in K-12, trade school, and community college training programs. Some mentioned that offshore wind development must also include *regional electricity upgrades and technology updates*, as large segments of the North Coast community lack access to broadband and some are without electricity altogether. Many North Coast communities are also without good roads and infrastructure.

Another harm stemming from past industrial development and colonial settlement is the epidemic of missing and murdered indigenous people. Attendees felt that it is critical to *prevent any increases in missing and murdered indigenous people* and other vulnerable populations stemming from offshore wind development. As a potential solution, an attendee suggested that a third party could serve as a watchdog and make sure that development is not extractive, detrimental, or boom and bust. Another solution proposed was an *oversight community group* that could: serve as an *ongoing source of information* for the community, help *represent the community* in later stages of offshore wind related development (such as transmission), *monitor scientific studies* as they are performed, and *monitor any CBAs with developers*. Such a group could also serve as a voice for communities seeking community benefits not immediately captured in developer agreements or the BOEM process, such as local energy resilience and infrastructure.

DEVELOPER INPUT: REDUCE PERMITTING BARRIERS AND ACCELERATE INFRASTRUCTURE DEPLOYMENT

Developers raised concerns about barriers in the *complex permitting landscape*, especially as permit seekers will need to navigate multiple agency processes. Wind industry representatives also expressed concerns around flexibility of the bidding credits and lease stipulations. In general, industry participants advocated for *broadening the scope of the bidding credit* beyond labor and workforce to include other policy priorities, such as environmental justice initiatives, biodiversity protections, and tribal engagement. Several developers also called for clarification about the range of actions that qualify for bid credits.

Several industry representatives expressed concern that extensive additional environmental review would unnecessarily delay the OSW process, noting that the full impacts cannot be known until turbines are in the water and that an element of learning and adjustment should be accounted for as projects take shape. Some participants supported a balance between environmental protection and efficient permitting, and argued that mitigating environmental risks throughout the permitting process could help to limit legal risks down the line.

Industry representatives also described the need to *expand plans for transmission, port construction, and energy offtake* in order to provide developers with greater clarity, especially since the timing of infrastructure investments will have a significant impact on a project's timeline and financial certainty.

Similarly, some developers expressed the importance of discussions about *future Call Areas* (beyond those leased in December 2022), since these kinds of discussions can inform long-term planning processes around transmission and port development, which operate on multi-decade timelines. This is especially important because more areas off the California coast are expected to be identified for offshore wind development in the future as large-scale transmission, port, and other projects are built out.

FISHING INDUSTRY INPUT: UNDERSTANDING AND ADDRESSING LIVELIHOOD IMPACTS

Fishing industry representatives' primary concern was that the current OSW areas will become off limits for fishing activities. In general, fishing participants felt that their *concerns had not been adequately considered throughout the planning process*, despite the expected impacts to fisheries, and expressed a *lack of trust* in the decision-making process. Fishing representatives urged agencies (especially CEC through its ongoing AB 525 analyses) to *assess the complete impact on jobs and economic conditions* by considering jobs lost as well as jobs created.

Many fishing representatives shared input on the CBA provisions in BOEM's proposed and final sale notices. Participants noted that members of fishing communities come from all over the state, so the CBA model as originally proposed might exclude those who are not based in the region where a

particular wind project is located. Participants encouraged using an alternative *model that ensures benefits regardless of location*. One participant advocated for Mutual Benefit Agreements with commercial fishermen that include safety, communication, job training, fish stock surveys, bonds for unexpected impacts, and financial mitigation before site surveys begin. Others pointed to previous negotiations between fishermen and cable laying companies as a model. Others suggested that developers pay into a fund to mitigate impacts to fishermen and local fishing communities and said that this fund could also cover any unexpected emergencies or accidents. Some participants encouraged additional *baseline studies of fish stocks and additional biological surveys* to inform mitigation agreements for displaced commercial fishermen. Many participants noted that impacts to fishermen will begin with the site survey process, not construction.

Some participants suggested a joint forum for stakeholders to meet with all leaseholders simultaneously, noting that this would reduce the burden and inefficiency of meeting with each developer individually, which is especially difficult to manage with *fishermen's changing schedules*.



CONCLUSION AND 2023 OUTLOOK

From stakeholder feedback, CLEE has learned that some stakeholders are eager for additional spaces in which to learn about and discuss post-auction timelines, next steps, emerging studies, and implementation. Other parties are more interested in engaging in conversation and planning for California's next set of Call Areas.

Either way, there is clearly an ongoing need for spaces that bridge various groups and interests and allow for deep interaction and discussion. We have heard throughout our outreach that the leasing and development processes should continually engage local, underserved, and frontline communities (including tribal nations) as full partners; create strong CBAs; and establish, identify, and fund workforce development programs and pathways for the aforementioned communities.

CLEE's work in 2022 expanded opportunities for learning, engagement, and dialogue in the state's offshore wind process, at times providing the only statewide space where various stakeholders and interests could exchange ideas and information in an informal, non-governmental setting. Looking ahead to 2023, the five winning bidders are expected to begin more direct dialogue with stakeholders, especially as CBAs and workforce development plans take shape. We hope that the stakeholder comments and concerns, and insights highlighted in this report are closely considered and acted upon as California pivots to implementation planning following the historic December lease auction.



APPENDIX

This appendix provides a high-level overview of comments from each of the four CLEE 2022 convenings.

STAKEHOLDER PERSPECTIVES FROM CLEE'S 2022 CONVENINGS

Convening 1: Introductory Session

CLEE held the first convening in this series on March 24, 2022. Some participants had previously been actively involved in California offshore wind (OSW) planning and were knowledgeable about the details of the federal lease process and state policies. Other participants were new to OSW as a topic and were seeking introductory information about OSW, the state of planning, and opportunities to engage in the process. CLEE targeted this initial conversation to participants who were new to OSW and designed the convening as a primer on the issue and the latest California developments.

Participants discussed the role of OSW in achieving California's broader climate and energy targets, and asked questions about the goals that the California Energy Commission was required to set under AB 525. (The final AB 525 goals were not adopted until August, so at the time of the March convening, participants discussed the role of state goals and the need for the state to send a clear signal about its OSW vision as a component of the state's larger decarbonization objectives.) Participants also noted the ongoing need to balance a wide variety of ocean uses and interests, and to consider tribal and cultural values, as well as commercial fishing operations and environmental impacts.

Participants noted that ongoing coordination with infrastructure development (e.g., ports, transmission) and permitting processes will be crucial to ensuring OSW is developed in an efficient timeframe, noting that forthcoming decisions (such as whether the Humboldt Wind Energy Areas will be connected to energy users via an undersea cable or through on-land transmission lines) will influence the nature of stakeholder impact and discussions.

Some participants expressed concern about the environmental review process. There was general urging that additional environmental review and better data transparency are needed. Some participants specifically called for a programmatic environmental impact statement (PEIS), which could then guide planning and review for each individual project. Several participants urged the state to take a more holistic approach to planning and said that they felt the process had not adequately addressed environmental issues to date, with some participants specifically calling for greater environmental review before Call Areas were identified. Other participants expressed concern that extensive additional environmental review would delay the OSW process, arguing that some impacts cannot be known until turbines are in the water.

and that an element of learning and adjustment should be accounted for as projects take shape.

Participants also raised concerns about barriers arising from the complex permitting landscape, especially as permit seekers will need to navigate multiple agencies' processes. Some participants said that there could be a balance between being environmentally conscious and efficient permitting, and argued that mitigating environmental risks throughout the permitting process could help to limit future legal risks.

Throughout the conversation, several participants advocated for greater inclusion of and engagement with environmental justice communities, noting that projects should be carried out such that these communities see benefits from offshore wind, with offshore wind displacing fossil fuel generation in frontline communities. Several participants also advocated for more comprehensive engagement with tribes, including both federally recognized and non-recognized tribes, throughout the decision making process.

Some participants advocated for deployment of smaller scale pilot projects before progressing to the large-scale projects envisioned for the Humboldt and Morro Bay Wind Energy Areas, arguing that lessons learned from initial projects could inform the development of larger projects (including project management, onshore port and supply chain logistics, environmental monitoring techniques, and workforce development). Other participants felt that the pilot projects proposed in state waters near shore would not yield information relevant to the projects farther offshore in federal waters, and shared concerns about the environmental impacts of projects in state waters.

At the convening, participants also discussed their diverse visions for an ideal OSW planning and deployment process in California. Key themes included:

- Setting OSW goals that reflect the state's decarbonization targets and outlining a path to achieving those targets, while also balancing the need to move quickly with the need to act responsibly and make decisions on the best possible information—avoiding unnecessary delays while maintaining transparency and minimizing impacts
- Balancing competing uses of ocean space
- Coordinating permitting and infrastructure planning
- Protecting and preserving wildlife, ecosystems, and local communities
- Considering environmental review more thoroughly and transparently before selecting Call Areas to assess both environmental impacts and technical feasibility, while striving for a “least conflict” siting approach
- Incorporating lessons learned from the East Coast and other regions
- Assessing the potential for displacing fossil fuel resources in general and especially in environmental justice or other disadvantaged communities that have borne the brunt of fossil fuel development
- Ensuring that offshore wind development planning and processes are accessible to people from different backgrounds, communities, income levels, etc. by creating a framework for transparent data sharing and monitoring, among other measures

- Assessing ways to support local supply chain development, workforce (training, local hiring, and labor standards), and the buildout of the transmission/distribution system that meets expected OSW capacity while meeting local and regional energy resilience needs

Next, participants were asked to identify barriers to achieving the components of this vision and to suggest solutions to overcome the barriers they identified. Some of the barriers identified included:

- Inadequate port infrastructure, including limited space, lack of capacity, lack of sufficient cranes or vessels, and other limitations
- A lack of adequate transmission capacity, especially for the Humboldt Wind Energy Area. This includes a lack of certainty about what transmission development on the North Coast will look like and which communities will be impacted and which will benefit
- A variety of data gaps that make it difficult to quantify impacts or make recommendations. Some examples of data gaps mentioned included fisheries data, equity and engagement data, and environmental impact data
- A lack of transparent, robust environmental review processes prior to the leasing phase so that if issues are uncovered, meaningful solutions can be implemented as soon as possible

Suggested solutions included:

- Determining the state's goals and strategic vision for OSW so that community benefits, investments, and planning can be better aligned
- Drawing from East Coast lessons learned—positive and negative—wherever possible
- Using OSW development as a way to revitalize distressed areas
- Using OSW development to invest in communities who have been historically and/or are currently excluded from investment, as well as those communities that suffer from underinvestment
- Establishing a clearer and more proactive approach to the transmission discussions to ensure that different agencies and jurisdictions are in sync
- Embarking on a more comprehensive spatial planning process, such as the one later mandated through AB 525
- Committing to better, more meaningful engagement with communities and impacted industries
- Committing to more rigorous environmental reviews and surveys and consideration of fishing impacts
- Ensuring workforce development, job creation, and supply chain development are addressed through the planning process
- Quantifying and communicating benefits to communities, including through more direct partnership with stakeholders and the general public throughout the AB 525 process, with an emphasis on procedural justice

Convening 2: Lease Stipulations

On April 29, 2022, CLEE held a convening about lease stipulations and bidding credits that might be included in the then-forthcoming Proposed Sale Notice (PSN). (The PSN was published in the Federal Register on May 31, 2022.) Representatives from BOEM shared updates on the federal process, and a speaker from the North Carolina Department of Commerce shared insights about the lease stipulations and process conducted for the Carolina Long Bay lease areas. CLEE representatives also shared insights from pro bono partners about the legal framework pertaining to lease stipulations and bidding credits. Participants were asked to consider what lease stipulations they would like to see included in the proposed and final sale notices.

Participants shared priorities for lease stipulations across four core areas: environmental impacts and fishing uses, economic and community benefits, industry considerations, and process considerations. Participants also shared ideas for designing the specific bidding credits available through the auction. Generally, participants expressed support for strengthening the stipulations in the BOEM lease guidelines and incentivizing greater investment in communities through higher bid credits.

Participants' suggestions around economic and community benefits included:

- Prioritizing union job creation and project labor agreements
- Exploring pathways for equity and local community ownership of offshore wind projects
- Implementing strong community benefits, including clean energy access and workforce development opportunities for environmental justice communities
- Ensuring that local and affected communities benefit from development of regional electricity infrastructure and energy resilience upgrades, especially those communities who currently do not have reliable electricity access
- Committing to non-exploitative industry development and ensuring protections for local populations (e.g., no increases in missing and murdered Indigenous people and other vulnerable populations)
- Making developer data transparent wherever possible
- Directing more benefits towards tribal communities, including increased access and fishing rights, land return, investment in community infrastructure and social services, and protection of access to cultural resources, as well as continued engagement with tribes in decision making (government-to-government consultation)
- Establishing mutual benefit agreements with commercial fishing representatives that include safety, communication, job training, fish stock surveys, bonds for unexpected impacts, and financial mitigation before site surveys begin
- Creating public private partnerships to support necessary infrastructure upgrades and expansion, as well as supply chain development
- Ensuring compliance and enforcement by creating and funding an oversight committee that would oversee community benefits

agreements, monitor data, and interface with developers and agencies on behalf of community, environmental, and tribal members

- Establishing either a third-party entity, bilateral agreements, or a blend of both to manage and enhance community engagement and the relationship between developers and communities

Participants' suggestions around environmental and fishing concerns included:

- Implementing the best available technology and adaptive management strategies for tracking, monitoring, and minimizing impacts to habitat and marine life
- Ensuring noise reduction measures and entanglement prevention for marine life, and introducing training for workers to ensure that they avoid and report marine life encounters
- Improving data reporting, collaboration, and transparency throughout the process
- Working with local fishing and community members to determine cable routes
- Minimizing impacts to viewshed
- Curtailing OSW production temporarily if a species is migrating or is at heightened risk

Participants discussed concerns from the industry perspective, including:

- Increasing flexibility to comply with lease stipulations
- Broadening the scope of the bidding credit beyond labor and workforce to respond to other state priorities, including environmental justice initiatives, tribal engagement, biodiversity protections, etc.
- Clarifying the range of actions that qualify for lease stipulations versus those that qualify for bid credits
- Expanding plans for transmission and port construction, as well as energy offtake, to provide greater clarity to potential bidders

Participants also shared ideas about how to improve the engagement process, including:

- Building face-to-face relationships between developers and communities, local and tribal governments, and other parties
- Proactively including tribal communities, low-income communities, and communities of color throughout the process and ensuring that they benefit from the projects
- Increasing capacity building and education for local communities to enable them to participate in the planning and development processes
- Differentiating development approaches in order to meet the varying needs of each geographic region
- Establishing an oversight community group that could: serve as an ongoing source of information for the community, help represent the community in later stages of offshore wind related development, such as transmission, monitor scientific studies as they are performed, and monitor any Community Benefit Agreements with developers.

Finally, participants offered other ideas for lease stipulations and bidding credits, including:

- Awarding points for pre-mitigation agreements with local stakeholders
- Giving more credit to developers who have conducted more robust, diverse types of stakeholder engagement
- Developing credits that support the fishing industry, such as through multi-factor bidding or a proportional bidding credit inclusive of fishing industry considerations
- Including curtailments and monitoring data in lease stipulations to align monitoring methods (as the Regional Wildlife Science Collaborative does on the East Coast)
- Using existing agreements with cable companies as potential models for offshore wind lease agreements with developers, as cable company-community agreements go back multiple decades and include elements like safety, monitoring, job training, surveys, etc.

Convening 3: Transmission

CLEE held its third convening in this series on June 28, 2022. The convening featured an array of agency and technical experts, including a representative from the California Independent System Operator, a former California Public Utilities Commission Deputy Executive Director, and a representative from Western Powerpool.

The convening started with some historical context from an advocate working in the North Coast. This speaker pointed out that there have been many extractive industries in Northern California that have created harm in the region. She urged state and federal governments to avoid repeating past mistakes by pursuing OSW development in such a way that creates partnerships with tribal nations and local communities and contributes to regional resilience.

Speakers then gave participants a transmission introduction and an overview of the California Independent System Operator planning process, as well as an introduction to the ways in which transmission problem solving must vary between Northern and Central California.

Participants asked numerous questions of the speakers. Some attendees were interested in more deeply understanding technical terms used in transmission – for example, the difference between availability and capacity. Others were interested in understanding how much new transmission infrastructure will be needed and whether existing infrastructure can be used as the state builds out transmission for offshore wind.

Participants sought clarity around the role of local governments in the transmission planning process. Participants were also interested in whether battery storage has the ability to reduce transmission needs. Some participants asked about the possibility of reducing conflict by co-locating transmission with existing cable infrastructure.

Participants were interested in whether new clean energy could be planned so as to benefit environmental justice communities, especially those that have been home to fossil fuel plants. For example, some participants posed the idea of retiring fossil fuel plants as part of the OSW planning process. Tribal advocates expressed concern that forty percent of some tribal communities in Northern California lack electricity and suggested a fund to address this need.

At the convening, participants discussed their definitions of success for OSW transmission in both the short and long term. These definitions of success included:

- Achieving statewide decarbonization goals
- Broader planning and coordination, including connections between OSW development phases (turbine planning to workforce planning)
- Clarity on planning goals and interim steps (for example, is the goal to plan only for OSW or for future, larger capacity in an area like the Central Coast)
- More conversation and partnership with state and federal agencies, developers, energy authorities, etc., about growing towards future electrification needs
- Meaningful engagement with local tribal communities, including non-federally recognized tribes
- More clarity about immediate next steps, including details on a first phase of planning and community engagement
- Coordination between organizations, as some ask similar questions
- More information about subsea cables and the environmental and cultural impacts of various transmission options, including through studies of voltage impacts and entanglement
- Prioritizing environmental justice, including by achieving a phase out of fossil fuel plants
- Improving energy resilience for communities directly affected
- Developing a comprehensive environmental monitoring plan
- Prioritizing transmission in least conflict areas, including those that minimize impacts to wildlife and habitats
- Adopting a standardized approach to priority environmental issues and adopting standards ahead of time
 - One participant proposed creating a national platform with commitments and codified standards and noted that coordination with business entities could be a forum for establishing best practices. This attendee urged that the AB 525 process be the primary vehicle for setting standards, with the AB 525 strategy report serving as a central document enabling state agencies to coordinate
- Having the opportunity to provide input to CPUC and CAISO about microgrid or storage options
- Implementing standardization – for example, using CAISO criteria to assess OSW or dynamic vs. transient analyses for renewables connections across the country
- A better understanding of which transmission siting options increase the likelihood of transmission actually being built

- Aligning transmission with generation, and understanding where the lease areas will be located moving forward to plan longer-term transmission needs
- Additional information and planning for wildfire risk
- More specific cost estimates
- Increased resources to devote to transmission planning and build out
- More detail on the impacts to the fishing industry and the involvement of labor unions
- Ensuring that near-shore sites are undisturbed, and working with fisheries agencies, NOAA, tribes, and others to protect these areas
- Establishing annual reports and check-ins to ensure accountability

Participants' concerns included:

- The need to present residents with a complete plan and clearer long-term picture, including potential routes
- Energy resiliency in local areas, and the need to provide electricity benefits to rural and tribal communities
- The importance of including sea space analysis in transmission conversations (in order to determine siting of generation and transmission) and vice versa.
- The logistics and feasibility of having new transmission lines cross public lands, such as the Trinity Wilderness
- Impacts on tribal communities, including habitat, wildlife, and cultural impacts
- The need to match California Energy Commission (CEC) load forecasting with interconnection requests to help paint a long-term picture of load forecast

Some participants at the convening discussed the potential pluses and minuses of building a subsea cable to deliver energy to more populated areas versus onshore transmission to deliver more energy to local areas as California's infrastructure is expanded to accommodate increased power generation from OSW. Some expressed support for a subsea cable, while others expressed opposition. One participant noted that a subsea cable is an expensive engineering endeavor, and that the economics will depend on the scale of the broader OSW buildout. A larger subsea cable might be more beneficial in terms of the scale of energy generated. Another participant expressed that additional on-land transmission might benefit local communities by increasing reliability or electricity access but might also create a substantial amount of new infrastructure in communities (for example, substations). One participant noted that an alternative solution might be creating a community benefits fund to help with electricity bills or fund needed upgrades.

In terms of information sharing and transparency, participants wanted to see:

- Ease of access to and usability of data
- Information on wildlife impacts
- Clarity on economic impacts and workforce development

- An information-sharing and discussion process around financing between state and federal parties. One participant proposed a joint state-federal transmission process with community engagement.

Several voices expressed the critical importance of having early stakeholder feedback and participation. One attendee proposed that the offshore wind permitting process could provide a good forum in which to raise certain transmission concerns and find agreement.

Additional questions posed by attendees included:

- How can this process help local areas meet their climate or other goals?
- How can we build stakeholder engagement early? Concerns about processes that have failed in the past.
- What is the need for financing support? Can the federal government help with financing, and possibly with permitting support as well?
- Where are the existing broadband cables at sea, including landings in Humboldt? How can we focus on co-locating transmission with existing cable infrastructure to potentially reduce conflict?

Convening 4: Perspectives from the Eastern US and Europe

On October 20th, 2022, CLEE held a convening on offshore wind perspectives from the East Coast and Europe featuring five speakers: the Regional Wildlife Science Collaborative (RWSC), Browning the Green Space, Equinor, Colby College, and Congressman Carbajal's office (D-CA 24th District). Some represented and shared information about the work of organizations including the RWSC and Browning the Green Space. Other speakers shared research on stakeholder and tribal engagement in Maine and lessons learned from a Denmark offshore wind tour. A speaker from Equinor described the company's experiences with Hywind, the world's first floating offshore wind farm. Representatives from the Bureau of Ocean Energy Management (BOEM) and the California Energy Commission (CEC) also shared updates on the auction process, which would be held later in 2022.

Convening participants identified concerns and needs including the following:

- Concerns around the distribution of impacts and costs and benefits
- Concerns around how to translate the RWSC model to the West Coast without the more tightly spaced, geographically side-by-side OSW development that occurs on the East Coast because of the many adjacent states pursuing OSW
- Concern that current OSW areas will make wind lease areas essentially off limits for fishing
- The need for long-term contracts to secure port, harbor, laydown, manufacturing, and assembly space
- New and larger, sometimes specialized equipment for ports and additional space are needed, which pose significant challenges
- A need for wildlife data collection and sharing

One participant was concerned about how to follow up with developers regarding community concerns and ensuring community participation in the absence of policy mandates. Participants also discussed options for zero-emission paths at the ports with the additional activity created by OSW, noting that Denmark has a goal of zero-emissions port activities and the California Green Ports Initiative focuses on providing green electric shore power.

Potential solutions were raised in some areas, including:

- Starting a West Coast version of the Regional Wildlife Science Collaborative
- Early planning to identify scientific research priorities connected to OSW impacts and mitigation
- A regional framework to develop datasets rather than having each project upload data individually without discussion, communication on priorities, and conversation about research design. Participants noted that datasets would not be effective without this regional focus.
- Conducting studies in advance of lease developments in different conditions to obtain more data



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