

Invenergy: OCS-A 0542 Semi-Annual Progress Report

November 1, 2022 – April 30, 2023



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Version 0



Executive Summary

This Progress Report is prepared in accordance with Invenergy Wind Offshore LLC's (Invenergy; Lessee) Commercial Lease OCS-A 0542 (Lease), which requires that Invenergy submit a Progress Report to the Bureau of Ocean Energy Management (BOEM) every 6 months through the Construction and Operations Plan approval process. This Progress Report covers the reporting period **November 1, 2022, to April 30, 2023**.

For this reporting period, Invenergy's progress on its project on Lease OCS-A 0542 (also called Leading Light Wind; the "Project"). Invenergy established protocols for offshore and onshore data collection and surveys to characterize the Project area. It completed its first benthic survey of the Project Lease area and transmission routes on April 7, 2023, and began its geophysical survey (Phase 1) without use of mitigated acoustic sources nor requirement of an Incidental Harassment Authorization on April 24, 2023.

Invenergy completed a routing analysis for federal waters and New York State (NYS) waters and is conducting a routing analysis from the designated Renewable Energy Lease Area OCS-A 0542 (Lease Area) to the National Guard Training Center in Sea Girt, New Jersey (NJ), as well as working to develop onshore routes from Sea Girt to the Larrabee substation.

Invenergy has been active in evaluating and bidding into offshore wind (OSW) renewable energy certificate power offtake opportunities in both New York (NY) and NJ.

During this reporting period, Invenergy has organized outreach efforts and requested feedback from Native American Tribes (Tribes) as well as multiple federal, state, and local agencies, fisheries, and other stakeholders. The Project has hired an external engagement director with more than 15 years of experience working in the region on infrastructure and outreach.

Federal, state, and local agency engagement has focused on introductory Project communications with relevant agencies as well as engagement discussions and meetings including but not limited to topics regarding transmission line planning, landfall and crossing locales, survey activities, and the NYS Article VII pre-application process.

Invenergy has developed and recently updated in March 2023, its Fisheries Communication Plan and engaged a designated Fisheries Liaison Officer (FLO) to inform engagement with fisheries industry stakeholders throughout the life of the Project. To date, fisheries engagement has focused on defining potential challenges and solutions between fisheries stakeholders, ocean users, and OSW development through collaborative communication pathways in industry liaisons, working groups, marine research institutions, and stakeholder participation enhancement opportunities to better inform Project activities and design decisions.

Invenergy is actively participating in relevant working groups and subcommittees to proactively identify other stakeholder groups with interest. Engagement has focused on exploring research partnerships with maritime stakeholders, academic institutions, and non-governmental organizations to advance environmental research and monitoring related to the construction and operations of the Project. Invenergy has participated in workshops with industry experts to discuss the challenges associated with routing, installing, and operating submarine cables and joined American Clean Power (ACP) Association's Maritime Subcommittee and the Regional Wildlife Science Collaborative for OSW with the collective goal of collaboration and information sharing to deconflict Project facilities and minimize impacts to resources. Additionally, Invenergy participated in BOEM's NY and NJ OSW Environmental Justice Forum.



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Acronyms and Abbreviations

ACP	American Clean Power
ALO BOEM	Agency Liaison Officer
E-TWG	Bureau of Ocean Energy Management
E-TWG F-TWG	Environmental Technical Working Group
G&G	NYSERDA Fisheries Technical Working Group
HRG	Geophysical and Geotechnical
	High-Resolution Geophysical
HSRL	Rutgers Haskin Shellfish Research Laboratory
Invenergy; Lessee Lease Area	Invenergy Wind Offshore LLC Lease Area OCS-A 0542
MAC-AFS	
	Mid-Atlantic Chapter of the American Fisheries Society
	Mid-Atlantic Fisheries Management Council
MTA	Metropolitan Transportation Authority
NATCP	Native American Tribal Communications Plan
NJ	New Jersey
	New Jersey Board of Public Utilities
NJDMAVA	New Jersey Department of Military and Veterans Affairs
NMFS	National Marine Fisheries Service
NOAA	National Oceanic and Atmospheric Administration
NPS	National Park Service
NY	New York
NYC	New York City
NYCDPR	New York City Department of Parks and Recreation
NYS	New York State
NYS-AFS	New York Chapter of the American Fisheries Society
NYSDEC	New York State Department of Environmental Conservation
NYSDOS	New York Department of State
NYSDPS	New York State Department of Public Service
NYSERDA	New York State Energy Research and Development Authority's
OCS	Outer Continental Self
OFLR	Offshore Fisheries Liaison Representative
OSW	Offshore Wind
PEIS	Programmatic Environmental Impact Statement
PJM	PJM Interconnection LLC
Project; Leading Light Wind	the project on Lease OCS-A 0542
ROSA	Responsible Offshore Science Alliance
U.S.	United States
USACE	United States Army Corps of Engineers



1. Purpose and Background

1.1. Purpose

The Bureau of Ocean Energy Management (BOEM) released in April 2023 the *Draft Guidelines and Instructions for Progress Report Required by BOEM New York Bight (OCS-A 0537-0544) and Carolina Long Bay (OCS-A 0545-0546) Leases.* This Progress Report is prepared in observance of the BOEM draft guidelines and in accordance with Commercial Lease OCS-A 0542, which requires that Invenergy Wind Offshore LLC (Invenergy; Lessee) submit a Progress Report to BOEM every 6 months through the Construction and Operations Plan approval process. This Progress Report covers the reporting period **November 1, 2022, to April 30, 2023**. As required by Addendum C, Section 3.1.1 of the Lease, this Progress Report documents overall Project progress and engagement activities undertaken with agencies, Native American Tribes (Tribes), communities, ocean user groups, and the public over the reporting period and plans for continued engagement.

1.2. Lessee Information

As lead developer, Invenergy is developing the project on Lease OCS-A 0542 (also called Leading Light Wind; the "Project") with co-developer energyRe. Invenergy and its affiliates have successfully developed more than 30 gigawatts of projects that are in operation, construction, or contracted. This includes more than 890 megawatts of wind, solar, and advanced energy storage projects in New York (NY) and over 4,500 megawatts of wind, solar, natural gas, and advanced energy storage projects in the PJM Interconnection LLC (PJM) market. Invenergy has opened an office in New York City (NYC), its third office in NY State (NYS), and has developed a Project website to inform interested parties and the general public about the Project and provide relevant updates as it progresses (<u>https://leadinglightwind.com/</u>). EnergyRe is an independent NY-based company focused on solving complex challenges and providing clean energy solutions. The team at energyRe has expertise in infrastructure, engineering, and development.

1.3. Lease Description

Invenergy executed Commercial Lease OCS-A 0542 in the NY Bight on April 2022. Lease Area OCS-A 0542 (Lease Area) is located 40 miles east of Atlantic City, New Jersey (NJ), and 80 miles south of Long Island, NY, and encompasses approximately 84,000 acres of the United States (U.S.) Outer Continental Shelf (OCS). The Project, which will be located within the Lease Area export cable corridors in surrounding waters, is named the Leading Light Wind Project. Figure 1 shows the Project Lease Area and other active lease areas in the vicinity. The Project Lease Area has a low gradient slope with water depths ranging between approximately 32 and 54 meters (104 and 177 feet). Further desktop analysis of the Lease Area and offshore waters is detailed in the 2023 Geophysical and Geotechnical (G&G) Survey Plan submitted to BOEM in March 2023.

The Project will include wind turbine generators in the Lease Area interconnected with electrical cables, foundations for the wind turbine generators, one or two converter/transformer platforms and export cables connecting to the onshore electrical grid. The Project is projected to produce over 2,000 megawatts that could power over 800,000 homes annually.





Figure 1 Leading Light Wind, OCS-A-0542 and Active BOEM Lease Areas

2. Tribal Engagement

This section provides a summary of Invenergy's engagement activities with Native American Tribes as described in the Commercial Lease OCS-A0542. Below is a list of applicable federally recognized Native American Tribes identified for engagement in Section 5.3.3 of Lease OCS-A 0542 (Appendix A).

- Absentee-Shawnee Tribe of Indians of Oklahoma,
- Delaware Tribe of Indians,
- Eastern Shawnee Tribe of Oklahoma,
- Mashantucket Pequot Tribal Nation,
- Mashpee Wampanoag Tribe,
- Mohegan Tribe of Connecticut,
- Shawnee Tribe,
- Stockbridge-Munsee Community Band of Mohican Indians,
- The Delaware Nation,
- The Narragansett Indian Tribe,
- The Shinnecock Indian Nation, and
- Wampanoag Tribe of Gay Head (Aquinnah).

On July 25, 2022, BOEM contacted Invenergy and the other lessees in the NY Bight to inform parties that BOEM's requirement for each lessee to hold a meeting with the Tribes within 120 days of lease execution could be overly burdensome to the Tribes. In the spirit of reducing stakeholder burden and coordinating engagement, BOEM indicated



that the agency would be playing a convening role to facilitate a meeting with all lessees and Tribes to discuss developments in the NY Bight, communication best practices, and the development/refinement of communication plans. BOEM agreed to waive the 120-day deadline associated with Lease Stipulation 3.1.2.2 of Addendum C of leases OCS-A 0537-0544 (such as, requirement for a Native American Tribal Communications Plan).

BOEM released in February 2023, its *Draft Guidelines and Instructions for Native American Tribes Communications Plan (NATCP) Development Required by BOEM New York Bight Leases (OCS-A-0537 to 0544) and Carolina Long Bay Leases (OCS-A-0545 to 0546).* The guidelines require the NY Bight Lessees to coordinate on developing a joint NATCP. Invenergy has been coordinating and collaborating with the other NY Bight Lessees. Together they have developed an NATCP outline to be presented to the Tribes during a meeting in May 2023. The Lessees are coordinating on jointly contracting a consultant to develop the NATCP who will also incorporate feedback from the Tribes that will be collected at the May 2023 meeting.

2.1. Overall Tribal Engagement Progress Since Last Report

Under the direction of its Tribal Liaison Officer (Appendix B), Invenergy engaged in continued coordination with all identified federally recognized Native American Tribes. Tribal engagement has focused primarily on information sharing regarding ongoing and upcoming Project activities including surveys planned for 2023. Table 1 includes a summary of engagement activities conducted with Tribes during the reporting period.

Table 1 Tribal Engagement During Reporting Period

Date	Tribe(s)	Focus of Discussion or Engagement and Meeting Objective(s)	Follow-up Actions, Activities, Outcomes
01/13/2023	All	Project update e-mail on information shared throughout 2022, efforts to solicit input on preliminary data collection activities, upcoming activities for Tribal participation, status of benthic survey, Phase IA cultural resources survey, and G&G surveys	Information sharing
		Noted a forthcoming invitation to a virtual meeting to discuss G&G surveys	
01/25/2023	All	G&G Pre-Survey Meeting certified letters inviting Tribes to virtual Teams meeting on March 7 and 8, 2023 to discuss the G&G survey plan	Information sharing
02/03/2023	All	G&G Pre-Survey Teams Meeting invitation for Tribes to attend a virtual Teams meeting on March 7 and 8, 2023 to discuss the G&G survey plan	Information sharing
03/02/2023	All	G&G Pre-Survey Teams Meeting reminder e-mail on invitation for Tribes to attend a virtual Teams meeting on March 7 and 8, 2023 to discuss the G&G survey plan	Information sharing



Date	Tribe(s)	Focus of Discussion or Engagement and Meeting Objective(s)	Follow-up Actions, Activities, Outcomes
03/07/2023	Stockbridge-Munsee Community Band of Mohican Indians Wampanoag Tribe of Gay Head (Aquinnah)	G&G Pre-Survey Teams Meeting #1 Focused on upcoming surveys planned for data collection to characterize both seafloor and subsurface ocean conditions. Shared survey schedules	Information sharing Routing and siting follow-up meeting; marine species follow-up meeting: protected species observer training, protected species, partnering opportunities, and takes; share schedule for Tribal engagement during geoarchaeological survey/coring; identify technology for virtual meetings during core processing
03/08/2023	Delaware Tribe of Indians Mashpee Wampanoag Tribe Wampanoag Tribe of Gay Head (Aquinnah)	G&G Pre-Survey Teams Meeting #2	Information sharing Explore development of comprehensive mapping data for submerged areas; Tribal engagement during strategy development for archaeological testing and sampling methodology; Mashpee Wampanoag Tribe requested a general Project area orientation map, SHP files and latitude/longitude; Delaware Tribe of Indians requested engagement during study/planning for NY landfall; Requested updated Project schedule for surveying/coring activities
03/23/2023	Stockbridge-Munsee Community Band of Mohican Indians Wampanoag Tribe of Gay Head (Aquinnah)	Teams Meeting #1 notes sent for review and comment via e-mail	Information sharing No comments received
03/23/2023	Delaware Tribe of Indians Mashpee Wampanoag Tribe Wampanoag Tribe of Gay Head (Aquinnah)	Teams Meeting #2 notes sent for review and comment via e-mail	Information sharing No comments received



Date	Tribe(s)	Focus of Discussion or Engagement and Meeting Objective(s)	Follow-up Actions, Activities, Outcomes
04/24/2023	Delaware Tribe of Indians Delaware Nation Stockbridge-Munsee Community Band of Mohican Indians	Teams meeting to provide overview of the Project and discuss terrestrial cultural resources	Engagement with NY State Historic Preservation Office and information sharing
05/01/2023	All Tribes	Teams Meeting #1 and #2 notes final versions sent via e-mail	Information sharing

2.2. Identification of Potential Project Effects Related to Tribal Interests

Table 2 includes a summary of potential effects related to Tribal interests and Tribal input on Project design or implementation during the reporting period.

Table 2 Potential Effects and Tribal Input on Project Design or Implementation During Reporting Period

Potential Effect		Affected Tribe	Effort to Address Potential Effect and/or How the Project Design or Implementation has been Informed
Potential impacts of construction to Native American archaeological sites	All		Invenergy will continue to engage with the Tribes as construction plans and designs of facilities advance and become more refined
			Invenergy will engage with Tribes during the geoarchaeological survey and coring process
Potential impacts to protected species due to increased ship activity from construction	All		Invenergy will engage with Tribes to discuss approaches to protecting marine species and partnering opportunities
Overall inefficiency of sharing information between Tribes/BOEM/Lessees	All		Invenergy will engage with Tribes, Lessees, and BOEM to identify opportunities for better information sharing
			Lessees are developing a joint NATCP to facilitate interactions with Tribes



Potential Effect	Affected Tribe	Effort to Address Potential Effect and/or How the Project Design or Implementation has been Informed
Potential impacts to undiscovered resources of cultural significance to Tribes could result from development of potential landfalls in NY. The Tribes identified potential Project area landfalls as culturally sensitive	Stockbridge-Munsee Community Band of Mohican Indians, Delaware Nation, Delaware Tribe of Indians	Invenergy will continue to engage with the Tribes as plans and designs of facilities advance and become more refined in geographic extent

2.3. Tribal Feedback on Transmission Planning

Invenergy met with three Tribes (Delaware Tribe of Indians, Delaware Nation. Stockbridge-Munsee Community Band of Mohican Indians) on April 24, 2023, and discussed their concerns about potential landfalls in NY (Tables 1 and 2). The Tribes shared the Project's potential landfalls in NY as occurring in a culturally significant region for them due to known pre- and post-contact Tribal settlements. The potential landfalls are in areas that are heavily developed and little of the Tribe's heritage has been discovered/preserved there. The Tribes are concerned with development that has the potential to impact undiscovered sites of cultural or religious significance. The shoreline and geologic formations such as rivers and ridges were highlighted as being more likely to potentially have sensitivity. Most specifically, the Tribes called out prominent topographic features of concern in the potential landfall areas. The Tribes requested additional consultation to review site-specific transmission activities in this area.

2.4. Anticipated or Scheduled Tribal Engagement Activities

Table 3 includes a summary of anticipated or scheduled engagement activities to be conducted with Tribes during the next reporting period.

Table 3 Anticipated Tribal Engagement Activities for the Next Reporting Period

Anticipated Focus of Discussion or Engagement	Tribe(s)	Anticipated Coordinated Engagement with Other Lessees
Meeting with Tribes on May 15, 2023, on the joint NATCP	All	Coordination on the joint NATCP, soliciting feedback from Tribes, and establishing future touchpoints for coordination with Tribes
Geoarchaeological coring meeting	All	None. This meeting will be Project-specific and during Invenergy's survey timeline at a mutually agreeable time
Routing and siting follow-up meeting on transmission routes and landfall locations	All	None. This meeting will be Project-specific and during Invenergy's development timeline at a mutually agreeable time
Marine species follow-up meeting: protected species observer training, protected species, partnering opportunities, and takes	All	To be determined based on outcome of joint NATCP development and Tribal input



3. Engagement with Potentially Affected Parties

This section provides a summary of Invenergy's engagement activities with Potentially Affected Parties including federal, state, and local agencies as well as fisheries and other stakeholders.

Invenergy has conducted outreach with federal, state, and local agencies, fisheries and other stakeholder groups as described in the following sections. Invenergy designated an Agency Liaison Officer (ALO; Appendix B) for the Project and submitted the Agency Communication Plan to BOEM on August 26, 2022. Additionally, Invenergy has engaged a Fisheries Liaison Officer (FLO) (Appendix B) and in March 2023 updated the Project's Fisheries Communication Plan. The Agency Communication Plan and Fisheries Communication Plan are posted to the Project website¹ (Appendix C).

3.1. Overall Engagement Progress with Potentially Affected Parties Since Last Report

3.1.1. Summary of Federal Agency Engagement Activities

Invenergy has continued engagement with federal agencies on a variety of topics to include transmission lines, areas of concern to specific agencies, natural resources, G&G survey plans, BOEM's programmatic environmental impact statement (PEIS) for the NY Bight, representative Project design envelope, and Section 106. Table 4 provides a summary of engagement activities conducted with federal agencies during the reporting period.

Table 4 Engagement Activities with Federal Agencies During the Reporting Period

Date	Federal Agency	Focus of Discussion or Engagement and Meeting Objective(s)	Follow-up Actions, Activities, Outcomes
10/31/2022	National Parks Service (NPS)	Discussion on transmission line crossing	Continued coordination
11/15/2022	National Oceanic and Atmospheric Administration (NOAA)	Pre-application meeting to discuss Project	Continued coordination
11/17/2022	US Army Corps of Engineers (USACE)	Pre-application meeting to discuss Project	Continued coordination
11/29/2022	BOEM, NOAA National Marine Fisheries Service (NMFS)	Benthic survey discussion	Received guidance from NMFS on areas of benthic interest
12/13/2022	BOEM	BOEM/American Clean Power (ACP) NY Bight Lessee Monthly meeting	Continued coordination
12/15/2022	BOEM	NY Bight PEIS avian analysis	Better Lessee understanding of avian analysis in the PEIS
01/10/2023	BOEM	BOEM/ACP NY Bight Lessee monthly meeting	Continued coordination
01/25/2023	BOEM	BOEM monthly meeting on OCS-A-0542	Continued coordination
02/13/2023	BOEM	BOEM monthly meeting on OCS-A-0542	Continued coordination

¹ <u>https://leadinglightwind.com/documents</u>



Date	Federal Agency	Focus of Discussion or Engagement and Meeting Objective(s)	Follow-up Actions, Activities, Outcomes
02/14/2023	BOEM	BOEM/ACP NY Bight Lessees monthly meeting	Continued coordination
02/27/2023	BOEM	G&G survey plan moonpool discussion	Provided better understanding to BOEM of types of moonpools to be used in survey vessels
03/13/2023	BOEM	BOEM monthly meeting on OCS-A-0542	Continued coordination
03/13/2023	BOEM	BOEM NY Bight PEIS Section 106 consultation	Continued coordination
03/14/2023	BOEM	BOEM/ACP NY Bight Lessees monthly Workshop on Representative Project Design Envelope; Avoidance, Minimization, Mitigation, Measures, and tiering	Continued coordination
04/10/2023	BOEM	BOEM Monthly Meeting on OCS-A-0542	Continued coordination

3.1.2. Summary of State Agency Engagement Activities

Invenergy has continued engagement with state agencies, primarily focused on Article VII in NY and a site visit to NJ. Table 5 provides a summary of engagement activities conducted with state agencies during the reporting period.

Table 5 Engagement Activities with State Agencies During the Reporting Period

Date	State Agency	Focus of Discussion or Engagement and Meeting Objective(s)	Follow-up Actions, Activities, Outcomes
4/12/2023	NYS Department of Environmental Conservation (NYSDEC) and NY Department of State (NYSDOS)	Article VII Pre-Application Meeting	Discussed variety of environmental topics including sediment sampling, contamination, and time of year restrictions. Also scheduled recurring monthly engagements
4/10/2023	NJ Department of Military and Veterans Affairs (NJDMAVA)	NJDMAVA hosted a site visit to the Sea Girt National Guard Training Center for prospective NJ 3 bidders. NJDMAVA toured the grounds and had open Q+A with developers regarding installing transmission cables on the property	Additional data requests to NJDMAVA. Incorporation of feedback from NJDMAVA into NJ3 Offshore Wind (OSW) wind renewable energy certificates bid



Date	State Agency	Focus of Discussion or Engagement and Meeting Objective(s)	Follow-up Actions, Activities, Outcomes
3/20/2023	NY Department of Public Service (NYSDPS)	Article VII Pre-Application Meeting	Provided NYSDPS with detailed description of the Project as it pertains to them for the Article VII application currently being prepared. Discussed some pertinent transmission issues for the NY area

3.1.3. Summary of Local Agency Engagement Activities

Invenergy has continued engagement with local agencies, primarily focused on cable crossings and potential landfall options. Table 6 provides a summary of engagement activities conducted with local agencies during the reporting period.

Table 6 Engagement Activities with Local Agencies During the Reporting Period

Date	Local Agency	Focus of Discussion or Engagement and Meeting Objective(s)	Follow-up Actions, Activities, Outcomes
12/16/2023	NYS Metropolitan Transportation Authority (MTA)	Discuss potential cable crossings	Discussed the MTA requirements for cable crossings in the East River
01/06/2023	NYC Department of Parks and Recreation (NYCDPR)	Discuss potential cable landfall options on NYCDPR property	Discussed various options and constraints and the Parks' plan for the property after a redevelopment

3.1.4. Summary of Fisheries Engagement Activities

During the reporting period, Invenergy has continued ongoing conversations with the fishing community in preparation for its survey activities. These conversations have resulted in decreasing the potential for conflicts between survey and fishing operations. Additionally, Invenergy has contracted regional fishing industry members to participate as OFLRs and scout vessel operators. Invenergy will continue to prioritize sourcing support from regional fishing community members in future Project activities. Table 7 provides a summary of fisheries engagement activities conducted during the reporting period.



Table 7 Fisheries Engagement Activities During Reporting Period

Date	Stakeholder(s)	Engagement Objective	Outcome
11/15/22	Mid-Atlantic Chapter of the American Fisheries Society (MAC-AFS); Other Lessees	Review and discuss ongoing fisheries research related to OSW, identify research needs and opportunities for cooperative research w/fishing community. Discuss collaborative fishing community engagement opportunities with other NY Bight Fisheries Liaisons	Learned about ongoing research; made connections for potential cooperative research; identified collaborative outreach and engagement opportunities with NY Bight developers
12/5/22	Mid-Atlantic Fisheries Management Council (MAFMC)	Submit Project introduction letter to MAFMC, informing about the Project, contacts, and planned activities	Letter included as part of meeting materials; informed fishing communities of the Project and contacts
01/12/23	Rutgers OSW Collaborative; NJ Board of Public Utilities (NJ BPU); Other Lessees	Discuss challenges and potential solutions regarding OSW with OSW industry, government, and academic leaders	Identified potential pathways for collaborative efforts with research institutions and other fisheries stakeholders to better understand and address fisheries challenges related to OSW development
01/31/23	NMFS Cooperative Research staff; recreational and commercial fishermen, research institutions, and other Lessees	NOAA Mid-Atlantic Cooperative Research Summit. Review status of cooperative research between fishing community and researchers, identify OSW cooperative research opportunities; facilitate regional coordination on cooperative research and development of new partnerships	Engaged with fishers willing to participate in cooperative research and identified potential opportunities; discussed vessel safety needs to support participation in OSW research
02/08/23	Cornell Cooperative Extension of Suffolk County; Commercial Fishermen of Long Island, NY	Discuss fisheries research, monitoring initiatives, and outreach and engagement opportunities; introduce the Project to commercial fishers from Long Island	Discussed potential for gear innovation to support fishing operations in a wind farm; discussed opportunities for cooperative research and monitoring; met with fishermen at the port of Shinnecock with Cornell Cooperative Extension staff
02/08/23	NY Chapter of the American Fisheries Society (NYS-AFS); NY Universities; NYS Energy Research and Development (NYSERDA)	Connect with organizations about fisheries and marine-related research for OSW development; learn about current fisheries research being conducted	Connected with fisheries research organizations to collaborate in the future, particularly on sturgeon-related monitoring and research



Date	Stakeholder(s)	Engagement Objective	Outcome
03/06/23	Fisheries stakeholders	Mariner Update on benthic survey	Several industry members contacted the FLO expressing concerns over potential gear loss or damage from survey activities. The FLO solicited information from industry members on locations of fishing gear prior to and during survey activities. This information was relayed to the survey team to mitigate potential conflicts between fishing and survey activity. The FLO is continuing to coordinate with fisheries stakeholders on future Project activities
03/09/23 - 3/10/23	Visits to commercial fishing ports of NJ	Meet with commercial fishermen, share Project information, at docks of Belford, Neptune City/Shark River, Point Pleasant, Cape May, and Barnegat Light. Activity coordinated with other NY Bight Lease Holders	Shared information about Project planning activities; listened to fishermen's concerns and discussed potential solutions; discussed vessel opportunities to support OSW
03/10/23	Cornell Cooperative Extension of Suffolk County; Commercial Fishermen of NY	Engage Long Island fishermen about commercial fishing gear innovations, marketing strategies, and concerns related to OSW development	Connected with members of the Long Island commercial fishing community; discussed opportunities for follow-up conversations about OSW development concerns
03/15/23	Rutgers Haskin Shellfish Research Laboratory (HSRL)	Engage HSRL regarding background in collaborative science with local commercial fisheries (clam, scallop, oyster); discuss fisheries-related research partnerships	Identified potential partnership opportunities for resource monitoring and to address concerns of the clam and scallop fishing communities
03/17/23 - 3/19/23	Saltwater Fishing Expo, Recreational Fishing Community of NY/NJ; Other Lessees	Engage regional recreational fishing community; share Project information, solicit input, and answer questions	Shared information on Project; expanded fisheries contact list; addressed questions regarding whale strandings; planned for follow-up with individual stakeholders
03/23/23	Atlantic Estuarine Research Society; American Littoral Society; NJ Economic Development Authority, NJ Universities	Connect with organizations about fisheries and marine-related research for OSW development; learn about current fisheries research being conducted; connect and discuss partnership opportunities with fisheries stakeholders	Developed new partnerships with fisheries stakeholders; scheduled follow- up communication on partnership and funding opportunities for fisheries-related research and monitoring



Date	Stakeholder(s)	Engagement Objective	Outcome
04/04/23	MAFMC	Provide development updates and engage with Council members and fishing industry leaders	Met with council members, fishing community leaders, other NY Bight Fisheries Liaisons; provided Project status updates, discussed potential for OSW Event at June 2023 council meeting in Virginia Beach
04/14/23	Wind Institute for Innovation and Training; NJ Economic Development Authority; NJ Universities; Other Lessees	Learn about current OSW research being conducted by NJ research and scientists; engage with industry and government representatives on responsible OSW development strategies	Connected with various local NJ organizations and stakeholders

3.1.5. Summary of Other Engagement Activities

During this reporting period, Invenergy continued to explore research partnerships with academic institutions and nongovernmental organizations to advance environmental research and monitoring in key thematic areas including commercial fisheries, biological resources (i.e., marine mammals, avian/bat, fishes), technological advancements, and education. Invenergy will continue these efforts to identify and evaluate potential partnership opportunities for furthering meaningful research. Table 8 provides a summary of engagement activities conducted with other stakeholders.

Table 8 Engagement Activities with Other Stakeholders During the Reporting Period

Date	Stakeholder	Meeting Objective	Outcome
Various	Regional Wildlife Science Consortium	Monthly subcommittee meetings to discuss marine mammal, avian/bat, sea turtle, habitat/ecosystem, and industry	Ongoing contribution to the development of the Regional Wildlife Science Consortium Science Plan
Various	Elected officials, business/civic, labor, environmental, community organizations in NY and NJ	Introductory briefings to the Project	Continued coordination
Various	Potential procurement and supply chain partners	Support Project delivery and meet obligations of OSW wind renewable energy certificates power contract opportunities	Progressed partnerships with potential wind turbine generator original equipment manufacturers, developing several port and marshalling solutions to enable Project construction, developing supply chain investment plans



Date	Stakeholder	Meeting Objective	Outcome
Various	North America's Building Trades Unions and the NY State Building and Construction Trades	To enter a Project Labor Agreement(s) covering Project construction	Invenergy signed a Memorandum of Understanding with North America's Building Trades Unions to ensure the Project is built by NY union construction workers
Various	Local Stakeholders	Share Project information at local events	Continued transparency with the public
Various	Industry and Trade Associations	Share Project information	Continued transparency with stakeholders
Various	ACP Maritime Subcommittee	Discuss marine activities involving construction and operations of OSW farms	Continued coordination
Various	Academic Institutions, Non-governmental Organizations	Explore research partnerships to advance environmental research and monitoring in key areas (commercial fisheries, biological resources, technological advancements, and education)	Continued discussions and coordination
Various	Northeast and Mid- Atlantic Ocean Data Portals	Opportunities for data sharing to synthesize survey and monitoring data at regional scales	Continued discussions and coordination
11/01/2022	NYSERDA E-TWG	State of the Science, Committee Update, Coordination, and Opportunities	Continued coordination
03/02/2023	NYSDOS Maritime Technical Working Group	In-person workshop for industry experts, regulatory agencies, developers, and other stakeholders to discuss the challenges of routing, installing, and operating submarine cables	Continued coordination
03/09/2023	NYSDOS	Environmental Technical Working Group (E-TWG) Spring meeting	Provided feedback on NYS Master Plan 2.0
03/02/2023	NYSDOS	OSW Cabling Workshop	Provided feedback on cable routing challenges and provided opportunity to engage with mariners related to their concerns about submarine cables



Date	Stakeholder	Meeting Objective	Outcome
01/12/2023	Regional Wildlife Science Collaborative	Introduction to Northeast and Mid-Atlantic Data Portals	Preliminary discussion of opportunities for data sharing

3.2 Potential Effects and Input from Parties on Project Design or Implementation

Table 9 provides a summary of potential Project effects related to federal, state, local, parties and other stakeholders and their input on Project design and implementation during the reporting period.

Table 9 Potential Effects and Input from Parties on Project Design or Implementation During the Reporting Period

Potential Effect	Affected Party	Effort to Address Potential Effect and/or How the Project Design or Implementation has been Informed
Potential construction impact to parkland	NPS	Continued coordination on transmission line and landfall development
Potential impacts to USACE areas of jurisdiction	USACE	Continued coordination on transmission line and landfall development
Potential impacts of G&G survey to protected species	BOEM	Held a meeting to discuss the functions of moonpools on survey vessels
Potential impacts to fisheries industry from gear loss and damage from survey activities	Fisheries	The OFLR solicited information from industry members on locations of fishing gear prior to and during survey activities. This information was relayed to the survey team to mitigate potential conflicts between fishing and survey activity. The OFLR is expanding on these conversations to coordinate on future Project activities

3.3 Anticipated or Scheduled Engagement Activities

Table 10 provides a summary of anticipated or scheduled engagement activities with federal, state, local, parties and other stakeholders.

Table 10 Anticipated or Scheduled Engagement with Parties for the Next Reporting Period

Anticipated Focus of Discussion or Engagement	Party	Anticipated Coordinated Engagement with Other Lessees
Second benthic survey	BOEM, NMFS	None. This engagement is Project specific
Results of the first benthic survey	BOEM, NMFS	None. This engagement is Project specific



Anticipated Focus of Discussion or Engagement	Party	Anticipated Coordinated Engagement with Other Lessees
Monthly coordination on Construction and Operations Plan development and requisite studies	BOEM, relevant agencies TBD	None. This engagement is Project specific
PEIS	BOEM, Lessees	Anticipate joint meetings with other Lessees and BOEM to discuss progress of PEIS and to share information
Section 106	BOEM, Lessees	Anticipate joint meetings with other Lessees and BOEM to discuss additional guidance on Section 106
ACP and Lessees monthly coordination with BOEM	BOEM, Lessees, ACP	Continued coordination between BOEM, Lessees, and ACP on the NY Bight
Regulatory process and routing	USACE	None. These engagements are Project specific
Marine routing	USCG	None. These engagements are Project specific
Terrestrial routing	New York State Department of Transportation	None. These engagements are Project specific
Coastal Zone Consistency	NYSDOS	None. These engagements are Project specific
Water Quality and regulatory processes	NYSDEC	None. These engagements are Project specific
Land Use	NYCDPR	None. These engagements are Project specific
Coordination on upcoming G&G surveys, gathering peak fishing times and areas, port visits, stakeholder meetings, conferences, tradeshows, tournaments, fisheries mitigation solutions	Fisheries community, OFLR	Anticipate sharing port hours with other Lessees
Science partnership opportunities, cooperative research, community outreach	Regional institutions, academia, organizations, NOAA Sea Grant OSW Energy Liaison	None. These engagements are Project specific
OSW development and potential impacts to fish and fisheries	ROSA, NYSERDA F- TWG, ACP Fisheries Subcommittee, ACP NY	Some of these engagements are jointly attended by Lessees



Anticipated Focus of Discussion or Engagement	Party	Anticipated Coordinated Engagement with Other Lessees
	Bight Fisheries Working Group	
Continued Project information education	Local stakeholders	None. These engagements are Project specific

4. Survey Plan Activities Under BOEM Review or Underway

Tables 11, 12, and 13 provides a summary of Invenergy's survey plan activities and coordination with BOEM. Invenergy completed its first offshore benthic survey on April 7, 2023, and is currently undertaking its geophysical survey.

Table 11 Survey Plan Activities Under BOEM Review or Underway

Type of Survey	Survey Activity Date or Proposed Date	Purpose	Location Description
Geophysical Survey Phase 1 – non-mitigated sources	April 2023	Collect detailed imaging of the seabed to characterize seafloor conditions and mobility, to collect backscatter imagery to better understand differing acoustic properties of the seabed, and to refine the understanding of seabed features or obstructions, areas of potential archaeological interest, subsea infrastructure, and potential unexploded ordnance in the Lease Area and potential transmission routes	Lease Area and potential transmission routes

Table 12 provides a summary of anticipated or modified survey activities.

Table 12 Anticipated or Modified Survey Plan Activities

Type of Survey	Survey Activity Date or Proposed Date	Purpose	Location Description
Geophysical Survey Phase 2 – mitigated sources	Late summer	Collect detailed imaging of the seabed to characterize seafloor conditions and mobility, to collect backscatter imagery to better understand differing acoustic properties of the seabed, and to refine the understanding of seabed features or obstructions, areas of potential archaeological interest, subsea infrastructure, and potential unexploded ordnance in the Lease Area and potential transmission routes	Lease Area and potential transmission routes



Type of Survey	Survey Activity Date or Proposed Date	Purpose	Location Description
Geotechnical Survey	Late summer/early fall 2023	Collect data to supplement the 2022 geotechnical investigations for the characterization of soil layers, material types, and soil engineering properties. The 2023 geotechnical investigations are designed to fill remaining data gaps as required for the Construction and Operations Plan and to satisfy design and engineering requirements	Lease Area and potential transmission routes
Benthic Survey 1 – State Waters	May 2023	Complete Benthic Survey 1 by collecting grab samples, video, and photographs to characterize the benthic environment in the Lease Area and potential transmission routes	Transmission routes in state waters of NY and NJ
Benthic Survey 2	Summer 2023	Using an iterative approach, informed by Benthic Survey 1 and coordination with BOEM and NMFS, collect grab samples, video, and photographs to continue characterization of the benthic environment in the Lease Area and potential transmission routes	Lease Area and potential transmission routes

5. Coordinated Engagement

Invenergy has participated in coordinated engagement efforts with other Lessees in the NY Bight. Invenergy has worked with the larger OSW development community through the ACP Association to advocate for the OSW industry, collaborate on policy discussions, and coordinate with federal agencies on emerging policy guidance. Invenergy has actively engaged with other NY Bight lessees on the PEIS BOEM is undertaking for the NY Bight.

Invenergy has also coordinated closely with Lease OCS-A 0541 on the wind turbine layout, alignment on key corridors as part of preliminary design, and data collection. It will continue coordination with Lease OCS-A-0541 as both projects progress. With regard to state activities, Invenergy joined the NY OSW Alliance, a project of the Alliance for Clean Energy NY where it works with other OSW developers and other organizations to promote the responsible development of OSW power for NY. Invenergy also joined the NJ Mid-Atlantic Renewable Energy Coalition where it works with other renewable energy organizations to promote responsible renewable energy development.

Invenergy joined the Regional Wildlife Science Collaborative for OSW, and as an active member has participated in monthly meetings of the marine mammal, avian/bat, sea turtle, habitat/ecosystem, and industry subcommittees to provide input on the development of the organization's proposed science plan. Additionally, Invenergy participated in the NYSDOS E-TWG, spring meeting, providing feedback on development of the NYS Master Plan 2.0.

Invenergy has begun initial outreach to explore research partnerships with academic institutions and non-governmental organizations to advance environmental research and monitoring in key thematic areas including commercial fisheries, biological resources (i.e., marine mammals, avian/bat, fishes), technological advancements, and education. Invenergy will continue these efforts to identify and evaluate potential partnership opportunities for furthering meaningful research. Invenergy has held discussions with administrators of the Northeast and Mid-Atlantic Ocean Data Portals and is exploring opportunities for data sharing in support of their efforts to synthesize survey and monitoring data at regional scales.



Appendices



Appendix A. Tribes and Other Parties Relevant to the Project

Table A-1 Federally Recognized Tribes Relevant to the Project

Name of Tribe
Absentee-Shawnee Tribe of Indians of Oklahoma
Delaware Tribe of Indians
Eastern Shawnee Tribe of Oklahoma
Mashantucket Pequot Tribal Nation
Mashpee Wampanoag Tribe
Mohegan Tribe of Connecticut
Shawnee Tribe
Stockbridge-Munsee Community Band of Mohican Indians
The Delaware Nation
The Narragansett Indian Tribe
The Shinnecock Indian Nation
Wampanoag Tribe of Gay Head (Aquinnah)

Table A-2 Parties Relevant to the Project

Name of Party	Party Type(s)
Bureau of Ocean Energy Management	Federal Agency (FA)
Department of Defense	FA
Environmental Protection Agency	FA
National Marine Fisheries Service	FA
National Oceanic and Atmospheric Administration	FA
National Park Service	FA
National Marine Fisheries Service National Oceanic and Atmospheric Administration	FA FA



Name of Party	Party Type(s)
United States Army Corps of Engineers (New York and Philadelphia District)	FA
United States Coast Guard	FA
United States Fish and Wildlife	FA
New York State Metropolitan Transportation Authority	State Agency (SA)
New York State Energy and Research Development	SA
New York City Department of Parks and Recreation	SA
New York Department of State	SA
New York Department of Public Service	SA
New Jersey Department of Environmental Protection	SA
New York Department of Environmental Conservation	SA
New Jersey Economic Development Authority	SA
New Jersey Board of Public Utility	SA
American Clean Power Fisheries Subcommittee	Tribal, State, Federal, or Other Working Group or Forum (WG)
Environmental Technical Working Group	WG
Fisheries Technical Working Group	WG
Mid-Atlantic Fishery Management Council	WG
New York Bight Working Group	WG
New York Chapter of the American Fisheries Society	WG
Northeast Fisheries Management Council	WG
American Littoral Society	Educational and Research Institutions (ERI)
Atlantic Estuarine Research Society	ERI



Name of Party	Party Type(s)
Cornell Cooperative Extension of Suffolk County	ERI
New Jersey Universities	ERI
Rutgers Haskin Shellfish Research Laboratory	ERI
Rutgers Offshore Wind Collaborative	ERI
Wind Institute for Innovation and Training	ERI
Commercial Fisheries Users of Project Area	Commercial Fishery Industry (CFish)
Commercial Fishermen of Long Island and New York	CFish
North America's Building Trades Unions	Other
New York State Building and Construction Trades	Other



Appendix B. Lessee and Liaison Contact Information

Name	Contact Information
Agency Liaison Officer	Carmen Bernett, PhD, ENVSP
	Invenergy, Leading Light Wind
	cbernett@invenergy.com
	708-883-3878
Tribal Liaison Officer	Hope Luhman, PhD, RPA
	WSP
	hope.luhman@wsp.com
	518-334-6035
Fisheries Liaison Officer	Sarah Hudak
	Sea Risk Solutions
	shudak@searisksolutions.com
	919-302-8559

Appendix C. Communications Plans

Agency	https://leadinglightwind.com/assets/img/Leading-Light-Wind Agency-Comms-Plan Final-
Communication Plan	rev.1_032423_2023-03-24-223010_nyis.pdf
Fisheries	https://leadinglightwind.com/assets/pdfs/leadinglightoffshore/20230307_LLW_FisheriesComm
Communication Plan	unicationPlan.pdf
Native American	BOEM agreed to waive the 120-day deadline associated with Lease Stipulation 3.1.2.2 of
Tribal	Addendum C of leases OCS-A 0537-0544 (such as requirement for a Native American Tribal
Communications	Communications Plan). The Lessees are developing a joint NATCP in collaboration with the
Plan	Tribes. Drafting of the NATCP will progress during the next reporting period.

