# South Fork Wind, LLC – NGO Agreement for the Protection of North Atlantic Right Whales June 16, 2022

This Agreement for the Protection of North Atlantic Right Whales (the "Agreement") is dated as of June 16, 2022 (the "Effective Date"), and is made by and between SOUTH FORK WIND, LLC ("SFW"), the NATIONAL WILDLIFE FEDERATION, the NATURAL RESOURCES DEFENSE COUNCIL, and the CONSERVATION LAW FOUNDATION, Inc. (collectively, the "NGOs") (each of the foregoing may be referred to herein individually as a "Party," and collectively as the "Parties").

WHEREAS, the Parties are united in the belief that responsibly developed offshore wind energy has a major role to play in the energy future of the United States;

WHEREAS, the Parties recognize that wind energy does not have the negative climate effects of carbon emissions from other generation sources, and wind energy thus helps to ameliorate impacts from the climate crisis such as ocean acidification, loss of sea ice, sea level rise, more extreme weather, and many other negative climate effects;

WHEREAS, the Parties are committed to working together to ensure that the development of much-needed wind electricity generation capacity off the nation's coasts will occur in a manner that avoids, minimizes, and mitigates adverse impacts on the health of our coastal and marine wildlife;

WHEREAS, the development of offshore wind energy provides a unique opportunity for offshore wind developers to collaborate with academic research institutions, government, environmental organizations, ocean user groups and other stakeholders to advance scientific research that enhances protections for the critically endangered North Atlantic right whale, including research on the effects, if any, of wind farm operations on North Atlantic right whale distribution and habitat use:

WHEREAS, SFW and its affiliates are committed to developing offshore wind power projects in the United States with robust standards of environmental protection during pre-development, construction, and operations and maintenance activities, while making a meaningful contribution to science that can support the responsible development of the United States' vast offshore wind resources;

WHEREAS, while the protection of the North Atlantic right whale is a top priority, the Parties recognize and agree that protective actions set forth herein must be taken in a manner that ensures human health and safety when working in the offshore environment;

WHEREAS, while this Agreement pertains to protections for the North Atlantic right whale specifically, the Parties agree that the measures set forth herein may also provide additional protections to other marine mammals and protected species;

WHEREAS, this Agreement is intended to serve as a model for similar agreements pertaining to offshore wind projects along the East Coast; and

WHEREAS, the Parties agree that the commitments made herein apply specifically and solely to SFW's approximately 132-Megawatt "South Fork Wind Farm" project and specifically and solely in the area covered by U.S. Bureau of Ocean Energy Management ("BOEM") Lease No. OCS-A 0517 (the

"Project Area") as more fully described in the Construction and Operations Plan submitted to the Bureau of Ocean Energy Management dated June 29, 2018, as supplemented thereafter (the "Project") and the joint BOEM/NMFS Record of Decision on the Project issued November 24, 2021.

NOW THEREFORE, in consideration of the foregoing, the Parties agree as follows:

#### I. Protective Measures for North Atlantic Right Whales

SFW agrees to implement the following measures for responsible offshore wind development in constructing and operating the Project. Among other protections, these measures include acoustic and visual "Clearance Zones" for North Atlantic right whales. Where applicable, these Clearance Zones shall extend for the relevant distance specified in meters ("m") herein, in all directions from the center of the applicable Project activity, e.g., from the pile or from the center of a survey vessel. As used (and as further specifically defined) in this Agreement, "Clearance Zone" may refer to either an acoustic or a visual Clearance Zone, or to both taken together.

## A. Construction Activities - Pile Driving

Table 1. Seasonal Restrictions on "Impact Pile Driving" Activities1

Timeframe	Mitigation Protocol
Red Period: January 1 – April 30	No impact pile driving
Green Period: May 1 – November 30	Comprehensive monitoring / Clearance Zone protocol required
Period to be Avoided: December 1 – December 31	Avoid impact pile driving to the extent specified in Subsection I.A.3; however, if impact pile driving should occur during this period, utilizing the "Pile Driving Enhanced Mitigation Protocol" (as defined in Subsection I.A.3) is required.

## 1 Red Period (January 1–April 30): No Pile Driving

During the Red Period, as specified in Table 1, of highest relative abundance of North Atlantic right whales, no pile driving shall occur.

# 2 Green Period (May 1–November 30): Comprehensive monitoring / clearance zone protocol required

During the Green Period, as specified in Table 1, when North Atlantic right whales are less likely to be present in high numbers, a "Pile Driving Comprehensive Monitoring / Clearance Zone Protocol" (as detailed below) will be implemented during each day that pile driving is scheduled to take place.

<sup>&</sup>lt;sup>1</sup> "Impact Pile Driving" is defined as pile driving with: a standard hydraulic hammer; a variation on such (e.g., adding a cushioning system); or an alternative percussive hammer. The Parties acknowledge that technological developments exist which reduce the impact of pile driving (e.g., blue piling, vibratory piling). Should non-impact pile driving techniques or other low-noise or noiseless installation techniques advance to the stage where their use during construction of the Project is technically and commercially feasible, the Parties will reopen discussion of seasonal restriction periods to account for the best available science.

The Pile Driving Comprehensive Monitoring / Clearance Zone Protocol will include the following measures:

- a. Pile driving shall not be initiated within 1.5 hours of (civil) sunset or at any time when the "Acoustic and Visual Pile Driving Clearance Zone" (as defined in Subsection I.A.2.b) cannot be acoustically and visually monitored, as determined by the lead Protected Species Observer ("PSO")<sup>2</sup> on duty. Pile driving may continue after daylight hours only if the pile driving began prior to (civil) sunset and SFW or its contractors determine that pile driving must proceed for human safety or installation feasibility<sup>3</sup> reasons;
- b. An "Acoustic and Visual Pile Driving Clearance Zone" for North Atlantic right whales shall extend to 5,000 meters (or as adjusted based on field verification measurements pursuant to Subsection I.A.2.c), in all directions from the center of the pile. When the application of monitoring methods required under this Subsection I.A.2.b results in either a visual observation or acoustic detection of one or more North Atlantic right whales within the Acoustic and Visual Pile Driving Clearance Zone, pile driving activities shall not be initiated. When there is an acoustic detection of a North Atlantic right whale within an "Acoustic Pile Driving Exclusion Zone" of 2,000 meters, extending in all directions from the center of the pile, pile driving then underway shall be shut down unless SFW or its contractors determine that continued pile driving activities are necessary for reasons of human safety or installation feasibility.<sup>4</sup> Further, in the event that a North Atlantic right whale is visually identified by PSOs pursuant to Subsection I.A.2.b.ii at any distance from the pile, (i.e., within or beyond the Acoustic and Visual Pile Driving Clearance Zone), pile driving activities shall not be initiated, and pile driving then underway shall be shut down unless SFW or its contractors determine that continued pile driving activities are necessary for reasons of human safety or installation feasibility. The following methods shall be used to determine whether North Atlantic right whales are present in either the Acoustic and Visual Pile Driving Clearance Zone or the Acoustic Pile Driving Exclusion Zone:

<sup>&</sup>lt;sup>2</sup> The term Protected Species Observer ("PSO") refers to an individual with a current National Marine Fisheries Service ("NMFS") approval letter as a Protected Species Observer.

<sup>&</sup>lt;sup>3</sup> "Installation feasibility" refers to ensuring that the pile installation event results in a usable foundation for the wind turbine (i.e., foundation installed to the target penetration depth without refusal and with a horizontal foundation/tower interface flange). In the event that pile driving has already started and nightfall occurs, the lead engineer on duty will make a determination through the following evaluation: 1) Use the site-specific soil data on the pile location and the real-time hammer log information to judge whether a stoppage would risk causing piling refusal at re-start of piling; and 2) Check that the pile penetration is deep enough to secure pile stability in the interim situation, taking into account weather statistics for the relevant season and the current weather forecast. Such determinations by the lead engineer on duty will be made for each pile location as the installation progresses and not for the site as a whole. This information will be included in the reporting for the project. For the avoidance of doubt, the determination that pile driving must proceed for human safety reasons need not be made by the lead engineer on duty, but rather may be made by any representative of SFW or its contractors on site.

<sup>&</sup>lt;sup>4</sup> For purposes of this sentence and the following sentence, the determination that pile driving may continue shall be made in the same manner as set forth in footnote 3, above.

- i. Real-time passive acoustic monitoring ("PAM")<sup>5</sup>, assuming a detection range of 5,000 meters, shall be undertaken from a vessel or vessels other than a pile driving vessel, or from a stationary unit or units, to avoid the hydrophone being masked by the pile driving vessel or development-related noise and to ensure that the Acoustic and Visual Pile Driving Clearance Zone (prior to initiation of pile driving) or Acoustic Pile Driving Exclusion Zone (once pile driving is underway) is clear of North Atlantic right whales. PAM shall begin at least sixty (60) minutes prior to commencement or resumption of pile driving and shall be conducted throughout the duration of pile driving activity; and
- ii. There shall be vessel-based PSOs stationed at the pile driving site. Specifically, there shall be a minimum of four PSOs following a two-on, twooff rotation, each responsible for scanning no more than 180° of the horizon per pile driving location. The PSOs will visually monitor the Acoustic and Visual Pile Driving Clearance Zone of 5,000 meters (or as adjusted) prior to the initiation of pile driving, with the exception of "low visibility weather conditions" (as defined below). Although PSO coverage will focus on the extent of the Acoustic and Visual Pile Driving Clearance Zone, SFW will delay the initiation of pile driving if a North Atlantic right whale is visually observed at any distance, as set forth above. In the event that either one of the on-duty PSOs stationed at the pile driving site is unable to visually monitor the entire Acoustic and Visual Pile Driving Clearance Zone (including through the use of visual monitoring tools stationed on the construction vessel) due to low visibility ("low visibility weather conditions"), additional PSOs ("Additional PSOs") shall visually monitor the Acoustic and Visual Pile Driving Clearance Zone from a vessel circling the pile driving site for so long as low visibility weather conditions persist. There shall be a minimum of four of these Additional PSOs following a two-on, two-off rotation, each responsible for scanning no more than 180° of the horizon per pile driving location. During low visibility weather conditions, the PSOs stationed at the pile driving location and the Additional PSOs will visually monitor the Acoustic and Visual Pile Driving Clearance Zone to the maximum extent possible prior to the initiation of pile driving, but at a minimum will visually monitor to the extent of the Acoustic Pile Driving Exclusion Zone.
- Visual monitoring shall begin at least sixty (60) minutes prior to the commencement of pile driving or resumption of pile driving if halted (in accordance with Subsection I.A.2.b).

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<sup>&</sup>lt;sup>5</sup> Throughout this agreement "PAM" refers to a real-time passive acoustic monitoring system, with equipment bandwidth sufficient to detect the presence of vocalizing North Atlantic right whales and/or if available at the time of construction other similar high performance sound monitoring systems and arrays.

- iv. Visual monitoring shall be conducted throughout the duration of pile driving activity. Visual monitoring shall continue until thirty (30) minutes after the pile driving is complete.
- v. SFW may also include deploying additional observers, hydrophones, alternative monitoring technologies (i.e., night vision, thermal, infrared), and/or use of drones with the goal of ensuring the ability to continually monitor the entire Acoustic and Visual Pile Driving Clearance Zone for North Atlantic right whales.
- c. If through mitigation, sound levels equivalent to those modeled for a noise reduction of 15dB or greater are demonstrated to have been achieved through field measurements, the Acoustic and Visual Pile Driving Clearance Zone will be reduced to 3500 m.
- d. Once halted (in accordance with Subsection I.A.2.b), pile driving may resume if after use of the methods set forth in Subsections I.A.2.b.i—iii, including the sixty (60) minute pre-resumption monitoring, the lead PSO confirms that there are no North Atlantic right whales in the Acoustic and Visual Pile Driving Clearance Zone (subject to any reduction in the range to be visually monitored during low visibility weather conditions pursuant to Subsection I.A.2.b.ii).

## 3 Period to be Avoided (December 1 – December 31)

The Parties acknowledge that North Atlantic right whales are expected to use the area in and around the Project Area during December at similar levels as during the Red Period. Accordingly, SFW will make every commercially feasible effort to avoid pile driving in December. However, should development of the Project be delayed such that there is a likelihood that once commenced pile driving for the construction of the project cannot be completed by the end of November, SFW will notify the NGOs and request consultation with them in a timely manner regarding any additional mitigation protocols that may be technically and commercially feasible for SFW. If, ultimately, SFW reasonably determines that it is not commercially feasible for SFW to avoid pile driving in December, the Parties agree that SFW may engage in pile driving during the month, subject to the following mitigation protocol and other mitigation measures (if any) to which the Parties have mutually agreed during consultation pursuant to the previous sentence (collectively, the "Pile Driving Enhanced Mitigation Protocol"):

- a. A monitoring effort that ensures visual coverage of a 10,000-meter "December Pile Driving Visual Clearance Zone" will be undertaken prior to commencement of pile driving in addition to the measures specified in Subsections I.A.2.b.i—iii. Visual coverage may occur as an aerial survey, a vessel based mobile survey or vessel based observing from fixed locations.
- b. When pile driving is halted (in accordance with Subsection I.A.2.b) during the month of December, pile driving may resume after the December Pile Driving Visual Clearance Zone has been monitored again using the methods described in Subsection I.A.3.a, assuming no North Atlantic right whales are detected in the December Pile Driving Clearance Zone as a result of such monitoring.

#### B. Geophysical Surveys during Construction and Post-Construction

This section will govern geophysical surveys performed during the "Construction and Post-Construction Periods" and shall not apply to any geophysical surveys carried out as part of the site assessment and characterization ("SAC") stage of the Project. Furthermore, use of equipment that is (i) used for navigational and positioning purposes, or (ii) specifically required by a state agency or federal permit shall not be subject to this Agreement. The Parties believe further discussion is necessary to agree upon feasible protocols for SAC surveys that would allow SFW to meet BOEM geophysical survey requirements, but acknowledge that such discussions are outside the scope of this Agreement.

Table 2. Seasonal Restrictions on Geophysical Surveys During Construction and Post-Construction

Timeframe	Mitigation Protocol
Red Period: December 1 – April 30	<ul> <li>No geophysical surveys with equipment that operates between 7 Hz and 35 kHz unless with Enhanced Mitigation Protocol.</li> </ul>
<b>Green Period</b> : May 1 – November 30	Comprehensive monitoring / clearance zone protocol required

# 1. Red Period (December 1–April 30): No Surveys or Surveys with Enhanced Mitigation Protocol

During the Red Period, as specified in Table 2, there shall be no geophysical surveys with equipment that operates between 7 Hz and 35 kHz. Notwithstanding the foregoing, SFW and its contractors may conduct geophysical surveys using equipment that operates between 7 Hz and 35 kHz if they deem such surveys to be essential<sup>7</sup> during the construction and micro-siting of the Project to ensure proper installation or maintenance of the Project post-construction. Such surveys shall be subject to implementation of the following enhanced mitigation protocol:

- a. A "Survey Clearance Zone" for North Atlantic right whales shall extend 1,000 meters in all directions from the survey vessel; a shutdown of all geophysical equipment that operates between 7 Hz and 35 kHz shall be implemented if there is a detection of a North Atlantic right whale within the Survey Clearance Zone or if the Survey Clearance Zone cannot be adequately monitored (based on the assessment of the lead PSO).
- b. Visual observation and PAM shall begin at least thirty (30) minutes prior to commencement of a survey and shall be conducted throughout the duration of the survey activity.

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<sup>&</sup>lt;sup>6</sup> Construction and Post Construction periods" refers to the period following BOEM's non-objection to SFW's Facilities Design Report and Fabrication and Installation Report.

<sup>&</sup>lt;sup>7</sup> "Essential" refers to situations where construction has resulted in a condition that has been reported which would be hazardous to marine vessels or marine activities resulting in a threat to life.

- c. During daylight hours, surveys using equipment that operates between 7 Hz and 35 kHz shall not be initiated, and if underway shall be shut down, when there is either a visual observation or an acoustic detection (confirmed by visual observation) of one or more North Atlantic right whales within the Survey Clearance Zone.
- d. After daylight hours, surveys using equipment that operates between 7 Hz and 35 kHz shall not be initiated, and if underway shall be shut down, when there is either a visual observation (with use of appropriate nighttime visual observation equipment) or an acoustic detection of one or more North Atlantic right whales within the Survey Clearance Zone.
- e. Once shut down pursuant to Subsection I.B.1.c or I.B.1.d, survey activities using equipment that operates between 7 Hz and 35 kHz may resume after thirty (30) minutes of both visual and acoustic monitoring as described in Subsection I.B.1.c (during daylight hours) or I.B.1.d (after daylight hours) confirm that there are no North Atlantic right whales in the Survey Clearance Zone; provided that:
  - Real-time PAM shall be undertaken in a manner that avoids masking of the North
    Atlantic right whale vocalizations by vessel noise, including through use of a system
    that is independent from the survey vessel (if necessary); and
  - ii. There shall be a minimum of four PSOs following a two-on, two-off rotation, each responsible for scanning no more than 180° of the horizon.
- f. Use of survey equipment that operates between 7 Hz and 35 kHz will follow a ramp-up procedure and will be limited to the lowest source level that SFW or its contractors deem feasible to meet survey requirements.

## Green Period (May 1-November 30): Survey Comprehensive Monitoring / Clearance Zone Protocol

During the Table 2 Green Period, as specified in Table 2, a "Survey Comprehensive Monitoring / Clearance Zone Protocol" (as detailed below) will be implemented during all surveys that utilize equipment that have operating frequencies between 7 Hz and 35 kHz. The Survey Comprehensive Monitoring / Clearance Zone Protocol will include the following measures:

- a. Only for purposes of this Subsection I.B.2, there shall be a "Modified Survey Clearance Zone" that extends a minimum of 500 m, and, to the extent feasible, up to 1,000 meters, in all directions from a survey vessel;
- Visual observation and PAM shall begin at least thirty (30) minutes prior to commencement of a survey, and shall be conducted throughout the duration of the survey activity.
- c. During daylight hours a survey vessel shall not initiate survey activities using equipment that operates between 7 Hz and 35 kHz, and, if already initiated, shall shut down such survey activities, when there is either a visual observation or an acoustic detection (confirmed by visual observation) of one or more North Atlantic right whales within the Modified Survey Clearance Zone.

- d. After daylight hours, a survey vessel shall not initiate survey activities using equipment that operates between 7 Hz and 35 kHz, and if already initiated, shall shut down such activities, when there is either an acoustic detection or a visual observation (by appropriate nighttime visual observation equipment) of one or more North Atlantic right whales in the Modified Survey Clearance Zone.
- e. Once shut down, pursuant to Subsection I.B.2c or I.B.2.d, geophysical survey activities using equipment that operates between 7 Hz and 35 kHz may resume after thirty (30) minutes of visual observation and acoustic monitoring, as described in Subsection I.B.2.c (during daylight hours) or I.B.2.d (after daylight hours), confirms there are no North Atlantic right whales in the Modified Survey Clearance Zone, provided that:
  - Real-time PAM shall be undertaken in a manner that avoids masking of the North
    Atlantic right whale vocalizations by vessel noise, including through use of a system
    that is independent from the survey vessel (if necessary); and
  - ii. The Modified Survey Clearance Zone shall be monitored by at least one PSO during daylight hours, and by two PSOs during nighttime.
- f. Use of survey equipment that operates between 7 Hz and 35 kHz will follow a ramp-up procedure and will be limited to the lowest source level that SFW or its contractors deem feasible to meet survey requirements.

#### C. Vessel Speed Restrictions

SFW will implement the following practices during the construction and operation of the Project in relation to vessel speed restrictions.

#### 1. General Restrictions

- a. All personnel working offshore will receive training on observing and identifying North Atlantic right whales and general North Atlantic right whale awareness;
- b. Vessels will maintain separation distances of 500 meters from North Atlantic right whales, maintain a vigilant watch for North Atlantic right whales, and in the event that a North Atlantic right whale is visually detected slow down or manoeuvre their vessels as appropriate to avoid a potential interaction with a North Atlantic right whale; and
- c. All service operation vessels (SOVs) and platform service vessels (PSVs) will carry automated thermal camera systems and use the systems as advisable based on the individual observer's professional judgement (informed by scientific literature of which the individual observer is aware).

#### 2. Speed Restrictions

All Project-associated vessels shall adhere to the following "Standard Plan" speed restrictions. SFW may develop, in consultation with NOAA, an "Adaptive Plan" that modifies the Standard Plan vessel

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<sup>&</sup>lt;sup>8</sup> With exceptions for safety.

speed restrictions. The monitoring methods that inform the Adaptive Plan must prove their efficacy using vessels going 10 knots or less. If all Parties agree that the Adaptive Plan is sufficiently effective, the Adaptive Plan could be used as an alternative to the Standard Plan.

#### Standard Plan:

1. Vessels of all sizes will operate port to port<sup>9</sup> at 10 knots or less (except while in Narragansett Bay and Long Island Sound, which have not been demonstrated by best available science to provide consistent habitat for North Atlantic right whales).

#### D. Reporting

SFW shall report all visual observations and acoustic detections of North Atlantic right whales to the National Marine Fisheries Service ("NMFS") or the Coast Guard as soon as possible and no later than the end of the PSO shift. In some cases, such as with the use of near real-time autonomous buoy systems, the detections will be reported automatically on a preset cycle. SFW shall report an entangled or dead North Atlantic right whale to NMFS, the Marine Animal Response Team (1-800-900-3622) or the U.S. Coast Guard immediately via one of several available systems (e.g. phone, app, radio). Methods of reporting are expected to advance and streamline in the coming years, and SFW is committed to supporting and participating in these efforts.

#### E. Underwater Noise Reduction

SFW is committed to employing noise reduction and attenuation measures that are technically and commercially feasible for the Project to minimize impacts to North Atlantic right whales and other high-priority species. <sup>10</sup>

SFW will apply a combination of near field (e.g., reduced blow energy, Hydrosound Damper) and far field noise mitigation (e.g., single bubble curtain) or a combination system (e.g., double bubble curtain) that is expected to achieve a 15dB (SEL) reduction based on modeling. SFW will commit to achieving a minimum of 10 dB (SEL) reduction in the field during construction through a combination of noise reduction and attenuation, as compared against a baseline consisting of projections from prior noise measurements of unmitigated piles from Europe and North America. Types of mitigation that will be considered for use by SFW are summarized in Attachment 1. SFW will aim to obtain mitigation results at least comparable to those achieved in Europe through use of the same combination of systems or equivalent systems, which results are summarized in Attachment 1. Field measurements will be conducted on the first pile installed. For the Project, SFW will not request authorization from NMFS for Level A takes of North Atlantic right whales. SFW will inform and receive input from the other Parties as it identifies noise attenuation measures and technologies to be used for the Project.

<sup>&</sup>lt;sup>9</sup> "Port to port" means any transit in New England and adjacent Federal waters that both starts and ends at a U.S. port, and is made by a vessel contracted by the SFW project for the construction or operation of the Project.

<sup>&</sup>lt;sup>10</sup> SFW's selection of a commercially feasible mitigation system must consider logistical limitations such as size of piles, site conditions, and availability of equipment and installation vessels. Consideration of associated human health and safety risks and commercial commitments may also limit the choice of systems that can and cannot be used.

#### F. Additional Mitigation Strategies

In addition to the above measures designed to avoid and minimize impacts to North Atlantic right whales, SFW commits to actively considering mitigation approaches aimed at protection of other species.

#### II. Commitment to Collaborative Science

SFW commits to implement the following principles when undertaking marine science and science-based conservation efforts:

- a) Plan and conduct science and science-based conservation efforts in a collaborative and transparent manner, utilizing recognized marine experts, engaging relevant stakeholders, and making results publicly available;
- b) Contribute to the field of marine science and make efforts to address the priorities defined by regional and state ocean planning efforts; and
- c) Advance understanding of the effects of offshore wind development on marine and coastal resources, the effectiveness of mitigation measures (e.g., noise attenuation, thermal detection), and strategies to reduce other stressors facing affected species (e.g., incidental fishing gear entanglement reduction) such as the North Atlantic right whale.

#### III. Inclusion of Protective Measures in Agency Submittals

If, following the Effective Date, SFW submits applications for state and federal authorizations to conduct Project construction and operation activities that may potentially affect North Atlantic right whales, SFW agrees to propose in its applications for such authorization's avoidance, minimization and mitigation strategies consistent with the protective measures set forth herein as they relate to the activity for which authorization is sought. SFW will inform the relevant state and federal agencies of SFW's voluntary commitments under this Agreement. To the extent that a state or federal agency declines to adopt, for regulatory purposes, a protective measure otherwise required herein, SFW will nevertheless implement the measure provided it does not conflict with regulatory requirements.

## IV. Adaptive Management

While this Agreement applies only to the Project, the Parties recognize that affiliates of SFW manage other projects and intend to propose additional projects. In a good faith effort to continue to work collaboratively and evaluate lessons learned from the Project, annually, or more frequently if one of the Parties so requests, the Parties agree to review the scientific data on the occurrence, abundance, habitat use, and conservation status of North Atlantic right whales, particularly in the vicinity of the Project Area, along with any other relevant data, including information on new noise attenuation and monitoring technologies or practices that have become available. This review will inform future projects and agreements between the NGOs and SFW affiliates. To the extent that new protective measures are identified that may be utilized by the Project, the Parties agree to discuss and SFW agrees to evaluate any such measure and to implement it if SFW determines that such protective

measure is both commercially feasible for SFW and improves upon, in a meaningfully measurable manner, one or more protective measures already in place.

#### V. Governing Law; Dispute Resolution

This Agreement shall be governed by, and construed in accordance with, the laws of the State of New York, determined without reference to principles of conflicts of law (other than sections 5-1401 and 5-1402 of the General Obligations Law of the State of New York). All proceedings with respect to this Agreement or any other dispute between the Parties hereto shall be brought in federal or state court within the County of New York in the State of New York, and the Parties consent both to the personal and subject matter jurisdiction of any such court. In the event of a dispute among the Parties concerning implementation of or compliance with any aspect of this Agreement, the initiating party or parties shall provide the other Party or Parties with a written notice outlining the nature of the dispute and the remedy that is sought. The Parties shall meet and confer, either in person or over the telephone, to work in good faith to attempt to resolve the dispute, including by modification of the agreement if all Parties agree. If agreement on the appropriate resolution of the dispute cannot be reached, each Party reserves its respective right to withdraw from the Agreement as a last resort.

## VI. <u>Entire Agreement; Counterparts</u>

This Agreement constitutes the entire agreement between the Parties hereto relating to the subject matter hereof, and may not be amended or in any manner modified except by a written instrument signed by authorized representatives of both Parties. All prior or contemporaneous agreements or understandings between Parties relating to the subject matter hereof, whether oral or written, are superseded by and merged into this Agreement. This Agreement may be executed in any number of counterparts (including by facsimile or .pdf transmission), each of which will be deemed an original, but all of which together will constitute one and the same instrument.

#### VII. Term of Agreement

The Parties agree that the protective measures set forth herein will remain in place for five years from the Effective Date unless extended or modified by mutual agreement of the Parties in writing.

[Signature page follows]

Dated as of the Effective Date.

## South Fork Wind, LLC

By: Møller

Name: Claus Bøjle Møller

Title: Authorized Signatory

By: Mre Auxere

Title: Authorized Signatory

## **National Wildlife Federation**

By: By:

Name: Jim Murphy Name: Kit Kennedy

Title: Director, Legal Advocacy Title: Managing Director, Climate and Clean Energy

**Natural Resources Defense Council** 

Program

## **Conservation Law Foundation**

By: Prisable M. Books

Name: Priscilla M. Brooks

Title: Vice President and Director of Ocean Conservation

#### Attachment 1

## Summary of Mitigation Achieved via Sound Reduction Methods that May be Considered for Application by South Fork Wind

The following tables are taken from: *Bellmann M. A., Brinkmann J., May A., Wendt T., Gerlach S. & Remmers P. (2020) Underwater noise during the impulse pile-driving procedure: Influencing factors on pile-driving noise and technical possibilities to comply with noise mitigation values*<sup>11</sup>.

**Table 3:** Achieved broadband noise reduction by an optimized single or double Big Bubble Curtain with different system configurations regarding the supplied air volume and in different water depths. <u>Note:</u> A non-optimized system configuration resulted in significantly lower noise reductions.

No.	Noise Abatement System resp. combination of Noise Abatement Systems (applied air volume for the (D)BBC; water depth)	Insertion loss ΔSEL [dB] (min. / average / max.)	Number of piles
1	Single Big Bubble Curtain – BBC (> 0.3 m $^3$ /(min·m), water depth < 25 m)	$11 \leq 14 \leq 15$	> 150
2	Double Big Bubble Curtain – DBBC (> 0.3 m³/(min·m), water depth < 25 m)	14 ≤ 17 ≤ 18	> 150
3	Single Big Bubble Curtain – BBC (> 0.3 m $^3$ /(min·m), water depth ~ 30 m)	8 ≤ 11 ≤ 14	< 20
4	Single Big Bubble Curtain – BBC (> 0.3 m³/(min⋅m), water depth ~ 40 m)	7 ≤ 9 ≤ 11	30
5	Double Big Bubble Curtain – DBBC (> 0.3 m $^3$ /(min·m), water depth ~ 40 m)	8 ≤ 11 ≤ 13	8
6	Double Big Bubble Curtain – DBBC (> $0.4 \text{ m}^3/(\text{min}\cdot\text{m})$ , water depth $\sim 40 \text{ m}$ )	12 ≤ 15 ≤ 18	3
7	Double Big Bubble Curtain - DBBC (> 0.5 m $^3$ /(min·m), water depth > 40 m)	~ 15 - 16	1

<sup>&</sup>lt;sup>11</sup> Supported by the Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (Bundesministerium für Umwelt, Naturschutz und nukleare Sicherheit (BMU)), FKZ UM16 881500. Commissioned and managed by the Federal Maritime and Hydrographic Agency (Bundesamt für Seeschifffahrt und Hydrographie (BSH)), Order No. 10036866. Edited by the itap GmbH.

Table 4: Achieved noise reduction of single Noise Abatement Systems and combinations of secondary Noise Abatement Systems in their respective optimized system configuration depending on different, technical-constructive and site-specific framework conditions.

All basic underwater noise measurement data were collected in the North Sea with currents of up to 0.75 m/s and a sandy soil.

No.	Noise Abatement System resp. combination of Noise Abatement Systems (applied air volume for the (D)BBC; water depth)	Insertion loss  ∆SEL [dB] (minimum / average / maximum)	Number of foundations
1	IHC-NMS (different designs) (water depth up to 40 m)	$13 \leq 15 \leq 17 \text{ dB}$ $\text{IHC-NMS}8000  15 \leq 16 \leq 17 \text{ dB}$	> 450 > 65
2	HSD (water depth up to 40 m)	10 ≤ 11 ≤ 12 dB	> 340
3	optimized double BBC* <sup>1</sup> (> 0,5 m³/(min m), water depth ~ 40 m)	15 – 16	1
4	combination IHC-NMS + optimized BBC (> 0,3 m³/(min m), water depth < 25 m)	17 ≤ 19 ≤ 23	> 100
5	combination IHC-NMS + optimized BBC (> 0,4 m³/(min m), water depth ~ 40 m)	17 - 18	> 10
6	combination IHC-NMS + optimized DBBC (> 0,5 m <sup>3</sup> /(min m), water depth ~ 40 m)	19 ≤ 21 ≤ 22	> 65
7	combination HSD + optimized BBC (> 0,4 m³/(min m), water depth ~ 30 m)	15 ≤ 16 ≤ 20	> 30
8	combination HSD + optimized DBBC (> 0,5 m <sup>3</sup> /(min m), water depth ~ 40 m)	18 - 19	> 30
9	GABC skirt-piles*2 (water depth bis ~ 40 m)	~ 2 - 3	< 20
10	GABC main-piles*3 (water depth bis ~ 30 m)	< 7	< 10
11	"noise-optimized" pile-driving procedure (additional additive, primary noise mitigation measure; chapter 5.2.2)	$\sim$ 2 - 3 dB per halving of the blow energy	