



*Responsible Offshore Development Alliance*

March 25, 2021

Jolie Harrison, Chief, Permits and Conservation Division  
Office of Protected Resources  
National Marine Fisheries Service  
1315 East-West Highway  
Silver Spring, MD 20910

**Re: Takes of Marine Mammals Incidental to Specific Activities; Taking  
Marine Mammals Incidental to Marine Site Characterization Surveys Off of  
Coastal Virginia; Docket No. NOAA–NMFS–2020–23487**

Dear Chief Harrison:

The Responsible Offshore Development Alliance (RODA) submits the following comments regarding the National Marine Fisheries Service's (NMFS) proposed modification to the incidental harassment authorization (IHA) Takes of Marine Mammals Incidental To Specific Activities; Taking Marine Mammals Incidental to Marine Site Characterization Surveys Off of Coastal Virginia.<sup>1</sup>

RODA is a coalition of fishery-dependent companies, associations, and community members committed to improving the compatibility of new offshore development with their businesses. Members of our coalition operate in federal and state waters of the Mid-Atlantic, New England, and Pacific coasts.

As an organization representing commercial fishermen, RODA is not an expert in marine mammals, but many of our members are very aware of and influenced by the Marine Mammal Protection Act and operate in accordance with protected species regulations. The proposed modification to the IHA raises questions of equal application of the harassment and take authorization across multiple industries that operate in the marine environment.

Our recent letter to NMFS' Office of Protected Resources on its Notice of Proposed Incidental Harassment Authorization related to construction of the South Fork offshore wind project<sup>2</sup> outlines many concerns from fishermen about protected resources take authorizations. This is particularly true given that many of the species in question migrate or travel between multiple

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<sup>1</sup> 86 Fed. Reg. 13695 (Mar. 10, 2021).

<sup>2</sup> 86 Fed. Reg. 8490 (Feb. 5, 2021).

proposed offshore wind project areas in the Atlantic and may therefore experience cumulative effects. We have appended this letter and request that the points made there be considered for the proposed modification to the Dominion IHA that is the subject of this notice. Additionally, we have briefly outlined some of the key concerns below.

First and foremost, the expansion of the IHA to 600 individuals of the common dolphin (*Delphinus Delphis*) by Level B harassment seems vastly different from the originally approved (and first modification) take authorization of 68 individuals. As RODA noted in our comments on the IHA permit application for construction of the South Fork Wind Farm, there is increasing concern that there are no backstops or accountability measures for when a take exceeds a threshold (see attached letter). We repeat our question from those comments:

*“What accountability measures will apply to ensure that OSW developers are likewise responsible for their own impacts, and the burdens of those are not also assigned to fishermen, should they occur?”*

An unsustainable pattern would be set if offshore wind (OSW) developers can simply apply for modifications to existing IHAs, increasing the take of protected species every few months. It seems unrealistic that a project would be paused or terminated due to exceeding its allowed marine mammal take once billions of dollars have been spent and power contracts signed, however it is unclear whether any other mitigation measures would be effective if impacts occur beyond those of early predictions.

Similarly, we are increasingly concerned with the one-off nature of the IHA process, despite the regional nature of OSW. This applies to both applications for authorizations for each individual project along the coast, and different phases of each project. For this modification request, NMFS is simply looking at the survey phase for a single project owned by Dominion Energy Virginia. But there are fifteen (and counting) OSW lease areas on the East Coast, all which will have survey, construction, operations, and decommissioning phases; a holistic and regional analysis of impacts to marine mammals and protected species must be undertaken as required by the National Environmental Policy, Marine Mammal Protection, and Endangered Species Acts, particularly for species of particular concern and those that are highly migratory and rely on resources and habitats all along the entire U.S. eastern seaboard. A basic cumulative analysis of this nature has never occurred.

Ultimately, consequences from increased pressure to any protected species and the excess take of marine mammals will negatively impact fisheries and the fishing industry. We have outlined this further in the attached letter and in our comments to the South Fork Wind Farm DEIS,<sup>3</sup> specifically for the North Atlantic Right Whale but the same concept applies for other protected species -- **fishermen will be affected by any protected resource take.**

Again, accurate analyses and certainty in the effectiveness of mitigation measures are of paramount importance before issuing IHA permits. Yet there is reason to believe that a reasonable standard has not been met. Dominion indicates in its IHA modification proposal that the unexpected increase in marine mammal take may be due to curiosity or enhanced feeding

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<sup>3</sup> See RODA's comments to the SFWF DEIS here: [https://rodafisheries.org/wp-content/uploads/2021/02/210222-SFWF\\_DEIS.pdf](https://rodafisheries.org/wp-content/uploads/2021/02/210222-SFWF_DEIS.pdf)

opportunity provided by lighted vessels. Behavioral reactions to factors such as vessel lights and increase in vessel traffic should be known and predictable, particularly when compared to unknown activities in the future such as pile driving.

Lastly, pot fishermen with historic fishing ground in and near to the Coastal Virginia Offshore Wind (CVOW) area have already experienced negative interactions with OSW survey operations and vessels. Using the “appropriate” method of notification, Virginia pot fishermen have notified Dominion fisheries liaisons about cut and damaged gear, and yet there has been no compensation for lost gear or revenue and minimal action has been taken to reduce conflict between survey operations and fishing (requests for these actions were formally submitted to Dominion in a letter from RODA pot fishermen based in Virginia sent November 2020).<sup>4</sup> While outside of the purview of NMFS authorization, we repeat our concern from our SFWF DEIS comments that G&G surveys; a) may be negatively impacting biological resources (including and beyond protected species); b) the fishing industry is already being negatively impacted by survey operations through gear loss and exclusion from traditional grounds; and c) there is far too little oversight of the environmental impacts of survey activities overall.

Thank you for your consideration of these comments. Please do not hesitate to reach out if we can provide additional information or clarification.

Sincerely,



Lane Johnston, Programs Manager



Annie Hawkins, Executive Director

*Responsible Offshore Development Alliance*

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<sup>4</sup> See RODA’s VA pot fishermen’s letter to Dominion energy here: [https://rodafisheries.org/wp-content/uploads/2020/11/201104\\_Pot-Fishery-Integration-Letter.pdf](https://rodafisheries.org/wp-content/uploads/2020/11/201104_Pot-Fishery-Integration-Letter.pdf)



*Responsible Offshore Development Alliance*

March 10, 2021

Jolie Harrison, Chief  
Permits and Conservation Division  
NMFS Office of Protected Resources  
1315 East-West Highway  
Silver Spring, MD 20910

**Re: Notice of Proposed Incidental Harassment Authorization; Taking Marine Mammals Incidental to Construction of the South Fork Offshore Wind Project; Docket No. NOAA-NMFS-2021-02263**

Dear Ms. Harrison,

The Responsible Offshore Development Alliance (RODA) submits the following comments regarding the National Marine Fisheries Service (NMFS) proposed incidental harassment authorization (IHA) for the construction of a commercial wind energy project as requested by South Fork Wind, LLC (SFW).<sup>1</sup> These comments, while responsive to the proposed IHA for the SFW project, are also directed toward the proposed Vineyard Wind project and others under development in the U.S. Atlantic. Due to the absence of a public comment period after changes in the Vineyard Wind project design and regulatory context, and the lack of a programmatic or cumulative approach to OSW planning in the region, this constitutes one of the only opportunities for public involvement and therefore we request full attention to these comments.

RODA is a national coalition of independent fishing businesses, associations, companies and community members committed to ensuring the compatibility of new offshore development with their businesses. Members of our coalition operate in federal and state waters and shoreside throughout the New England, Mid-Atlantic, and Pacific coasts.

Fishermen are extremely concerned about potential impacts to protected resources arising from the construction of offshore wind energy (OSW) facilities. As you know, many Atlantic fisheries are severely constrained by regulations designed to minimize North Atlantic right whale (NARW) and other protected resource interactions, and any increase in take or harassment of these species will very likely result in further impacts to fishing operations.

There is an ongoing Unusual Mortality Event for the NARW since 2017. NMFS's website lists climate change, vessel strikes, entanglements, and ocean noise as the primary threats to NARWs.<sup>2</sup> Three out of four of these threats will increase as a direct result of OSW project construction. Since

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<sup>1</sup> 86 Fed. Reg. 8490 (Feb. 5, 2021).

<sup>2</sup> See <https://www.fisheries.noaa.gov/species/north-atlantic-right-whale> .



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2017 alone, 32 NARW have died and 14 have been seriously injured.<sup>3</sup> With only 356 individual NARW estimated remaining, margins for error (e.g., one ship strike) are very slim. The injury or death of a single North Atlantic right whale could have population-level impacts, so the response to any take is drastic. Allowing activities which will dramatically increase the risk/likelihood of take needs to be strictly scrutinized.

RODA is appreciative that OSW developers have worked with NMFS and others to adopt mitigation measures in order to minimize construction impacts to marine mammals. However, the adequacy of these measures, as all information provided to the government by interested private parties, requires robust independent review. In several instances, project applicants have provided information on fisheries impacts that is incorrect or based upon faulty data, including those referenced in RODA's comments on the SFW project Draft Environmental Impact Statement (DEIS). For that reason, we encourage NMFS to evaluate the proposed IHA with utmost care utilizing the best available science.

### **Right Whales Commonly Occur in OSW Areas**

The location of the proposed SFW project is at the heart of an area that has seen significant congregations of NARWs in recent years. Over one third of the total population, including up to 30 percent of known calving females, visited the RI and MA Lease Areas between 2010 and 2015.<sup>4</sup> The presence of NARWs south of Martha's Vineyard and Nantucket, where the Proposed Project is to be located, has been documented as increasing since at least 2016.<sup>5</sup> As recently as 48 hours ago, approximately 10-20% of the estimated remaining NARWs were observed in the MA/RI WEAs; based on available maps they appear to be primarily in the Vineyard Wind I and SFW project areas. Due to the evidence of increased use of the MA/RI Wind Energy Areas (WEA) by growing aggregations of NARWs, it is imperative that analyses utilized to review the proposed IHA rely on the most recent available data.

NARWs must locate and exploit extremely dense patches of zooplankton, specifically, high concentrations of lipid-rich copepods (*Calanus finmarchicus*) to feed efficiently. These dense patches are common in the Project Area during the spring, summer, and fall. Any activities which may impact the NARW's ability to forage within the Project Area need to be minimized. Given the concentration of NARWs within and adjacent to the Project Area, it is crucial that potential impacts to this population be fully considered before IHA issuance. Scientists agree that the loss of even one more breeding female whale would be catastrophic to the population.

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<sup>3</sup> *Id.*

<sup>4</sup> Bureau of Ocean Energy Management, Vineyard Wind 1 Offshore Wind Energy Project Supplement to the Draft Environmental Impact Statement (2020), p. 3-127.

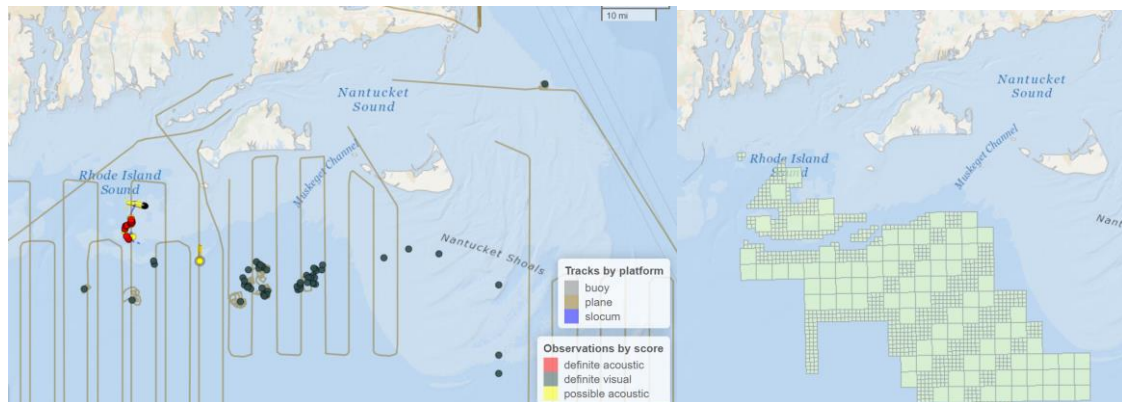
<sup>5</sup> Roberts-Duke, J., Etre-IEC, N. 2019. Decision Support Tool presented to the Atlantic Large Whale Take Reduction Team April 23, 2019.

[https://archive.fisheries.noaa.gov/garfo/protected/whaletrp/trt/meetings/April%202019/Meeting%20Materials/overview\\_of\\_relative\\_risk\\_reduction\\_decision\\_support\\_tool\\_04\\_23\\_2018.pdf](https://archive.fisheries.noaa.gov/garfo/protected/whaletrp/trt/meetings/April%202019/Meeting%20Materials/overview_of_relative_risk_reduction_decision_support_tool_04_23_2018.pdf)



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The following maps depict NARW observations for the period 2/24/21 - 3/10/21 (on left; source <http://whalemap.org/WhaleMap/>) and the MA/RI WEAs (on right; source Mid-Atlantic Ocean Data Portal):



### **Failure to Mitigate Survey Impacts Will Increase Uncertainty in Analysis**

The above map shows not only the location of NARWs, but the tracks for NMFS “spotter” planes used to assess the population. The aerial surveys are used in population assessments to inform management, as well as to identify entanglement situations and assist in responding to those events. The construction and operation of OSW projects will prohibit the operation of these surveys within the project areas “because the planned maximum-case scenario [turbine] blade tip height [] would exceed the survey altitude with current surveying methodologies.”<sup>6</sup>

From an operational standpoint, the spotter planes must fly below the cloud ceiling to make visual contact with NARW. If these surveys are forced to higher elevations, will it impact the ability to make that visual contact; thus impacting NMFS ability to proactively prevent interactions with NARWs.<sup>7</sup> Development of offshore wind in the RI and MA Lease Areas would impact approximately 60 percent of the NARW aerial survey blocks in the area.<sup>8</sup>

BOEM has previously determined that the effects on survey aerial coverage will substantially impact NMFS’ ability to continue using current methods to fulfill its mission of precisely and accurately assessing protected species.<sup>9</sup> This will result in an unacceptable level of uncertainty in protected resource management. It will also potentially result in an event that may otherwise be a “harassment” event become a mortality event, if entanglement response is delayed, hampered, or made impossible and injured whales cannot be rescued. So too is the cessation of NMFS protected resource surveys a threat to climate science itself; assessment of protected resource and fish stocks

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<sup>6</sup> Vineyard Wind SEIS, p. 3-127.

<sup>7</sup> The DEIS and proposed IHA do not appear to analyze the impact of clouds to survey operations nor the effects of OSW turbine operation to cloud formation.

<sup>8</sup> Vineyard Wind SEIS, p. 3-127.

<sup>9</sup> *Id.*





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over long time series is a key factor in understanding ecosystem health, function and shifts and responses to climate change.

### **Serious Concerns Exist Regarding Treatment of Whales in OSW Permitting**

A major concern is the high amount of increased vessel traffic associated with the MA/RI WEAs—up to 2,600 vessels throughout the life of the SFW project alone.<sup>10</sup> BOEM has also estimated that construction of each future OSW project would require an additional 25-46 vessels *per project* operating in the proximal geographic area at any given time, and that up to four projects would be under construction at the same time in the next few years.<sup>11</sup> This large increase in traffic would greatly increase the risk of ship strike to the endangered NARW. NMFS has stated that slowing down vessel traffic and reducing ocean noise, as well as reducing risks of entanglements are key to regulation and management plans.

Additionally, associated increases in vessel noise could contribute to the suite of ongoing stressors impacting the NARW population. Noise has been found to interfere with right whale communication and increase their stress levels. In turn, “females that undergo energetic stress from reproduction may be more susceptible than males to dying from chronic injuries such as those from entanglement or vessel strikes.”<sup>12</sup> Noise from human activities, such as that which would occur with activities associated with wind energy installation and operation of the proposed project, can disrupt normal behavior of NARWs and may further reduce their ability to identify physical surroundings, find food, navigate, and find mates.

BOEM’s analyses of these concerns in the DEIS were inadequate and not based on the best available science, as discussed in RODA’s comment letter dated February 22, 2021. However, we are not the only ones to raise concerns; organizations with far more expertise in whale research have also expressed criticism.

The Marine Mammal Commission (MMC) submitted comments on this application and raised several concerns, identified shortcomings and inaccuracies in the proposed IHA. As they are more knowledgeable on impacts of pile driving and acoustics to marine mammals, we defer to their expertise and recommend NMFS fully review the concerns they identify in their public comment. In particular, MMC cites poor analyses such as underestimation of harassment takes from impact and vibratory pile driving, noise, insufficient and incomplete monitoring measures and reporting requirements. As identified, those issues may result in costly closures or strict management crackdowns for fisheries. We urge NMFS to use the best available science including the most comprehensive models for estimating marine mammal take and developing robust mitigation measures.

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<sup>10</sup> BOEM, South Fork Wind Farm Draft Environmental Impact Statement (2021), p. 3-62.

<sup>11</sup> Vineyard Wind SEIS, p. 3-111.

<sup>12</sup> See <https://www.fisheries.noaa.gov/species/north-atlantic-right-whale>.



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On September 9, 2020, seventeen environmental NGOs submitted a public comment letter outlining several concerns and recommendations related to the IHA for site characterization surveys required for these OSW projects. Again, we defer to their expertise but echo their concerns regarding: a) the lack of sufficient data and observations of NARWs and other protected species in the WEAs and associated cable routes that are not sufficiently described by the models used by NMFS, b) the failure to take a cumulative look at take and harassment as there are numerous areas to be developed and each project will submit an IHA, c) the untested proposed mitigation and insufficient monitoring measures intended to minimize impacts to protected species, and d) no long term monitoring plans for marine mammals and protected species. This coalition provided concrete recommendations for improving mitigation measures for surveys, including: (1) to incorporate additional data sources including real-world observational data into calculations of marine mammal density and take; (2) not adjust take numbers downward for large whales based on unproven mitigation measures; (3) require mitigation measures that meet the least practicable adverse impact standard; and (4) strengthen its vessel speed restrictions. We urge NMFS to ensure that each of these important topics raised by whale experts are fully addressed.

### **Fishermen Will Be Affected by Any Protected Resource Take**

Negative impacts to local fishermen and coastal communities as a result of a potentially adverse impact to NARWs (e.g. vessel strike resulting in death or severe injury) are not mentioned or evaluated in the DEIS, proposed IHA, or biological opinion for this project, and should be included in a comprehensive analysis. The lack of an adequate analysis of individual and cumulative impacts to these protected whale species is concerning, given that fishermen are already highly restricted in their ability to harvest due to NARW protections. For instance, all MA state waters are closed to lobster gear from Feb. 1 - May 15th, with the exemption of waters south and southwest of the Cape.

The entire fishing industry pays the price to protect right whales, not just those closest to the project area. An impacts to right whales off the South Atlantic, will result in impacts to fisheries in Maine, impacts in Cape Cod Bay impact fishermen in Southern New England, and so on. These reverberating impacts are not addressed nor analyzed in the DEIS, the biological opinion, nor the proposed IHA.

### **Cumulative Review Is Required for All Project Phases**

It is imperative that vessel and noise impacts from offshore wind energy development not be considered in isolation, that is, phase-by-phase for each project, particularly when it comes to impacts to whales. They are highly migratory and rely on resources and habitats all along the entire U.S. eastern seaboard in the same areas where numerous wind energy areas have already been leased, and more will likely be leased in the future. A basic cumulative analysis of this nature has never occurred but is required by laws such as the Marine Mammal Protection Act, Endangered Species Act, and National Environmental Policy Act.





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In addition to construction impacts, noise impacts from OSW site characterization surveys are also a primary concern. Certain types of these surveys could result in long-term and high-intensity impacts on marine mammals, depending on the design and effectiveness of mitigation measures. It cannot be said that mitigation measures have entirely eliminated adverse impacts to marine mammals, and neither NMFS nor BOEM should not treat that as matter of fact. It is presumptive to almost guarantee that not a single right whale will be harmed during surveys, which is what the SFW project DEIS implies.

### **Mitigation Must Be Robust and Accountability Measures If Harm Exceeds Threshold Must Be Clarified**

In general, the mitigation measures presented by BOEM, developers, and in the proposed IHA need clearer explanations of what supporting data was used, i.e., how they were informed, and how their efficacy is analyzed. The actions should not be allowed to be considered mitigatory if they are still resulting in unacceptable potential population level impacts to numerous species. Additionally, we echo the Marine Mammal Commission that NMFS must ensure mitigation measures would affect the least practicable impact on the species and stocks—particularly North Atlantic right whales—during impact pile driving.

Proposed mitigation measures for the SFW facility rely heavily on visual monitoring, passive acoustic monitoring, and vessel speed restrictions. Each of these has limitations: visual monitoring cannot cover large distances or identify whales below the surface, and passive acoustic monitoring may not be fully effective within wind energy areas or during construction. If vessel speed restrictions fully eliminated the possibility of harassment or take, current management measures for existing vessel traffic would have entirely eliminated NARW ship strikes. Moreover, a commitment for OSW project vessels to comply with any dynamic management area that would apply to *all* vessel traffic can hardly be considered a proposed mitigation strategy; the important inquiry is the effect of increased vessel traffic at all.

The SFW project DEIS states that data gathered through mitigation efforts could be used to evaluate impacts and potentially lead to additional mitigation measures, if required.<sup>13</sup> This optimistic statement raises a fundamental question that remains unanswered in the proposed IHA, biological opinion, and other documents: what can be done if take or harassment exceeds predicted thresholds? Can a project realistically stop mid-construction or mid-operation after taxpayers have spent billions of dollars on its development? Fisheries are subject to accountability measures by law if scientifically-based catch limits are exceeded. What accountability measures will apply to ensure that OSW developers are likewise responsible for their own impacts, and the burdens of those are not also assigned to fishermen, should they occur?

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<sup>13</sup> South Fork Wind Farm Draft EIS, p. 3-68.



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Thank you for your consideration of these comments. We respectfully request careful attention to these important matters, and that any significant revisions to the proposed IHA be subject to an additional comment period. Please do not hesitate to reach out if we can provide additional information or clarification.

Sincerely,

Annie Hawkins, Executive Director

Lane Johnston, Programs Manager

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# SOUTHERN ENVIRONMENTAL LAW CENTER

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March 25, 2021

Submitted via electronic mail

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**Re: Comments on a Second Notice to Modify the Incidental Harassment Authorization for Marine Site Characterization Surveys in the OCS-A-0483 Lease Area and the Coastal Waters off Virginia**

Ms. Harrison,

The Southern Environmental Law Center (“SELC”) submits these comments on behalf of Conservation Law Foundation, Defenders of Wildlife, National Wildlife Federation, Natural Resources Defense Council, Whale and Dolphin Conservation, Surfrider Foundation, Sierra Club Virginia Chapter, Mass Audubon, Assateague Coastal Trust, Inland Ocean Coalition, the International Marine Mammal Project of Earth Island Institute, and NY4WHALES, in response to the National Marine Fisheries Service’s (“NMFS”) proposal to modify for a second time an incidental harassment authorization (“IHA”) originally issued to Dominion Energy Virginia (“Dominion”), for high-resolution geophysical (“HRG”) surveys off the coast of Virginia in the area of Commercial Lease of Submerged Lands for Renewable Energy Development on the Outer Continental Shelf (OCS-A-0483) and in the coastal waters off Virginia (“Project Area”), in support of the Coastal Virginia Offshore Wind Commercial Project.<sup>1</sup>

NMFS first issued the IHA to Dominion on August 28, 2020.<sup>2</sup> NMFS then modified the IHA on December 17, 2020 to allow a staggering increase in the take limit for Atlantic spotted dolphin.<sup>3</sup> Our organizations highlighted the numerous deficiencies in both the original Draft IHA and in NMFS’s initial modification of the IHA, in comments that we submitted to the agency on July 17, 2020 and November 25, 2020, respectively. Both comment letters are attached and incorporated by reference here.<sup>4</sup> Now, the agency is proposing to once again

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<sup>1</sup> Takes of Marine Mammals Incidental to Specified Activities; Taking Marine Mammals Incidental to Marine Site Characterization Surveys Off of Coastal Virginia, 86 Fed. Reg. 13,695 (Mar. 10, 2021).

<sup>2</sup> Takes of Marine Mammals Incidental To Specified Activities; Taking Marine Mammals Incidental to Marine Site Characterization Surveys Off of Coastal Virginia, 85 Fed. Reg. 55,415 (Sept. 8, 2020).

<sup>3</sup> Takes of Marine Mammals Incidental to Specified Activities; Taking Marine Mammals Incidental to Marine Site Characterization Surveys Off of Coastal Virginia, 85 Fed. Reg. 81,879 (Dec. 17, 2020).

<sup>4</sup> Letter from SELC et al. to Jolie Harrison, Chief, Permits & Conservation Div., Nat’l Marine Fisheries Serv. (NMFS) (July 17, 2020) [hereinafter “Draft IHA Comments”], provided as Attachment 1; Letter from SELC et al. to J. Harrison, NMFS (Nov. 25, 2020), provided as Attachment 2.

modify the same IHA to allow Dominion to incidentally harass roughly *ten times* more common dolphin than NMFS previously authorized in August 2020.

Our organizations are profoundly concerned about NMFS's pattern of modifying the IHA to allow Dominion to harass more and more marine mammals, simply due to higher-than-expected presence in the Project Area. NMFS's proposed increase of Dominion's Level B take limit from 68 to 668 common dolphins<sup>5</sup> is contrary to the conservation mandate of the Marine Mammal Protection Act ("MMPA"), for the same reasons as those set forth in our comments on the initial modification. Moreover, NMFS's willingness to repeatedly increase the take limits is particularly disturbing in light of the worsening conservation status of a number of marine mammal species found off Virginia's coast—including the critically endangered North Atlantic right whale—and in light of the significant number and scope of marine site characterization surveys for offshore wind activities on the East Coast that NMFS has already permitted and will continue to review in the future.

The MMPA requires that NMFS, in authorizing harm, must meet a number of basic, protective standards: that only "small numbers" of marine mammals will be taken; that the impacts on those species and populations will be "negligible"; and that the methods of take and mitigation will ensure that the activity will have the "least practicable impact" on marine mammals and their habitat.<sup>6</sup> At every step, the agency must use the "best scientific evidence available."<sup>7</sup> Once again, the proposed modification falls far short of these standards.

#### **A. NMFS's Modification Fails to Meet the MMPA's Basic Protective Standards**

First, under the MMPA, NMFS may authorize the take of "small numbers" of marine mammals under certain conditions.<sup>8</sup> While the statute does not define "small numbers," the agency's interpretation of the term cannot be reconciled with the MMPA's purpose. NMFS arbitrarily considers the take of one-third of a population to be the dividing line between "small numbers" that can be authorized under an IHA and those that cannot.<sup>9</sup> Moreover, NMFS applies the one-third interpretation across the board to all species. In this instance, NMFS explains that because the take of common dolphins "relative to the population size (less than one percent)...is less than one third of the species or stock abundance," NMFS considers the proposed take "to be small numbers."<sup>10</sup> In applying this arbitrary number, NMFS fails to take into account the unique conservation status of individual populations, the nature of the proposed activity, and the potential cumulative impacts. Rather than relying on an arbitrary threshold, NMFS instead should consider all available data pertaining to a species and the proposed activity to determine whether the proposed level of take (in this case, of the common dolphin) will ensure that population levels are maintained at, or restored to, healthy population numbers.<sup>11</sup>

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<sup>5</sup> 86 Fed. Reg. at 13,699.

<sup>6</sup> 16 U.S.C. § 1371(a)(5)(D).

<sup>7</sup> *See, e.g., id.* § 1373(a).

<sup>8</sup> *Id.* § 1371(a)(5)(D)(i).

<sup>9</sup> 86 Fed. Reg. at 13,699.

<sup>10</sup> *Id.*

<sup>11</sup> H.R. Rep. No. 103-439, at 22, 1994 WL 93670 (Mar. 21, 1994); *see Native Vill. of Chickaloon v. NMFS*, 947 F. Supp. 2d 1031, 1052–53 (D. Alaska 2013) (upholding agency's "small numbers" determination where the agency did not "categorically establish 10% as a small number; rather, it determined, through consideration of the available

Second, under the MMPA, NMFS may issue an IHA only if it finds that the authorized harassment caused by a “specified activity” will have a “negligible impact” on marine mammals.<sup>12</sup> Here, in conducting its negligible impact analysis, NMFS’s simply hangs its hat upon the conclusory statements of earlier findings and thus likewise underestimates the potential impacts of HRG surveys on the common dolphin. NMFS claims that, because “no new information” suggests that the previous negligible impact finding for common dolphin is incorrect, the proposed 10-fold increase in authorized take will also have only a negligible impact on the stock.<sup>13</sup> Such circular reasoning is unsupported by any facts. Moreover, the agency asserts, as it did in the initial IHA modification, that harassment is expected to be of “lower severity, predominantly in the form of avoidance of the sound source and potential occasional interruption of foraging<sup>14</sup>—repeating verbatim the same rationale that NMFS used to justify the first IHA modification regarding the Atlantic spotted dolphin.<sup>15</sup> In light of the magnitude of the change in take levels that Dominion is requesting, NMFS must undertake a rigorous analysis of the potential impacts on the common dolphin and other small cetaceans. In fact, as we pointed out in our November 25, 2020 comments, the existing science indicates that delphinids, a particularly acoustically sensitive group of species that includes common dolphins, have the potential to be displaced,<sup>16</sup> shift their behavioral state,<sup>17</sup> and stop or alter vocalizations<sup>18</sup> in response to a variety of anthropogenic noises, with potentially adverse energetic effects even from minor changes.<sup>19</sup>

In addition, we reiterate that the agency’s reliance on a 160-dB threshold for behavioral harassment is not supported by the best available scientific information. Instead, the science

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data, that 10% was a small number in the specific context of the Cook Inlet beluga whale and the nature of the proposed activity”).

<sup>12</sup> 16 U.S.C. § 1371(a)(5)(D)(i). To make a finding of “negligible impact” under its regulations, NMFS must determine that the authorized harassment “cannot be reasonably expected to, and is not reasonably likely to, adversely affect” annual rates of recruitment or survival in any marine mammal species or population. 50 C.F.R. § 216.103.

<sup>13</sup> 86 Fed. Reg. at 13,699.

<sup>14</sup> *Id.*

<sup>15</sup> Takes of Marine Mammals Incidental to Specified Activities; Taking Marine Mammals Incidental to Marine Site Characterization Surveys Off of Coastal Virginia, 85 Fed. Reg. 71,881, 71,885 (Nov. 12, 2020).

<sup>16</sup> Carolyn J. Stone & Mark L. Tasker, *The effects of seismic airguns on cetaceans in UK waters*, J. CETACEAN RESEARCH & MGMT. (Dec. 2005) (showing, in the presence of seismic vessels, more pronounced displacement in small odontocetes than in larger cetaceans); John C. Goold, *Acoustic assessment of populations of common dolphin Delphinus delphis in conjunction with seismic surveying*, J. MARINE BIOLOGICAL ASS’N U.K. (1996) (identifying an apparent avoidance zone of one kilometer for common dolphin around airguns).

<sup>17</sup> Ann Weaver, *An ethology of adaptation: Dolphins stop feeding but continue socializing in construction-degraded habitat*, FRONTIERS MARINE SCI. (Mar. 18, 2021) (showing significant decreases in the numbers of foraging dolphins in the presence of construction noise); Howard Gray & Koen Van Waerebeek, *Postural instability and akinesia in a pantropical spotted dolphin, Stenella attenuata, in proximity to operating airguns of a geophysical seismic vessel*, J. NATURE CONSERVATION (Dec. 2011) (observing severe injury or impaired neurological function in spotted dolphin exposed to airgun noise).

<sup>18</sup> Marc O. Lammers et al., *Acoustic monitoring of dolphin occurrence and activity in a MINEX training range*, PROCEEDINGS OF MEETINGS ON ACOUSTICS (July 10, 2016) (demonstrating repeated cessation of dolphin calls around Navy training with low-weight explosives).

<sup>19</sup> Terrie M. Williams et al., *Swimming and diving energetics in dolphins: A stroke-by-stroke analysis for predicting the cost of flight responses in wild odontocetes*, J. EXPERIMENTAL BIOLOGY (Jan. 7, 2017); Marla M. Holt et al., *Vocal performance affects metabolic rate in dolphins: Implications for animals communicating in noisy environments*, J. EXPERIMENTAL BIOLOGY (Mar. 30, 2015).

indicates that Level B takes occur with near certainty at levels well below this threshold, as discussed in more detail in our Draft IHA Comments.<sup>20</sup> By relying on such an outdated, incorrect threshold, NMFS has further underestimated impacts to marine mammals, resulting in a negligible impact analysis that is arbitrary and inaccurate.

## **B. The Mitigation Measures Found in the IHA Remain Under-Protective**

Finally, in authorizing “take” by incidental harassment under the general authorization provision of the MMPA, NMFS must prescribe “methods” and “means of effecting the least practicable adverse impact” on marine mammals and their habitat and establish additional “requirements pertaining to the monitoring and reporting of such taking.”<sup>21</sup> As set forth in our comments on both the draft IHA and the initial IHA modification, the mitigation measures in the IHA are not adequately protective of Virginia’s marine mammals and cannot satisfy the statutory standard.<sup>22</sup> Further, despite already authorizing one significant modification to the allowable take limits and now proposing yet another, the mitigation measures remain unchanged. We once again urge the agency, especially in light of the higher-than-expected detections of common dolphin and Atlantic spotted dolphin in the Project Area, to modify Dominion’s IHA as follows:

- **NMFS should establish a standard 500-meter exclusion zone for all marine mammal species around survey vessels.** It is unacceptable that, even after authorizing one—and now proposing to authorize a second—significant increase in take levels for dolphins, the agency is still choosing to leave small cetaceans without *any* exclusion zone protections in the IHA. The one-kilometer avoidance zone for common dolphins observed by Goold (1996) in the presence of anthropogenic noise further illustrates that the lack of exclusion zone measures for delphinids found in the IHA is wholly under-protective.
- **HRG surveys should commence, with ramp-up, during daylight hours only, and should be both visually and acoustically monitored (i.e., through passive acoustic monitoring). For efforts that continue into the nighttime, night-vision or infrared monitoring should also be used.** That common dolphins appear to be attracted to the artificial lighting from Dominion’s HRG vessels after dusk, and thereby may be exposing themselves to Level B take during nighttime hours,<sup>23</sup> underscores the need for both diel restrictions as well as mixed-method monitoring efforts after dark.

We also remain deeply concerned that the IHA will put North Atlantic right whales at unacceptable risk. As NMFS is aware, the population, which stands at an estimated mere 356 individuals as of the end of 2019, cannot sustain the loss of even one individual.<sup>24</sup> The extreme vulnerability of the species is also underscored by the tragic loss of four calves in the last two

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<sup>20</sup> See Draft IHA Comments at 11-12.

<sup>21</sup> 16 U.S.C. § 1371(a)(5)(A)(i)(II).

<sup>22</sup> See Draft IHA Comments at 15-22.

<sup>23</sup> 86 Fed. Reg. at 13696 (hypothesizing that the observed bowriding of common dolphins may be due to “an enhanced feeding opportunity provided (after dusk) by the lighted vessels”).

<sup>24</sup> Heather M. Pettis et al., *North Atlantic Right Whale Consortium 2020 Annual Report Card*, N. ATL. RIGHT WHALE CONSORTIUM (Jan. 2021),

[https://www.narwc.org/uploads/1/1/6/6/116623219/2020narwcreport\\_cardfinal.pdf](https://www.narwc.org/uploads/1/1/6/6/116623219/2020narwcreport_cardfinal.pdf). See also Scott D. Kraus, Presentation to the North Atlantic Right Whale Consortium Meeting (Oct. 2020) (establishing a potential biological removal of 0.7).



calving seasons, three of which were killed by vessel strike.<sup>25</sup> Moreover, Dominion has observed right whales in the Project Area at least *seven* times since the beginning of the survey period.<sup>26</sup> These facts compel the need for strong mitigation measures for activities covered by Dominion's IHA. **In addition to the measures discussed above, our organizations once again urge NMFS to:**

- Impose a seasonal restriction on HRG surveys that have the potential to injure or harass the North Atlantic right whale, extending from November 1 through April 30, to avoid the time period that poses the highest risk for the population;
- In lieu of the standard 500-meter exclusion zone described above, establish, to the extent feasible, an extended 1,000-meter exclusion zone for North Atlantic right whales around survey vessels;
- Require that all vessels traveling *to and from* the Project Area maintain a speed of 10 knots or less throughout the survey period; and
- Require that Dynamic Management Areas become active anytime a single North Atlantic right whale is sighted or acoustically detected.

We also highlight the agency's own recent findings about the risk of vessel strikes on the East Coast—one of two main factors preventing recovery of right whales. Vessel strikes stemming from Dominion's activities pose a serious threat to right whales. In fact, NMFS's recent Vessel Speed Rule Assessment found that current vessel speed restrictions—the very same measures that the IHA relies upon to minimize incidental take of right whales from vessel strikes—are *under-protective* and must be strengthened to further reduce this risk to the species.<sup>27</sup> As a result, NMFS's reliance on outdated, inadequately protective vessel speed measures for Dominion's survey activities violates the agency's obligation to ensure the “least practicable adverse impact” on Virginia's marine mammals.<sup>28</sup> NMFS must modify the vessel strike mitigation measures in the IHA accordingly.

## C. Conclusion

NMFS, in authorizing the dramatic increase in take of Atlantic spotted dolphin under Dominion's IHA, and in proposing now to authorize a significant increase in take of the common

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<sup>25</sup> *First Known North Atlantic Right Whale Calf of the Season Washes Up Dead off North Carolina*, NMFS (Nov. 23, 2020), <https://www.fisheries.noaa.gov/feature-story/first-known-north-atlantic-right-whale-calf-season-washes-dead-north-carolina>; *Dead North Atlantic Right Whale Sighted off New Jersey*, NMFS (June 29, 2020), <https://www.fisheries.noaa.gov/feature-story/dead-north-atlantic-right-whale-sighted-new-jersey>; *North Atlantic Right Whale Calf Injured by Vessel Strike*, NMFS (Jan. 30, 2020), <https://www.fisheries.noaa.gov/feature-story/north-atlantic-right-whale-calf-injured-vessel-strike>; *North Atlantic Right Whale Calf Stranded Dead in Florida*, NMFS (Feb. 14, 2021), <https://www.fisheries.noaa.gov/feature-story/north-atlantic-right-whale-calf-stranded-dead-florida>.

<sup>26</sup> Jason Ericson, CVOW Environmental Briefing (Public Presentation), DOMINION ENERGY (Mar. 8, 2021), <https://vimeo.com/521412682/51db2f7046>. See also *Fantastic video of an encounter with North Atlantic right whales off the coast of Virginia Beach*, U.S. NAVY (Jan 27, 2021), [https://www.navy.mil/submit/display.asp?story\\_id=10888](https://www.navy.mil/submit/display.asp?story_id=10888).

<sup>27</sup> See generally NMFS, *North Atlantic Right Whale (Eubalaena glacialis) Vessel Speed Rule Assessment* (June 2020), available at <https://www.fisheries.noaa.gov/national/endangered-species-conservation/reducing-vessel-strikes-north-atlantic-right-whales>.

<sup>28</sup> 16 U.S.C. § 1371(a)(5)(A)(i)(II).

dolphin, has failed to discharge its responsibilities under the MMPA to protect marine mammals. Indeed, the agency's acquiescence to Dominion's requests to modify the IHA—without undertaking any objective analysis of the impacts of such changes—paints a disturbing picture for the future of offshore wind permitting on the East Coast and its impacts on marine mammals. For all of the above reasons, the agency must withdraw its proposed IHA modification and revise its analysis, consistent with the agency's statutory obligations of ensuring that any potential stressors posed by the proposed activity are mitigated and that the project will have the least practicable adverse impact on affected species.

In closing, we urge NMFS under the new administration to reconsider its current IHA process so as to properly reflect the requirements under the MMPA. Given the emerging threats to, and declining status of, a number of federally protected marine mammal species and populations in the mid-Atlantic, we believe that such overhaul is vital.

Thank you for your consideration of these comments.

Sincerely,



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[Attachments]

# ATTACHMENT 1

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July 17, 2020

Submitted via electronic mail

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**Re: Comments on Draft Incidental Harassment Authorization for Site Characterization Surveys in the OCS-A-0483 Lease Area and the Coastal Waters off Virginia**

Ms. Harrison,

The Southern Environmental Law Center (“SELC”) submits these comments on behalf of Natural Resources Defense Council, National Wildlife Federation, Conservation Law Foundation, Defenders of Wildlife, Whale and Dolphin Conservation, Surfrider Foundation, the Nature Conservancy, Sierra Club Virginia Chapter, Assateague Coastal Trust, Mass Audubon, NY4WHALES, the International Marine Mammal Project of Earth Island Institute, and Inland Ocean Coalition, in response to the National Marine Fisheries Service’s (“NMFS”) proposal to issue an incidental harassment authorization (“IHA”) to Dominion Energy Virginia (“Dominion”), for marine site characterization surveys off the coast of Virginia in the area of Commercial Lease of Submerged Lands for Renewable Energy Development on the Outer Continental Shelf (OCS-A-0483) (“the Lease Area”), and in the coastal waters off Virginia where a “cable corridor” will be established (collectively termed “Project Area”), in support of the Coastal Virginia Offshore Wind (“CVOW”) Commercial Project.<sup>1</sup>

Dominion proposes to conduct high-resolution geophysical (“HRG”) and geotechnical surveys for purposes of site characterization and project design of the CVOW Commercial Project. These activities are set to commence “as soon as possible” and will last for a period of 161 days.<sup>2</sup> Dominion plans to run two survey vessels concurrently within the 122,799-acre Lease Area, which lies 27 nautical miles off the coast of Virginia Beach, and along the “cable corridor” between the Lease Area and coastal Virginia.

This is an exciting moment for offshore wind in Virginia, and we recognize and celebrate the contribution that the offshore wind projects associated with these surveys could make in providing clean energy for the state and region. Once completed in 2026, Dominion’s 2,640-megawatt CVOW Commercial Project would provide enough electricity to power up to 650,000

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<sup>1</sup> Takes of Marine Mammals Incidental to Specified Activities; Taking Marine Mammals Incidental to Marine Site Characterization Surveys Off of Coastal Virginia, 85 Fed. Reg. 36,537 (June 17, 2020).

<sup>2</sup> *Id.* at 36,538.

homes in Virginia.<sup>3</sup> It is our view that wind energy will continue to be a vital part of our nation's energy mix, and we applaud the steps Virginia is taking to address climate change and to support offshore wind and clean energy development. In addition to rich wind resources, the waters off the coast of Virginia represent an area of important marine mammal habitat. This habitat and the health of marine mammals will continue to be threatened by changes in the ocean environment brought on by climate change, further underscoring the need to transition away from reliance on fossil fuels.

It is our view that, as offshore wind energy development moves forward, it must do so in an environmentally responsible manner, safeguarding vulnerable ocean habitat and wildlife. As offshore wind is a nascent industry in the United States, there is still much to learn about how it can be developed with appropriate mitigation measures to protect local wildlife. For example, given that underwater noise pollution disrupts marine mammal communication and can potentially drive marine mammals from areas critical to their feeding and migration, the agency must be especially careful to ensure that the proposed offshore wind development activities are done with the utmost consideration for the health of marine mammals and their habitats. This is particularly true given the dire population status of the North Atlantic right whale, which was just reclassified to Critically Endangered by the International Union for Conservation of Nature ("IUCN") Red List. The protections established by the agency for this project are likely to set the standard for further offshore wind development along the Atlantic coast in the years to come. The following comments are intended to support the advancement of offshore wind in a manner sustainable for marine wildlife, and particularly marine mammals.

Our organizations have a number of concerns pertinent to NMFS' "negligible impact" and "least practicable impact" determinations, and accordingly urge the agency to adopt the mitigation and monitoring requirements necessary to ensure adequate protections for North Atlantic right whales and other priority species. As detailed in the comments below, we highlight the following inconsistencies between the Proposed IHA and the Marine Mammal Protection Act ("MMPA"):

- In determining take numbers, NMFS relies on incomplete estimates of marine mammal abundance, distribution, and density for the U.S. East Coast;
- NMFS underestimates take numbers based on unfounded assumptions regarding acoustic thresholds and effectiveness of mitigation and monitoring measures;
- NMFS neglects to acknowledge the potential for Level A take from survey noise and vessel strike; and
- NMFS proposes to consider extending any one-year IHA with a truncated 15-day comment period, which is plainly contrary to the MMPA.

We accordingly recommend that the mitigation and monitoring measures in the Proposed IHA be modified as follows:

- NMFS should impose a seasonal restriction on site characterization activities that have the potential to injure or harass the North Atlantic right whale (i.e., source level

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<sup>3</sup> *Coastal Virginia Offshore Wind*, DOMINION ENERGY (last visited July 16, 2020), <https://www.dominionenergy.com/company/making-energy/renewable-generation/wind/coastal-virginia-offshore-wind>.



- >180 dB re 1  $\mu$ Pa (SPL) at 1-meter frequencies between 7 and 35 kHz<sup>4</sup>) from November 1 through April 30, to avoid the time period that poses the highest risk for North Atlantic right whales;
- HRG surveys should commence, with ramp-up, during daylight hours only, to maximize the probability that marine mammals are detected and confirmed clear of the exclusion zone;
  - NMFS should establish a standard 500-meter exclusion zone for *all* marine mammal species around surveys with noise levels that could result in injury or harassment of marine mammals, and, to the extent feasible, an extended 1,000-meter exclusion zone for North Atlantic right whales;
  - a combination of visual monitoring—by four protected species observers adhering to a two-on/two-off schedule—and passive acoustic monitoring should be used at all times that survey work is underway, and, for efforts that continue into the nighttime, night vision or infrared technology should also be used;
  - shutdown requirements should not be waived for bottlenose dolphins belonging to any stock, to protect the strategic and depleted stock of Western North Atlantic Southern Migratory Coastal bottlenose dolphin; and
  - all vessels operating *within* the Project Area should maintain a speed of 10 knots or less outside the period of November 1 and April 30, during which this speed limit should be extended to all vessels traveling *to and from* the Project Area. NMFS should also consider requiring that Dynamic Management Areas (“DMA”) become active anytime a single North Atlantic right whale is sighted or acoustically detected.

## I. BACKGROUND

### A. The Marine Mammal Protection Act

Congress enacted the MMPA because “certain species and population stocks of marine mammals are, or may be, in danger of extinction or depletion as a result of man’s activities.”<sup>5</sup> The statute seeks to ensure that species and population stocks are not “permitted to diminish beyond the point at which they cease to be a significant functioning element of the ecosystem of which they are a part,” and do not “diminish below their optimum sustainable population.”<sup>6</sup> Congress intended for NMFS to act conservatively in the face of uncertainty when authorizing activities harmful to marine species.<sup>7</sup> This careful approach to management was necessary because of the vulnerable status of many species and because it is difficult to measure the impacts of human activities on marine mammals in the wild.<sup>8</sup>

At the heart of the MMPA is its “take” prohibition, which establishes a moratorium on the capture, harassing, hunting, or killing of marine mammals, and generally prohibits any person or vessel subject to the jurisdiction of the United States from taking a marine mammal on

<sup>4</sup> As discussed in Section II.B, the best available science on other low- to mid-frequency sources indicates that Level B takes will occur with near certainty at exposure levels well below the 160 dB threshold that NMFS applies to behavioral impacts.

<sup>5</sup> 16 U.S.C. § 1361(1).

<sup>6</sup> *Id.* § 1361(2); *see also Conservation Council for Haw. v. Nat’l Marine Fisheries Serv.*, 97 F. Supp. 3d 1210, 1216 (D. Haw. 2016).

<sup>7</sup> H.R. Rep. No. 92-707 (Dec. 4, 1971), *as reprinted in* 1972 U.S.C.C.A.N. 4144, 4148.

<sup>8</sup> 16 U.S.C. § 1361(1), (3).

the high seas or in waters or on land under the jurisdiction of the United States.<sup>9</sup> Harassment is any act that “has the potential to injure a marine mammal or marine mammal stock in the wild” or to “disturb a marine mammal...by causing disruption of behavioral patterns, including, but not limited to, migration, breathing, nursing, breeding, feeding, or sheltering.”<sup>10</sup>

NMFS may grant exceptions to the take prohibition under the specific circumstances enumerated in the statute. Relevant here, the agency may authorize, for not more than a one-year period, the incidental, but not intentional, “taking by harassment of small numbers of marine mammals of a species or population stock” if the agency determines that such take would have only “a negligible impact on such species or stock.”<sup>11</sup> The agency must prescribe permissible methods of take to ensure that the activity has “the least practicable impact on such species or stock and its habitat, paying particular attention to rookeries, mating grounds, and areas of similar significance[.]”<sup>12</sup> NMFS must also establish monitoring and reporting requirements.<sup>13</sup> No later than 45 days after receiving an application for an IHA, NMFS must publish a proposed authorization and open a 30-day comment period.<sup>14</sup>

## **B. Virginia’s Marine Mammals**

According to Dominion’s IHA Application for site characterization activities, at least 37 marine mammal species are known to occur in the marine and coastal waters off Virginia, including seven large and 26 small cetaceans, and four pinnipeds.<sup>15</sup> Of these marine mammal species, five large cetaceans (fin, sei, blue, sperm, and North Atlantic right whales) are listed as endangered under the Endangered Species Act (“ESA”) and as depleted and strategic stocks under the MMPA. One small cetacean species, the false killer whale, is designated as a strategic stock under the MMPA, and the Western North Atlantic Southern Migratory Coastal stock of bottlenose dolphin is designated as both a depleted and strategic stock under the MMPA. The various conservation statuses and seasonal presence of these species require particular consideration by NMFS when issuing an IHA to Dominion.

Despite what is presented in the following sections, data on seasonality and distribution of Virginia’s marine mammals, as well as those occupying the broader Mid-Atlantic region, are largely lacking when compared with other regions. As such, NMFS should take steps now to develop a dataset that more accurately reflects marine mammal presence so that it is in hand for future IHAs and other regulatory steps to advance offshore wind in the Mid-Atlantic. Specifically, we recommend that NMFS: 1) fund analyses of recently collected sighting and acoustic data for all data-holders; 2) continue to fund and expand surveys and studies to improve

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<sup>9</sup> *Id.* §§ 1362(13), 1371(a).

<sup>10</sup> *Id.* § 1362(18)(A).

<sup>11</sup> *Id.* § 1371(a)(5)(D)(i).

<sup>12</sup> *Id.* § 1371(a)(5)(D)(ii)(I).

<sup>13</sup> *Id.* § 1371(a)(5)(D)(ii)(III).

<sup>14</sup> *Id.* § 1371(a)(5)(D)(iii).

<sup>15</sup> DOMINION ENERGY, *Dominion Coastal Virginia Offshore Wind Commercial Project: Request for the Incidental Harassment of Marine Mammals Incidental to Survey Activities on the Outer Continental Shelf (OCS) within Lease OCS-A 0483 and the Associated Export Cable Corridor*, submitted to NMFS (May 11, 2020), <https://www.fisheries.noaa.gov/action/incidental-take-authorization-dominion-energy-virginia-marine-site-characterization-surveys> [hereinafter “Dominion IHA Application”], at Table 3-1. Inexplicably, NMFS determines that only 16 of the 37 species are likely to be affected by the proposed activity. 85 Fed. Reg. at 36,541, Table 2. NMFS should explain why the remaining 21 species are missing from its IHA analysis.

our understanding of distribution and habitat use of marine mammals off Virginia, including within and adjacent to the Project Area, as well as throughout the broader Mid-Atlantic region, in the very near future; and 3) take a “precautionary approach” with regard to siting and mitigation when permitting offshore wind activities in areas for which species distribution data are limited. Only then can the most accurate take numbers and most effective mitigation measures be established.

i. North Atlantic Right Whales

As the agency is aware, the conservation status of the North Atlantic right whale is dire. Although the species has been listed as endangered since the 1970s, recent scientific analysis confirms that the population has been declining since 2010 due to entanglements in commercial fishing gear and vessel strikes.<sup>16</sup> In the wake of an alarming number of human-caused deaths of North Atlantic right whales in 2017, NMFS declared an Unusual Mortality Event (“UME”) under the MMPA for all U.S. waters in which right whales occur,<sup>17</sup> which devotes additional federal resources to determining and—if possible—mitigating the source of excessive mortality. This designation is still in effect. At least thirty-one whales are known to have been killed since 2017, and an additional ten animals have been documented with serious injuries from which they will not recover.<sup>18</sup> Two of the ten calves born in the latest calving season are already either confirmed or presumed dead due to vessel strikes, and their mothers have not been seen since.<sup>19</sup>

The loss of these forty-one animals represents roughly ten percent of the total population, which is now estimated at approximately 400 individuals.<sup>20</sup> Of these, no more than 95 are females of breeding age.<sup>21</sup> Females are more vulnerable than males to the lethal and sub-lethal effects of human activity, surviving to only 30-40 years of age with an extended inter-calf interval of approximately 10 years.<sup>22</sup> Furthermore, poor body condition of individuals within the population, compared with that of southern right whales, is of major concern for the future viability of the population.<sup>23</sup> The agency has recently named the North Atlantic right whale a “Species in the Spotlight,” indicating that they are among the nine marine species most at risk of

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<sup>16</sup> Richard M. Pace, III et al., *State-space mark-recapture estimates reveal a recent decline in abundance of North Atlantic right whales*, *ECOLOGY & EVOLUTION* (Sept. 18, 2017); Sarah M. Sharp et al., *Gross and histopathologic diagnoses from North Atlantic right whale Eubalaena glacialis mortalities between 2003 and 2018*, *DISEASES OF AQUATIC ORGANISMS* (June 20, 2019).

<sup>17</sup> 2017–2020 North Atlantic Right Whale Unusual Mortality Event, NMFS (last visited July 10, 2020), <https://www.fisheries.noaa.gov/national/marine-life-distress/2017-2020-north-atlantic-right-whale-unusual-mortality-event>.

<sup>18</sup> *Id.*

<sup>19</sup> North Atlantic Right Whale Calf Injured by Vessel Strike, NMFS (Jan. 30, 2020), <https://www.fisheries.noaa.gov/feature-story/north-atlantic-right-whale-calf-injured-vessel-strike>; Dead North Atlantic Right Whale Sighted off New Jersey, NMFS (June 29, 2020), <https://www.fisheries.noaa.gov/feature-story/dead-north-atlantic-right-whale-sighted-new-jersey>.

<sup>20</sup> Heather Pettis et al., *North Atlantic Right Whale Consortium 2019 Annual Report Card*, N. ATL. RIGHT WHALE CONSORTIUM (Jan. 2020), <https://www.narwc.org/uploads/1/1/6/6/116623219/2019reportfinal.pdf>.

<sup>21</sup> Chris Oliver, *Immediate Action Needed to Save the North Atlantic Right Whales*, NMFS (July 3, 2019), <https://www.fisheries.noaa.gov/leadership-message/immediate-action-needed-save-north-atlantic-right-whales>.

<sup>22</sup> Pace et al., *supra* note 16; Peter Corkeron et al., *The recovery of North Atlantic right whales, Eubalaena glacialis, has been constrained by human-caused mortality*, *ROYAL SOC’Y OPEN SCI.* (Nov. 7, 2018).

<sup>23</sup> Fredrik Christiansen et al., *Population comparison of right whale body condition reveals poor state of the North Atlantic right whale*, *MARINE ECOLOGY PROGRESS SERIES* (Apr. 23, 2020).

extinction in the United States.<sup>24</sup> And just this month, the IUCN Red List reclassified the status of the species from Endangered to Critically Endangered, one step away from Extinction.<sup>25</sup>

Since 2010, North Atlantic right whale distribution and habitat use have shifted in response to climate change-driven shifts in prey availability and favorable oceanographic conditions.<sup>26</sup> Monitoring indicates that such shifts are being observed throughout much of their range,<sup>27</sup> and observes right whales spending more time in the Mid-Atlantic year-round.<sup>28</sup> In addition, as the Proposed IHA notes, North Atlantic right whales are now more widely distributed across all Atlantic coast regions throughout winter months.<sup>29</sup> A recent study detected North Atlantic right whales in the waters off Virginia on approximately 10 percent of days throughout the year.<sup>30</sup> Further, NOAA data suggest that there is a seasonal hot spot of *Centropagidae* copepod density, on which North Atlantic right whales feed, off the coast of Virginia in the summer.<sup>31</sup> Scientists predict that further range shifts of this nature will occur as water temperatures continue to rise from climate change.<sup>32</sup>

While North Atlantic right whales are increasingly present within the Project Area year-round, they are most consistently present at their highest densities from November through April, based on acoustic data<sup>33</sup> and aerial surveys.<sup>34</sup> This period captures both the southward migration from the species' northern feeding grounds to their southern calving grounds off the Carolinas, Georgia, and Florida in the fall and early winter, when pregnant females are likely to be traveling through the Lease Area, and the northward migration in the late winter and early spring, when mothers and calves are likely to be traveling through and adjacent to the Project Area. These months of elevated occurrence are supported by the period for which NMFS scientists have identified a Biologically Important Area ("BIA") for North Atlantic right whales.<sup>35</sup> This

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<sup>24</sup> *Endangered Species Conservation: Species in the Spotlight*, NMFS (last visited July 10, 2020), <https://www.fisheries.noaa.gov/topic/endangered-species-conservation#species-in-the-spotlight>.

<sup>25</sup> *Almost a third of lemurs and North Atlantic Right Whale now Critically Endangered - IUCN Red List*, INT'L UNION FOR CONSERVATION OF NATURE (July 9, 2020), <https://www.iucn.org/news/species/202007/almost-a-third-lemurs-and-north-atlantic-right-whale-now-critically-endangered-iucn-red-list>.

<sup>26</sup> Nicholas R. Record et al., *Rapid climate-driven circulation changes threaten conservation of endangered North Atlantic right whales*, OCEANOGRAPHY (May 3, 2019).

<sup>27</sup> Erin L. Meyer-Gutbrod et al., *Marine species range shifts necessitate advanced policy planning: The case of the North Atlantic right whale*, OCEANOGRAPHY (June 11, 2018).

<sup>28</sup> Genevieve E. Davis et al., *Long-term passive acoustic recordings track the changing distribution of North Atlantic right whales (Eubalaena glacialis) from 2004 to 2014*, NATURE SCI. REPORTS (Oct. 18, 2017).

<sup>29</sup> 85 Fed. Reg. at 36,542 (citing Davis et al., *id.*).

<sup>30</sup> Daniel P. Salisbury et al., *Right whale occurrence in the coastal waters of Virginia, U.S.A.: Endangered species presence in a rapidly developing energy market*, MARINE MAMMAL SCI. (Oct. 15, 2015).

<sup>31</sup> *Ecology of the Northeast US Continental Shelf: Zooplankton*, NAT'L OCEANIC AND ATMOSPHERIC ADMIN. (last visited July 10, 2020), <https://www.nefsc.noaa.gov/ecosys/ecosystem-ecology/zooplankton.html>.

<sup>32</sup> Davis et al., *supra* note 28.

<sup>33</sup> *See id.*; *see also* Salisbury et al., *supra* note 30. There is some indication that right whale densities start to increase as early as October; however, the authors conclude that the November 1<sup>st</sup> through April 30<sup>th</sup> period is when the majority of right whales are present.

<sup>34</sup> Sarah D. Mallette et al., *Occurrence of Baleen Whales along the Continental Shelf Region of the VACAPES OPAREA off Southern Virginia: Final Report*, NAVAL FACILITIES ENG'G COMMAND (NAVFAC) (July 2018), [https://www.navy-marine-species-monitoring.us/files/8415/3383/3682/Mallette\\_et\\_al.\\_2018\\_-\\_Occurrence\\_of\\_Baleen\\_Whales\\_along\\_the\\_Continental\\_Shelf\\_Region\\_of\\_the\\_VACAPES\\_OPAREA\\_off\\_southern\\_Virginia\\_-\\_Final\\_Report.pdf](https://www.navy-marine-species-monitoring.us/files/8415/3383/3682/Mallette_et_al._2018_-_Occurrence_of_Baleen_Whales_along_the_Continental_Shelf_Region_of_the_VACAPES_OPAREA_off_southern_Virginia_-_Final_Report.pdf) (finding that North Atlantic right whales were spotted during the winter and spring).

<sup>35</sup> Erin LaBrecque et al., *Biologically Important Areas for cetaceans within U.S. waters—East coast region*, AQUATIC MAMMALS (Mar. 2015).

Migratory Corridor BIA covers important migratory habitat stretching from Cape Cod Bay in Massachusetts to off central Florida, extending from the coast past the continental shelf break.<sup>36</sup>

The best available science therefore demonstrates that November 1 through April 30 represents the time period of highest risk to North Atlantic right whales off Virginia, based on times of highest relative density of animals and times when mother-calf pairs and pregnant females are expected to be present. That said, given that North Atlantic right whales are now detected during every month of the year in the Mid-Atlantic, and that NMFS has determined the species cannot sustain the loss of a single individual, there is a clear need for strong and effective mitigation measures to be in place year-round for the CVOW Commercial Project.

The identification of this heightened seasonal occurrence and risk is also consistent with the Seasonal Management Area (“SMA”), which overlaps with part of the cable corridor and applies vessel speed limits to waters extending 37 kilometers offshore from the entrance of Chesapeake Bay from November 1 through April 30 for purposes of vessel strike mitigation.<sup>37</sup> As discussed in more detail below (*see* Section II.C), North Atlantic right whales are particularly vulnerable to serious injury and mortality from vessel strikes. Moreover, some types of anthropogenic noise have been shown to induce near-surface positioning in North Atlantic right whales, increasing the risk of vessel strike at relatively moderate levels of exposure. Anthropogenic noise also increases stress hormones in right whales, which can impact their ability to reproduce and impair their immune systems.<sup>38</sup> It is possible that HRG surveys could produce the same effects, and should therefore be given proper consideration by the agency.

## ii. Other Large Whales

Nearshore Mid-Atlantic waters serve as an important migratory area for humpback and endangered fin whales, while more offshore waters are important migratory grounds for minke and endangered sei whales.<sup>39</sup> Humpback whales are increasingly sighted year-round in the waters off Virginia, and perhaps throughout the broader Mid-Atlantic region.<sup>40</sup> These waters, including those within the Lease Area and cable corridor, provide important seasonal foraging habitat for humpback whales.<sup>41</sup> Between-year sightings suggest that as many as 20 percent of identified juvenile humpback whales occur in a relatively small study area in consecutive years.<sup>42</sup>

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<sup>36</sup> *Id.*

<sup>37</sup> *Reducing Ship Strikes to North Atlantic Right Whales*, NMFS (last visited July 10, 2020), <https://www.fisheries.noaa.gov/national/endangered-species-conservation/reducing-ship-strikes-north-atlantic-right-whales>.

<sup>38</sup> Rosalind M. Rolland et al., *Evidence that ship noise increases stress in right whales*, PROC. ROYAL SOC’Y B (Feb. 8, 2012).

<sup>39</sup> *Documenting Whale Migration off Virginia’s Coast: Virginia CZM Cooperative Agreement with the Virginia Aquarium*, NOAA (2014), <https://www.midatlanticocean.org/wp-content/uploads/2013/11/documenting-whale-migration-off-virginias-coast.pdf>.

<sup>40</sup> Alyson Fleming & Jennifer Jackson, *Global Review of Humpback Whales* (Megaptera novaeangliae), NMFS (Mar. 2011), <https://repository.library.noaa.gov/view/noaa/4489>.

<sup>41</sup> Sarah D. Mallette et al., *Seasonality and site-fidelity of humpback whales off the Mid-Atlantic region of the U.S.* (2017) (poster presentation, Va. Aquarium & Marine Sci. Ctr. (VAMSC)), [https://www.navy-marinespeciesmonitoring.us/files/5115/1941/4653/Mallette\\_SMM\\_2017\\_poster.pdf](https://www.navy-marinespeciesmonitoring.us/files/5115/1941/4653/Mallette_SMM_2017_poster.pdf).

<sup>42</sup> *Id.*



While not currently listed as depleted,<sup>43</sup> ongoing UMEs exist for the Atlantic populations of minke whales (since January 2017) and humpback whales (since January 2016). Ninety-two (92) minke whales have stranded between Maine and South Carolina from January 2017 to July 2020.<sup>44</sup> Some necropsies of have shown evidence of human interaction (i.e., vessel strike and entanglement), though more research is needed to determine the official causes of the UME.<sup>45</sup> Elevated numbers of humpback whales have also been found stranded along the Atlantic Coast since January 2016, and in a little over three years, 126 mortalities have been recorded (data through July 8, 2020), with strandings occurring in every state along the East Coast.<sup>46</sup> Virginia is the state with the second highest number of reported humpback strandings in the UME, likely due in part to elevated occurrences of vessel traffic in the area.<sup>47</sup> Indeed, NMFS' most recent Marine Mammal Stock Assessment Report shows that the majority of reported serious injury and mortality in the region were a result of vessel strikes, underscoring the risk of vessel traffic to humpback whales off the coast of Virginia.<sup>48</sup> The declaration of the three large whale UMEs by NMFS in the past few years, of which anthropogenic impacts may be a significant cause, demonstrates an increasing risk to large whales from human activities in this region, including those proposed by Dominion.

### iii. Small Cetaceans

In addition to endangered large whales, two strategic stocks of small cetaceans—false killer whales and the Western North Atlantic Southern Migratory Coastal stock of bottlenose dolphin—are found within the Project Area. While the Western North Atlantic stock of false killer whale was designated as strategic in 2014 because of mortality from fishery bycatch, no fishery-related mortality or serious injury has been observed in the last five years, and its strategic status is currently being proposed for removal.<sup>49</sup> The Western North Atlantic Southern Migratory Coastal stock of bottlenose dolphin is considered to be both strategic and depleted under the MMPA due to the number of annual human-caused mortalities and previous UMEs.<sup>50</sup>

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<sup>43</sup> While humpback whales are not considered depleted or strategic under the MMPA, there is reason to believe that they should be. According to the agency's own draft of the most recent Marine Mammal Stock Assessment Report, "[t]here is mounting evidence that humpback whales have been over PBR [Potential Biological Removal] for some time, and likely will be formally determined to be so in a future report. This is further supported by the NMFS declaration of Unusual Mortality Event No. 63.7..." *Draft Marine Mammal Stock Assessment Reports: U.S. Atlantic and Gulf of Mexico Draft Marine Mammal Stock Assessment*, NMFS (last visited July 10, 2020), <https://www.fisheries.noaa.gov/national/marine-mammal-protection/draft-marine-mammal-stock-assessment-reports> [hereinafter "2019 Draft Marine Mammal Stock Assessment"], at 163.

<sup>44</sup> *2017–2020 Minke Whale Unusual Mortality Event along the Atlantic Coast*, NMFS (last visited July 16, 2020), <https://www.fisheries.noaa.gov/national/marine-life-distress/2017-2020-minke-whale-unusual-mortality-event-along-atlantic-coast>.

<sup>45</sup> *Id.*

<sup>46</sup> *2016–2020 Humpback Whale Unusual Mortality Event Along the Atlantic Coast*, NMFS (last visited June 30, 2020), <https://www.fisheries.noaa.gov/national/marine-life-distress/2016-2020-humpback-whale-unusual-mortality-event-along-atlantic-coast>.

<sup>47</sup> Jessica M. Aschettino et al., *Satellite telemetry reveals spatial overlap between vessel high-traffic areas and humpback whales (Megaptera novaeangliae) near the mouth of the Chesapeake Bay*, FRONTIERS IN MARINE SCI. (Mar. 12, 2020).

<sup>48</sup> 2019 Draft Marine Mammal Stock Assessment, *supra* note 43, at 165-182.

<sup>49</sup> 2019 Draft Marine Mammal Stock Assessment, *supra* note 43, at 275.

<sup>50</sup> Sean A. Hayes et al., *U.S. Atlantic and Gulf of Mexico Marine Mammal Stock Assessments – 2017*, NMFS (Sept. 2018), <https://repository.library.noaa.gov/view/noaa/22730>, at 110-24.



The stock is commonly found in shallow waters off the Chesapeake Bay in the late summer months, but the precise boundaries of their migration vary from year to year.<sup>51</sup>

NMFS has identified a number of additional small cetacean species that have the highest likelihood of occurring in the Project Area and are expected to potentially be taken by the proposed activities. These include Atlantic spotted dolphins, Atlantic white-sided dolphins, common dolphins, short- and long-finned pilot whales, Western North Atlantic Offshore bottlenose dolphins, Risso's dolphins, and harbor porpoises.<sup>52</sup> Scientific research indicates seasonal and/or year-round presence of these species during the project period. During the warm summer months of June through August, Atlantic spotted dolphins are presumed to occupy coastal waters off Assateague, Virginia, including Chesapeake Bay.<sup>53</sup> From January through May, low numbers of white-sided and common dolphins are found off Virginia and the Carolinas.<sup>54</sup> Both species of pilot whale, the Western North Atlantic Offshore bottlenose dolphin stock, and the Risso's dolphin are more generally found further offshore along the continental shelf edge year-round,<sup>55</sup> yet some evidence suggests that long-finned pilot whales may move inshore during late summer and autumn months.<sup>56</sup> Passive acoustic monitoring regularly detects harbor porpoises from January through May off Maryland.<sup>57</sup>

#### iv. Pinnipeds

Two pinniped species of conservation concern are also found off Virginia during the project period: harbor and gray seals. While they are not listed under the ESA, nor considered strategic under the MMPA, a UME has been declared for these and two other seal species across the Northeast, extending as far south as Virginia. Due to infectious disease, 3,152 strandings have occurred since July 2018, including 10 in Virginia (data through March 13, 2020).<sup>58</sup> Harbor seals occur seasonally in coastal waters from southern New England to North Carolina from September through late May.<sup>59</sup> Seasonal distribution of gray seals in the Mid-Atlantic is less understood. Current population trends show abundance is likely increasing along the U.S. East Coast, although only strandings have been recorded off Virginia.<sup>60</sup>

HRG survey activities associated with marine site characterization have the potential to impact all of the above-mentioned species. Dominion's IHA Application notes: "Based on the

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<sup>51</sup> *Id.*

<sup>52</sup> 85 Fed. Reg. at 36,541, Table 2.

<sup>53</sup> Gordon T. Waring et al., *U.S. Atlantic and Gulf of Mexico Marine Mammal Stock Assessments – 2013*, NMFS (July 2014), <https://repository.library.noaa.gov/view/noaa/4757>, at 166.

<sup>54</sup> Hayes et al., *supra* note 50, at 77, 86.

<sup>55</sup> Sean A. Hayes et al., *U.S. Atlantic and Gulf of Mexico Marine Mammal Stock Assessments – 2018*, NMFS (June 2019), <https://repository.library.noaa.gov/view/noaa/20611>, at 74, 82; Sean A. Hayes et al., *U.S. Atlantic and Gulf of Mexico Marine Mammal Stock Assessments – 2016*, NMFS (June 2017), <https://repository.library.noaa.gov/view/noaa/14864>, at 120; Hayes et al. (2018), *supra* note 50, at 70.

<sup>56</sup> Randall R. Reeves et al. (eds.), *NAT'L AUDUBON SOC'Y GUIDE TO MARINE MAMMALS OF THE WORLD* 442 (2002).

<sup>57</sup> Jessica E. Wingfield et al., *Year-round spatiotemporal distribution of harbor porpoises within and around the Maryland Wind Energy Area*, PLOS ONE (May 3, 2017).

<sup>58</sup> *2018–2020 Pinniped Unusual Mortality Event Along the Northeast Coast*, NMFS (last visited July 8, 2020), <https://www.fisheries.noaa.gov/new-england-mid-atlantic/marine-life-distress/2018-2020-pinniped-unusual-mortality-event-along>.

<sup>59</sup> Hayes et al. (2019), *supra* note 55, at 121.

<sup>60</sup> *Id.* at 134, 131.

frequency ranges of the potential equipment to be used in support of the HRG survey activities[,] all but [two equipment types] operate within the established marine mammal hearing ranges and have the potential to result in Level A and B harassment of marine mammals.”<sup>61</sup> Elevated background noise can cause hearing damage, threshold shifts, masking, elevated stress, and behavioral disturbance in marine mammals, as described in the Proposed IHA.<sup>62</sup> The most likely and extensive effects of HRG surveys on large whales are behavioral responses, potentially resulting in the displacement of individuals out of important feeding or breeding areas or the disruption of communication important to life history functions.<sup>63</sup> Important here, migratory species have been known to avoid normal migratory paths when exposed to anthropogenic noise, leading to increased energy expenditure and potentially longer migratory times.<sup>64</sup>

## II. INCONSISTENCIES BETWEEN THE PROPOSED IHA AND THE MMPA

### A. NMFS Must Analyze All Data Sources When Calculating Marine Mammal Densities

In order to comply with the MMPA, NMFS must base its IHA analysis on the best available scientific information.<sup>65</sup> In determining the proportion of marine mammal species and populations taken by the proposed activities—a calculation that lies at the heart of the agency’s “small numbers” analysis—NMFS relies on estimates of marine mammal densities derived from the habitat-based density model produced by the Duke University Marine Geospatial Ecology Laboratory (“Roberts et al. model”).<sup>66</sup> While the Proposed IHA notes that the Roberts et al. model has been updated to incorporate additional data sources and two more years of data,<sup>67</sup> it still excludes data obtained through additional sightings databases, passive acoustic monitoring, and satellite telemetry. Notably, much of the survey data used to develop the model was collected prior to 2010 and therefore do not reflect the recent shift in North Atlantic right whale distribution, including the significant shifts observed during the past three years (2017-2019).

Moreover, the Roberts et al. model does not differentiate between species of pilot whale or seal, or between stocks of bottlenose dolphin.<sup>68</sup> That is, while the Proposed IHA separates marine mammals by species or by stock, the same accounting is used for each, and observations do not distinguish between species or stock. To make up for the general data, NMFS authorizes the total take for each stock of both bottlenose dolphins and all pilot whale and seal species. However, the MMPA requires that the agency look at the impact to both species and marine mammal stocks to support a negligible impact finding. A record that provides “general discussions with little, if any, relevance to the population-level effects on specific species and

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<sup>61</sup> Dominion IHA Application, *supra* note 15, at 7.

<sup>62</sup> 85 Fed. Reg. at 36,547.

<sup>63</sup> See, e.g., Brandon L. Southall et al., *Marine mammal noise exposure criteria: initial scientific recommendations*, AQUATIC MAMMALS (2007).

<sup>64</sup> See Christos Kolliatsas et al., OFFSHORE RENEWABLE ENERGY: ACCELERATING THE DEPLOYMENT OF OFFSHORE WIND, TIDAL AND WAVE TECHNOLOGIES 128-29 (2012).

<sup>65</sup> 16 U.S.C. §§ 1362(19), §§ 1362(27).

<sup>66</sup> Jason J. Roberts et al., *Habitat-based cetacean density models for the U.S. Atlantic and Gulf of Mexico*, NATURE SCI. REPORTS (Mar. 3, 2016).

<sup>67</sup> 85 Fed. Reg. at 36,556.

<sup>68</sup> “[Roberts et al.] produced density models to genus level for *Globicephala* spp. [pilot whales] and produced a density model for bottlenose dolphins that does not differentiate between offshore and coastal stocks.” *Id.* at 36542. “[Roberts et al.] produced density models for all seals and did not differentiate by seal species.” *Id.* at 36557.

stock, and to conclusory statements that no such effects are expected,” is inadequate.<sup>69</sup> We also note that the agency omits information on the “depleted” status of the Western North Atlantic Southern Migratory Coastal stock of bottlenose dolphin in the Proposed IHA, even though this designation was included in Dominion’s IHA Application.<sup>70</sup>

Miscalculation of take levels based on incomplete data could have serious implications for the future conservation status of these stocks. Because the density maps produced by the Roberts et al. model do not fully reflect the abundance, distribution, and density of marine mammals for the U.S. East Coast, they cannot be the only information source relied upon when estimating take. Integration of opportunistic sightings data and other sources of data that collect fine-scale information on factors driving marine mammal distribution with those gathered through systematic broad-scale surveys would better reflect current marine mammal presence, abundance, and density off Virginia, providing a more accurate assessment of Level B take.<sup>71</sup> Accordingly, NMFS must consider any data from State monitoring efforts,<sup>72</sup> passive acoustic monitoring data,<sup>73</sup> opportunistic marine mammal sightings,<sup>74</sup> and other data sources.

### **B. NMFS Should Not Adjust Take Numbers for Large Whales Based on Under-Protective Mitigation Measures**

According to the Proposed IHA, NMFS is choosing to adjust take numbers of endangered North Atlantic right whales and all other large whales to zero, as the proposed mitigation measures are “expected to preclude potential interactions” with, and “effectively prevent Level B harassment” of, these species.<sup>75</sup> Furthermore, the agency asserts that the 500-m exclusion zone for North Atlantic right whales exceeds the calculated Level B behavioral harassment zone.<sup>76</sup> While we appreciate NMFS’ refusal to authorize a single Level B take for the North Atlantic right whale, as is necessary given the species’ dire conservation status, we do not share the agency’s level of confidence that it is possible to mitigate all potential for Level B harassment through the implementation of an exclusion zone when North Atlantic right whales may nevertheless be present in the Lease Area. We are equally concerned in the case of large whales—humpback, fin, sei, sperm, and minke whales—all of which are either endangered or of conservation concern (*see* Section I.B.ii above).

Our reasons are threefold. First, the agency’s reliance on a 160 dB threshold for behavioral harassment is not supported by best available scientific information, which indicates that Level B takes occur with near certainty at exposure levels well below the 160 dB

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<sup>69</sup> *Conservation Council for Haw. v. NMFS*, 97 F. Supp. 3d 1210, 1223 (D. Haw. 2015).

<sup>70</sup> 85 Fed. Reg. at 36,541, Table 2.

<sup>71</sup> *See, e.g.,* Auriane Virgili et al., *Combining multiple visual surveys to model the habitat of deep-diving cetaceans at the basin scale*, GLOB. ECOLOGY & BIOGEOGRAPHY (Nov. 28, 2018).

<sup>72</sup> *E.g.,* NOAA, *supra* note 39; Mallette et al., *supra* note 34; Sarah D. Mallette et al., *Offshore Energy Planning for Marine Protected Species off of Virginia’s Coast: A Synthesis of Aerial Surveys in the Proximity of the Virginia Wind Energy Area (VA WEA) from 2012-2015*, VAMSC (2016), <https://www.deq.virginia.gov/Portals/0/DEQ/CoastalZoneManagement/FY14Task95-04-14.pdf>.

<sup>73</sup> *E.g.,* Davis et al., *supra* note 28; Salisbury et al., *supra* note 30.

<sup>74</sup> *E.g.,* *Dramatic Rescue of Endangered Whale Filmed by Fishermen*, THE TELEGRAPH (July 17, 2013), <https://www.telegraph.co.uk/news/earth/wildlife/10184397/Dramatic-rescue-of-endangered-whale-filmed-by-fishermen.html>.

<sup>75</sup> 85 Fed. Reg. at 36,557.

<sup>76</sup> *Id.*

threshold.<sup>77</sup> In the most comprehensive meta-analysis of behavioral response studies conducted to date, mid-frequency cetaceans had the highest probability of low-, moderate-, and high-severity responses to mid-frequency sonar sources (whose frequencies substantially overlap with the systems used by Dominion) at received levels around 150 dB, with significant increases in probability beginning at 130 dB and some responses occurring below 110 dB.<sup>78</sup> Second, the agency relies on the assumption that marine mammals will take measures to avoid the sound<sup>79</sup> even though studies have not found avoidance behavior to be generalizable among species and contexts,<sup>80</sup> and even though avoidance may itself constitute take under the MMPA. Third, as discussed in Section III below, the mitigation and monitoring protocols prescribed by the agency are inadequate at protecting marine mammals and do not comply with the MMPA. In fact, the mitigation measures in the Proposed IHA are overall less protective than previous IHA authorizations for the region (*see* Section III.C), even as the conservation status of the North Atlantic right whale has worsened. Collectively, the agency's assumptions regarding acoustic thresholds and mitigation effectiveness are unfounded and cannot be used to justify any reduction in the number of takes expected.

### C. NMFS Must Acknowledge that HRG Surveys and Vessel Strikes Can Result in Level A Take

The use of certain HRG survey equipment has the potential to result in Level A take, and this risk is relatively greater for species in the high-frequency hearing band, such as the harbor porpoise. The agency acknowledges this fact in its calculation of the Level A harassment zone,<sup>81</sup> yet discounts the possibility that Level A take will occur.<sup>82</sup> In fact, in previous authorizations for HRG surveys, the agency has, “out of an abundance of caution,” authorized Level A take for this species and other high-frequency cetaceans.<sup>83</sup> It is arbitrary for the agency to impose less precautionary measures for this area that is home to a number of mid- and high-frequency hearing specialists which may be vulnerable to Level A take. Moreover, the proposed cable corridor includes shallow, coastal waters, which may increase the likelihood of animals becoming trapped between the sound source and the shore. The agency should therefore acknowledge the *potential* for Level A take from HRG surveys on small cetaceans, and

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<sup>77</sup> See, e.g., Douglas P. Nowacek et al., *North Atlantic right whales (Eubalaena glacialis) ignore ships but respond to alerting stimuli*, PROC. ROYAL SOC'Y B (Dec. 3, 2003); Ronald A. Kastelein et al., *Threshold received sound pressure levels of single 1-2 kHz and 6-7 kHz up-sweeps and down-sweeps causing startle responses in a harbor porpoise (Phocoena phocoena)*, J. ACOUSTICAL SOC'Y AM. (Mar. 2012); Ronald A. Kastelein et al., *Behavioral response of a harbor porpoise (Phocoena phocoena) to 25.5- to 24.5-kHz sonar down-sweeps with and without side bands*, AQUATIC MAMMALS (Nov. 19, 2015).

<sup>78</sup> Catalina Gomez et al., *A systematic review on the behavioural responses of wild marine mammals to noise: The disparity between science and policy*, CAN. J. ZOOLOGY (Sept. 15, 2016).

<sup>79</sup> See 85 Fed. Reg. at, e.g., 36,548 (“most marine mammals would more likely avoid a loud sound source rather than swim in such close proximity as to result in TTS [Temporary Threshold Shift]”).

<sup>80</sup> Patrick J.O. Miller et al., *Using at-sea experiments to study the effects of airguns on the foraging behavior of sperm whales in the Gulf of Mexico*, DEEP SEA RES. I, (July 2009); Enrico Pirotta et al., *Vessel noise affects beaked whale behavior: Results of a dedicated acoustic response study*, PLOS ONE (Aug. 2012).

<sup>81</sup> 85 Fed. Reg. at 36,554, Table 6.

<sup>82</sup> *Id.* (“...in consideration of the proposed mitigation measures..., the likelihood of the proposed survey resulting in take in the form of Level A harassment is considered so low as to be discountable...”)

<sup>83</sup> See, e.g., Takes of Marine Mammals Incidental to Specified Activities; Taking Marine Mammals Incidental to Site Characterization Surveys Off the Coast of Massachusetts, 83 Fed. Reg. 22,443 (May 15, 2018).

reconsider its analysis of Level A take from HRG surveys on harbor porpoises and other acoustically sensitive species.

We are pleased that the Proposed IHA includes mitigation measures to avoid vessel strikes; however, it is our view that vessel impacts should also be incorporated into NMFS' take analysis. Vessel collisions are a leading cause of large whale injury and mortality and have been implicated as one of the major causes of death underlying the Atlantic large whale UMEs.<sup>84</sup> The number of recorded vessel collisions with large whales is likely to grossly underestimate the actual number of animals struck, as those struck but not recovered or thoroughly examined cannot be accounted for.<sup>85</sup> North Atlantic right whales are particularly prone to vessel strikes, given their slow speeds, overlapping range with shipping lanes, and extended time spent at or near the surface.<sup>86</sup> Some types of anthropogenic noise have been shown to *induce* near-surface positioning in North Atlantic right whales, increasing risk of vessel strikes.<sup>87</sup> It is possible that HRG surveys could produce the same effects, and should therefore be treated conservatively. The serious injury of two North Atlantic right whale calves by vessel strike this year alone, one of which resulted in documented mortality, demonstrates that vessel strikes pose an unacceptable risk to the species and can potentially occur even when very few whales are in the area.

In addition, relatively higher densities of humpback whales are found within high-traffic shipping lanes near the mouth of the Chesapeake Bay, indicating that vessel strike is a pertinent concern for this species.<sup>88</sup> Indeed, increased baleen whale sightings have occurred within the Bay, and have overlapped with the Project Area, over recent years<sup>89</sup> and vessel strike mortalities have also risen.<sup>90</sup> Given the demonstrated vulnerability of large whales to vessel collisions off the East Coast, and especially the mid-Atlantic, it is remiss of the agency to overlook vessel collisions as a source of potential take. The localized elevation in vessel activity occurring during marine site characterization surveys naturally increases the vessel collision risk for large whales in the area.

Our organizations understand that, based on past IHAs for marine site assessment and characterization activities, the vessels associated with the proposed activity will likely move at speeds well below 10 knots, meaning the risk of a lethal vessel collision during the surveys may be relatively low. However, the agency completely omits any information about estimated vessel speeds for the project. In the absence of such information, the agency cannot rule out the possibility that mortality or serious injury from vessel strikes could occur as a result of the proposed activity.

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<sup>84</sup> See NMFS, *supra* notes 17, 44, 46.

<sup>85</sup> See, e.g., Susan E. Parks et al., *Dangerous dining: Surface foraging of North Atlantic right whales increases risk of vessel collisions*, BIOLOGY LETTERS (Aug. 3, 2011).

<sup>86</sup> See *id.*

<sup>87</sup> Nowacek et al., *supra* note 77.

<sup>88</sup> See Mallette et al., *supra* note 41; see also Aschettino et al., *supra* note 47.

<sup>89</sup> Jessica M. Aschettino et al., *Mid-Atlantic Humpback Whale Monitoring, Virginia Beach, Virginia: 2017/18 Annual Progress Report*, NAVFAC (June 2018), [https://www.navy-marine-species-monitoring.us/files/2415/3081/8453/Aschettino\\_et\\_al.\\_2018\\_-\\_Humpback\\_Whale\\_Tagging\\_2017\\_-\\_Final.pdf](https://www.navy-marine-species-monitoring.us/files/2415/3081/8453/Aschettino_et_al._2018_-_Humpback_Whale_Tagging_2017_-_Final.pdf).

<sup>90</sup> Mallette et al., *supra* note 34.

In addition, as noted in the Proposed IHA, studies indicate that noise can induce flight responses, behavioral disturbances, habitat avoidance, and stress responses which reduce feeding rates and reproductive success.<sup>91</sup> Because of this, survey noise can induce horizontal displacement, or movement into other areas.<sup>92</sup> This could push a North Atlantic right whale or other large whale out of a protected area and into an area with a greater risk of vessel collision, such as the shipping lanes entering the Chesapeake Bay. Given this, indirect vessel strike risk resulting from habitat displacement should be considered in NMFS' take analysis.

#### **D. The Proposed IHA Extension Process Does Not Comport with the Plain Language of the Statute**

In addition to the Proposed IHA, NMFS requests comments on the potential one-year renewal of this Proposed IHA, on a case-by-case basis, for identical or nearly identical activities, with only an additional 15 days for public comment, should various criteria be met.<sup>93</sup> For several reasons, the undersigned organizations have opposed this process as contrary to law.

First, NMFS' proposal to provide one-year renewals does not comport with the plain language of the MMPA. Section 101(a)(D)(i) unambiguously states that IHAs are valid for periods of not more than one year.<sup>94</sup> Second, the statute is plainly clear on the timing of when the agency must publish a proposed authorization (45 days after receipt of an application) and the duration of the public comment period (30 days after publication).<sup>95</sup> The legislative history of the 1972 Act demonstrates that Congress viewed a robust notice and comment process as central to the agency's implementation of the IHA process, stating: "As approved by the Committee, the [MMPA] involves a number of basic concepts," one being that "the public is invited and encouraged to participate fully in the agency decision-making process."<sup>96</sup> When NMFS adheres to this process, "the public is assured of the right to be informed of actions taken or proposed."<sup>97</sup> Third, the legislative history removes any doubt that this 30-day comment period applies even in cases where the IHA is extended for another year without change.<sup>98</sup>

Notably, NMFS supplies no legal rationale for why it is authorized to issue an identical IHA for a second year while cutting in half the comment period the statute requires. The agency lacks discretionary authority to interpret the statute other than as commanded by its plain language, whether by regulation, by policy, or on a permit-by-permit basis as it purports to do here.<sup>99</sup> Nor has NMFS supplied a sufficient explanation for why it might assert that the statutory language of Section 101(a)(5)(D)(iii) is ambiguous, such that the agency might appropriately

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<sup>91</sup> 85 Fed. Reg. at 36,549-50.

<sup>92</sup> E.g., Manuel Castellote et al., *Acoustic and behavioural changes by fin whales (Balaenoptera physalus) in response to shipping and airgun noise*, BIOLOGICAL CONSERVATION (Mar. 2012).

<sup>93</sup> 85 Fed. Reg. at 36,562.

<sup>94</sup> 16 U.S.C. § 1371(a)(5)(D)(i).

<sup>95</sup> *Id.* § 1371(a)(5)(D)(iii).

<sup>96</sup> H.R. Rep. No. 92-707, at 4151 (1972), *reprinted in* 1972 U.S.C.C.A.N. 4144, 4151.

<sup>97</sup> *Id.* at 4146.

<sup>98</sup> H.R. Rep. No. 103-439, at 29 (1994). "[I]n some instances, a request will be made for an authorization identical to one issued the previous year. In such circumstances, the Committee expects the Secretary to act expeditiously in complying with the notice and comment requirements."

<sup>99</sup> See *Chevron, U.S.A., Inc. v. Nat. Res. Def. Council (NRDC)*, 467 U.S. 837, 842-43 (1984) ("If the intent of Congress is clear, that is the end of the matter; for the court, as well as the agency, must give effect to the unambiguously expressed intent of Congress.").



exercise its congressionally-delegated gap-filling authority to set forth a permissible interpretation of the statute that comports with the statute’s objectives.<sup>100</sup>

Finally, NMFS’ language about IHA Renewals on its website<sup>101</sup> does not provide a clear and legally adequate justification for its purported new reauthorization process, which allows interested members of the public only 15 calendar days to review and formulate comments. Given that this proposed change has appeared consistently in notices of draft IHAs for over a year now, NMFS apparently intends the new reauthorization process to become the rule rather than the exception. This change is not supported by law, and is further undermined by the fact that the agency has not gone through any public notice and comment or provided any rationale for its new process.

### **III. RECOMMENDATIONS FOR IMPROVED MITIGATION AND MONITORING**

In authorizing “take” by incidental harassment under the general authorization provision of the MMPA, NMFS must prescribe “methods” and “means of effecting the least practicable adverse impact” on marine mammals and set additional “requirements pertaining to the monitoring and reporting of such taking.”<sup>102</sup> In light of the aforementioned inconsistencies between the agency’s analysis and the requirements of the MMPA, NMFS has an obligation to impose robust avoidance, mitigation, and monitoring requirements to protect Virginia’s marine mammal species to the maximum extent practicable.

As noted above, the best scientific and commercial data available show that the North Atlantic right whale population cannot withstand the loss of a single individual, or any additional stressors. Any potential interruption of reproductive or migratory behavior may lead to population-level effects and is of critical concern. Given that North Atlantic right whales are present in the Project Area year-round, there is a clear need for strong mitigation measures on the activities covered by the IHA.

Our organizations agree with several of the mitigation and monitoring measures contained in the Proposed IHA. However, we believe that additional measures are necessary to more effectively avoid, minimize, and mitigate impacts to marine mammals. The current measures outlined in the Proposed IHA do not meet the standard of achieving the “least practicable adverse impact” on marine mammal populations. In the comments below, we address specific recommendations we have for improving these measures. These changes are critical to ensuring the protection of the North Atlantic right whale during Dominion’s proposed marine site characterization surveys.

#### **A. Seasonal Restrictions**

Dominion’s proposed survey activities are intended to commence “as soon as possible” and occur 24 hours per day for approximately 161 days, utilizing two survey vessels at any one

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<sup>100</sup> See *Northpoint Tech. Ltd. v. FCC*, 412 F.3d 145, 151 (D.C. Cir. 2005) (a “‘reasonable’ explanation of how an agency’s interpretation serves the statute’s objectives is the stuff of which a ‘permissible’ construction is made”).

<sup>101</sup> *Incidental Take Authorizations Under the Marine Mammal Protection Act*, NMFS (last visited July 10, 2020), <https://www.fisheries.noaa.gov/permit/incidental-take-authorizations-under-marine-mammal-protection-act>.

<sup>102</sup> 16 U.S.C. § 1371(a)(5)(D)(vi).

time.<sup>103</sup> This means that the proposed activities will continue well into the time period that poses the highest risk for North Atlantic right whales (i.e., November 1 to April 30). Given the extended duration and cumulative acoustic impact of the survey activities, we urge NMFS to prohibit site assessment and characterization activities that have the potential to injure or harass the North Atlantic right whale (i.e., source level >180 dB re 1  $\mu$ Pa (SPL) at 1-meter frequencies between 7 and 35 kHz) from November 1 to April 30.<sup>104</sup> These dates currently reflect both the best available scientific information on the relative density of North Atlantic right whales in the Mid-Atlantic, as well as the potential presence of pregnant females and mother-calf pairs (*see* Section I.B.i).

Time and area restrictions designed to protect certain species groups and habitats are one of the most effective available means to reduce the potential impacts of noise and disturbance on marine mammals.<sup>105</sup> Seasonal restrictions for pile driving and geophysical surveying formed a core component of a landmark agreement aimed at protecting the North Atlantic right whale from construction and site assessment and characterization activities in the Mid-Atlantic Wind Energy Areas that was reached between offshore wind developers and the environmental NGO community in 2012.<sup>106</sup> That said, it is becoming increasingly clear that there may not be a time of “low risk” for this species. The population size is now so small that any individual-level impact is of great concern. Moreover, changes in oceanographic conditions driven by climate change are rapidly impacting the habitat use and seasonal distribution of the species. Therefore, we recommend that robust and effective real-time monitoring and mitigation systems are in place to protect this species throughout the year (see the following sections for specific recommendations).

While existing and potential stressors to the North Atlantic right whale must be minimized as much as possible to promote the survival and recovery of the species, it is also incumbent upon the agency to address potential impacts to other imperiled whale species, particularly in light of the UMEs declared for humpback and minke whales (*see* Section I.B.ii). It is therefore imperative that consequences of the proposed North Atlantic right whale seasonal restriction on other protected species be fully addressed by the agency through the strong and

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<sup>103</sup> 85 Fed. Reg. at 36,538.

<sup>104</sup> Over a dozen wildlife conservation organizations have endorsed a suite of Best Management Practices (“BMP”) for the protection of the North Atlantic right whale during wind energy construction and operations of fixed foundation offshore wind projects off the U.S. East Coast. While the BMPs focus on construction and operations, the criteria to define times of highest risk are directly transferable to inform mitigation measures for site assessment and characterization activities. Conservation L. Found. et al., *Best Management Practices for North Atlantic Right Whales During Offshore Wind Energy Construction and Operations Along the U.S. East Coast* (Mar. 1, 2019), provided as Attachment 1.

<sup>105</sup> See, e.g., Tundi Agardy et al., A global scientific workshop on spatio-temporal management of noise (Workshop, Puerto Calero, Lanzarote) (June 4-6, 2007), <http://www.pelagosinstitute.gr/en/pelagos/pdfs/Spatio-temporal%20management%20of%20noise.pdf>; Sarah J. Dolman et al., *Technical report on effective mitigation for active sonar and beaked whales*, EUR. CETACEAN SOC’Y (Apr. 20, 2009), [https://www.ascobans.org/sites/default/files/document/AC16\\_50\\_TechnicalReportSonarBeakedWhales\\_1.pdf](https://www.ascobans.org/sites/default/files/document/AC16_50_TechnicalReportSonarBeakedWhales_1.pdf); Convention on Biological Diversity, *Scientific synthesis on the impacts of underwater noise on marine and coastal biodiversity and habitats*, UNITED NATIONS (Mar. 12, 2012), [https://www.ascobans.org/sites/default/files/document/AC19\\_4-16\\_CBD\\_SBSTTA16\\_SynthesisUnderwaterNoise\\_1.pdf](https://www.ascobans.org/sites/default/files/document/AC19_4-16_CBD_SBSTTA16_SynthesisUnderwaterNoise_1.pdf).

<sup>106</sup> See Letter from Jeff Grybowski, Deepwater Wind, et al. to Maureen Bornholdt, BOEM (Dec. 12, 2012), [https://www.nrdc.org/sites/default/files/occe\\_12121101a.pdf](https://www.nrdc.org/sites/default/files/occe_12121101a.pdf).

protective mitigation measures noted below (e.g., a seasonal restriction may displace survey activities later in the year, which may increase levels of take for other species and populations, including juvenile humpback whales that show site fidelity to the survey area).

## **B. Temporal Restrictions**

Dominion proposes to conduct HRG survey activities continuously, 24 hours per day,<sup>107</sup> which has the potential to harass North Atlantic right whales and other marine mammals. To best minimize impacts to marine mammals, HRG surveys should only commence, with ramp-up, during daylight hours of adequate visibility to maximize the probability that North Atlantic right whales are detected and confirmed clear of the exclusion zone.<sup>108</sup> If the survey is begun during daylight hours, we do not oppose these activities continuing into the night; however, if the survey is shut down for any reason, developers should be required to wait until daylight hours and good visibility for surveying to resume.

Dominion has voluntarily proposed to employ additional agency-approved visual observers when HRG surveys are underway at night.<sup>109</sup> We do not share the agency's confidence that visual observers alone will be able to monitor the exclusion zone effectively during nighttime hours. We are deeply concerned that NMFS has proposed reliance upon visual observation as the primary means of detecting North Atlantic right whales and other marine mammals at night, while requiring neither night vision, infrared technology, nor real-time passive acoustic monitoring. This approach is wholly under-protective and places one of the world's most endangered marine species at unnecessary risk. Accordingly, NMFS must require, for efforts that continue into the nighttime, the use of night vision or infrared technology in combination with real-time passive acoustic monitoring and shutdown on acoustic detection.

We note that the effectiveness of night vision and infrared technology in detecting marine mammals in low-visibility conditions has not yet been tested and published for this region, and varying results are still being reported elsewhere.<sup>110</sup> This is particularly true for detecting North Atlantic right whales and minke whales,<sup>111</sup> both species of concern off Virginia. Recent research published this year indicates increasing promise for infrared technology as a mitigation tool, specifically at night during relatively calm conditions.<sup>112</sup> Accordingly, the agency should

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<sup>107</sup> 85 Fed. Reg. at 36,538.

<sup>108</sup> Except for seasonal restrictions, which are calculated based on presence of the highly endangered North Atlantic right whale, mitigation and monitoring measures should be in place when any technologies are operating within the frequency ranges that overlap with those of low-, mid-, and high-frequency cetaceans.

<sup>109</sup> 85 Fed. Reg. at 36,557.

<sup>110</sup> In general, night vision technology has not been widely used or tested for marine mammal monitoring, and is considered to be heavily affected by environmental conditions. The use of infrared technology, relying on thermal differences between the target species and the environment, as a mitigation tool is still in development. The reduced temperature differential between whale blow and the surrounding water expected to occur in the Mid-Atlantic, particularly during the spring and summer, in contrast to the far cooler high-latitude waters, is likely to negatively impact the detection effectiveness of infrared in this region. See Justin Lathlean & Laurent Seuront, *Infrared thermography in marine ecology: Methods, previous applications and future challenges*, MARINE ECOLOGY PROGRESS SERIES (Nov. 6, 2014).

<sup>111</sup> Christine Cuyler et al., *Thermal infrared radiation from free living whales*, MARINE MAMMAL SCI. (Apr. 1992).

<sup>112</sup> Heather R. Smith et al., *A field comparison of marine mammal detections via visual, acoustic, and infrared (IR) imaging methods offshore Atlantic Canada*, MARINE POLLUTION BULL. (Mar. 13, 2020); Daniel P. Zitterbart et al., *Scaling the laws of thermal imaging-based whale detection*, J. ATMOSPHERIC & OCEANIC TECH. (May 8, 2020).

consider the limitations of these systems and ensure that the detection of marine mammals is possible at distances out to and beyond the exclusion zones in this region prior to reliance on this evolving technology. Our organizations also recommend that NMFS encourage Dominion to collaborate with scientists in collecting data that would increase the understanding of the effectiveness of night vision and infrared technologies off Virginia and the broader Mid-Atlantic region, with a view towards utilizing these technologies to commence surveys at night in the future. In sum, overall detection rates are likely to be maximized when complementary monitoring methods are used.

### **C. Exclusion Zone Size**

The Proposed IHA specifies that the following marine mammal exclusion zones will be established around HRG equipment: 500 meters for North Atlantic right whales, and 100 meters for “large whale species” (i.e., humpback, fin, sei, sperm, and minke whales).<sup>113</sup> As an initial matter, our organizations are concerned that this leaves two small cetaceans of conservation concern—the false killer whale and the Western North Atlantic Southern Migratory Coastal bottlenose dolphin—without any exclusion zone protections. In addition, these measures are inconsistent with those required for similar activities in other Lease Areas, without explanation or justification. For example, during HRG surveys in the nearby Kitty Hawk Lease Area leased by Avangrid Renewables, the agency required a 200-meter exclusion zone for all large whales, including pilot whales and Risso’s dolphins.<sup>114</sup> NMFS does not explain why, for the same activities being conducted less than 25 miles away, a smaller exclusion zone protecting fewer species is warranted. Further, the agency appears to offer no protection for harbor porpoises in its exclusion zone requirements here, even though the species has been proven extremely sensitive to noise, and similar IHAs issued in the past have implemented an exclusion zone for this species.<sup>115</sup> We are worried that these inconsistencies leave a number of species of conservation concern without adequate protection.

Our organizations believe that the definition of exclusion zone radii based on the acoustic thresholds laid out in the NMFS technical guidance document significantly underestimates the area in which marine mammals may experience noise at levels capable of causing behavioral harassment. Any potential harassment of the North Atlantic right whale is of particular concern. We therefore urge a clearance zone of 500 meters in all directions for *all* marine mammals around vessels conducting activities with noise levels that could result in injury or harassment to these species,<sup>116</sup> and, to the extent feasible, 1,000 meters for North Atlantic right whales.

### **D. Exclusion Zone Monitoring**

NMFS proposes to require that the exclusion zones be monitored by visual observation alone, through the use of only one visual observer during daytime operations and two visual

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<sup>113</sup> 85 Fed. Reg. at 36,557.

<sup>114</sup> Takes of Marine Mammals Incidental to Specified Activities; Taking Marine Mammals Incidental to Site Characterization Surveys off the Coast of North Carolina, 84 Fed. Reg. 17,384 (Apr. 25, 2019).

<sup>115</sup> See, e.g., Takes of Marine Mammals Incidental to Specified Activities; Taking Marine Mammals Incidental to Marine Site Characterization Surveys Off of Rhode Island and Massachusetts, 83 Fed. Reg. 19,711 (May 4, 2018) (implementing a 25-m exclusion zone for harbor porpoises).

<sup>116</sup> Letter from J. Grybowski et al. to M. Bornholdt, *supra* note 104.

observers at night.<sup>117</sup> First and foremost, it is our view that a minimum of four protected species observers on duty, adhering to a two-on/two-off shift schedule, is needed to avoid a single observer being responsible for visually monitoring more than 180° of the exclusion zone at any given time.

Furthermore, visual observations are not enough. To maximize the probability of detection of marine mammals, experts say that comprehensive exclusion zone monitoring is essential.<sup>118</sup> One reason for this is because detectability of marine mammals is highly dependent on the species and behavior. Of particular concern, studies suggest that North Atlantic right whales exhibit behaviors that reduce the likelihood of detection by visual observers and thus often go undetected. For example, acoustic surveys have detected North Atlantic right whale vocal presence throughout the year and over the entire spatial extent of a study area in Massachusetts Bay,<sup>119</sup> even though visual surveys have rarely reported sightings of North Atlantic right whales in the winter off the coast of Massachusetts.<sup>120</sup> In fact, aerial surveys were found to detect North Atlantic right whales on only two-thirds of the days they were acoustically detected in Cape Cod Bay, Massachusetts, from 2001 to 2005.<sup>121</sup> Additionally, there is evidence that North Atlantic right whales stop vocalizing in the presence of anthropogenic noise,<sup>122</sup> or spend significantly more time at subsurface depths (i.e., 1-10 meters) compared to normal surfacing depths (i.e., within 1 meter of the surface),<sup>123</sup> when exposed to certain types of acoustic disturbance. These behavioral responses are likely to be heightened when whales are in the proximity of the acoustic disturbance from geophysical surveying, meaning that animals may be less detectable by visual observers during the project period relative to other times.<sup>124</sup>

In addition, there are sighting condition limitations that must be taken into consideration. For even the most conspicuous large whale species, studies demonstrate that increasing Beaufort Sea State reduces the probability of detecting large whales. Estimates of relative detection probability under a Beaufort Sea State of 6 is less than half that for a Beaufort Sea State of 0.<sup>125</sup> Of particular concern, sea state has been demonstrated to have a direct effect on the sighting probability of North Atlantic right whales in the Lower Bay of Fundy and in Roseway Basin of

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<sup>117</sup> 85 Fed. Reg. at 36,557.

<sup>118</sup> See, e.g., Ursula K. Verfuss et al., *Comparing methods suitable for monitoring marine mammals in low visibility conditions during seismic surveys*, MARINE POLLUTION BULL. (Jan. 2018).

<sup>119</sup> Janelle L. Morano et al., *Acoustically detected year-round presence of right whales in an urbanized migration corridor*, CONSERVATION BIOLOGY (May 23, 2012).

<sup>120</sup> Howard E. Winn et al., *The distributional biology of the right whale (Eubalaena glacialis) in the western North Atlantic*, INT'L WHALING COMM'N (Jan. 1, 1986); Simon Pittman et al., *Cetacean distribution and diversity*, in AN ECOLOGICAL CHARACTERIZATION OF THE STELLWAGEN BANK NATIONAL MARINE SANCTUARY REGION, pp. 264-324 (Tim Battista et al. eds., 2006).

<sup>121</sup> Christopher W. Clark et al., *Visual and acoustic surveys for North Atlantic right whales, Eubalaena glacialis, in Cape Cod Bay, Massachusetts, 2001-2005: Management implications*, MARINE MAMMAL SCI. (May 9, 2010).

<sup>122</sup> See, e.g., Susan E. Parks et al., *Short- and long-term changes in right whale calling behavior: The potential effects of noise on acoustic communication*, J. ACOUSTICAL SOC'Y AM. (Jan. 31, 2008).

<sup>123</sup> Nowacek et al., *supra* note 77.

<sup>124</sup> Frances C. Robertson et al., *Seismic operations have variable effects on dive-cycle behavior of bowhead whales*, ENDANGERED SPECIES RES. (Aug. 13, 2013).

<sup>125</sup> The probability of sighting a North Atlantic right whale in this area changed by a factor of 0.628 (95% CI: 0.428-0.921) for every unit increase in sea state. Jay Barlow, *Inferring trackline detection probabilities, g(0), for cetaceans from apparent densities in different survey conditions*, MARINE MAMMAL SCI. (Jan. 4, 2015).

the Southwest Scotian Shelf.<sup>126</sup> Based on the data collected by the National Buoy Data Center, a monthly average Beaufort Sea State of 3 or 4 can be expected in close vicinity to the Lease Area year-round (*see* Table 1).<sup>127</sup> This is a salient consideration in the evaluation of whether a large whale can be accurately detected by visual observers alone. Based on the findings of Baumgartner et al. (2003), we would expect a reduction in detection probability of North Atlantic right whales by up to 84.5 percent under a Beaufort Sea State of 4, relative to ideal sighting conditions (i.e., Beaufort Sea State of 0).<sup>128</sup> Even under ideal sighting conditions, the detectability of large whales is likely to be significantly less than 100 percent given availability and perception biases other than those involving sea state.

*Table 1. Monthly average wave height and corresponding Beaufort Sea State recorded at NOAA National Data Buoy Station 44099 – Cape Henry, VA (147) in 2019.*  
(Data source: NOAA National Data Buoy Center, accessed July 9, 2020)

Month	Wave Height (m)	Beaufort Sea State
Jan	0.9	4
Feb	1.0	4
Mar	1.1	4
Apr	1.1	4
May	0.9	3
Jun	0.8	3
Jul	0.7	3
Aug	0.8	3
Sep	1.2	4
Oct	1.3	4
Nov	1.3	4
Dec	1.1	4

Thus, reliance on a single visual observer as the sole monitoring method is under-protective and should not be endorsed by the agency. Rather, a combination of (at a minimum) visual monitoring and passive acoustic monitoring should be implemented 24 hours a day.<sup>129</sup> Real-time passive acoustic monitoring should be undertaken in a manner that avoids masking of the North Atlantic right whale vocalizations by vessel noise, including by use of a system that is independent from the survey vessel if necessary. Research has demonstrated that passive acoustic monitoring can provide a two- to ten-fold increase in the number of days that North Atlantic right whales are detected relative to visual methodologies.<sup>130</sup> Aerial surveys would also

<sup>126</sup> Mark F. Baumgartner et al., *North Atlantic right whale habitat in the lower Bay of Fundy and on the SW Scotian Shelf during 1999-2001*, MARINE ECOLOGY PROGRESS SERIES (Dec. 15, 2003).

<sup>127</sup> See Online Database, *National Data Buoy Center*, NOAA (last visited July 8, 2020), <http://www.ndbc.noaa.gov/>.

<sup>128</sup> Baumgartner et al., *supra* note 126.

<sup>129</sup> We also support the inclusion of both broadband and low frequency hydrophones, which will ensure that vocalizations of North Atlantic right whales and other low- and mid-frequency vocalizing species can be detected.

<sup>130</sup> Melissa S. Soldevilla et al., *Passive acoustic monitoring on the North Atlantic right whale calving grounds*, ENDANGERED SPECIES RES. (Sept. 10, 2014). It is important to note that passive acoustic monitoring, while capable of significantly increasing detection rates, is not independently capable of detecting all whales in an area, for three reasons: 1) not all individuals continually vocalize, 2) individuals may stop vocalizing in the presence of noise (*see*

provide a useful supplement to increase detection probability. Detection of a North Atlantic right whale or any other marine mammal by any of these methods should trigger a shutdown or delay in the same way a visual detection would.

### **E. Shutdown Protocol**

We support the Proposed IHA's requirement for a 30-minute pre-clearance period (with ramp-up), and to immediately shut down survey activity upon the observation of a marine mammal.<sup>131</sup> Given that North Atlantic right whales and other large whales of conservation concern are known to use the areas within and around Project Area year-round, these measures are critical. We do not, however, agree with the proposal to waive this shutdown requirement for certain species of small delphinid.<sup>132</sup> We are particularly concerned that this exemption will leave the Western North Atlantic Southern Migratory Coastal stock of bottlenose dolphin, which is designated as both a depleted and a strategic stock, without adequate shutdown protections. NMFS should therefore remove *both* stocks of bottlenose dolphin from this exemption (as a protected species observer will not be able to distinguish between the two stocks of bottlenose dolphin present in this area).

### **F. Vessel Speed Limits**

As discussed in Section II.C above, vessel collisions remain one of the leading causes of large whale injury and mortality, particularly for North Atlantic right whales, and are a primary driver of the existing humpback and minke whale UMEs. The agency has a responsibility to implement mitigation measures to prevent any further vessel collisions for these species, as well as for other species of large whale (e.g., fin whales) that may be at potential future risk of experiencing an UME.

Our organizations support a mandatory speed restriction of 10 knots for all project vessels within any designated SMA or DMA for North Atlantic right whales.<sup>133</sup> The SMA located at the mouth of the Chesapeake Bay partially overlaps the cable corridor, and encompasses the time period during which the highest risk of North Atlantic right whale presence exists (*see* Section I.B.i). However, the recent death of a North Atlantic right whale calf off New Jersey<sup>134</sup> indicates how even single or pairs of animals are at risk of vessel strike year-round. Although the mother-calf pair had been sighted and acoustically detected, no voluntary vessel speed reduction areas were triggered under current DMA regulations. In light of this tragic event, a sighting of three or more North Atlantic right whales may be too high of a bar to trigger a DMA. NMFS should consider requiring DMAs in every instance that a single North Atlantic right whale is sighted or acoustically detected, not just aggregations of three or more whales.

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Parks et al. *supra* note 122); or 3) vocalizations may change during certain life history stages. *See* Susan E. Parks et al., *Acoustic crypsis in communication by North Atlantic right whale mother-calf pairs on the calving grounds*, BIOLOGY LETTERS (Oct. 9, 2019); Susan E. Parks et al., *North Atlantic right whale (Eubalaena glacialis) acoustic behavior on the calving grounds*, J. ACOUSTICAL SOC'Y AM. (July 10, 2019). As such, passive acoustic monitoring must be used in combination with other detection methods for mitigation purposes.

<sup>131</sup> 85 Fed. Reg. at 36,558.

<sup>132</sup> *Id.*

<sup>133</sup> *Id.*

<sup>134</sup> *See* NMFS, *supra* note 19.



We support the additional monitoring measures in place, including the presence of vessel-based observers and protocol for slowing down, stopping, and/or distancing vessels from detected marine mammals.<sup>135</sup> However, the proposed measures would allow project vessels to travel at speeds greater than 10 knots at all other times, unless “mother/calf pairs, pods, or large assemblages of cetaceans are observed near a vessel.”<sup>136</sup> This is insufficient. Research shows that a collision between a whale and a vessel of any length traveling above of speed of 10 knots has a more than 60 percent probability to result in a lethal strike.<sup>137</sup> This risk is likely higher for calves and juveniles. Our organizations therefore urge the agency to impose a 10-knot speed limit on all vessels, including survey and support vessels, operating *within* the Project Area during the entire survey period. The same speed restriction should be extended to all project-associated vessels transiting *to and from* the Project Area from November 1 through April 30, to avoid collisions with North Atlantic right whales.<sup>138</sup> Given that North Atlantic right whales may be in the Project Area year-round (*see* Section I.B.i), and that pregnant mothers and calves are likely to travel close to shore, these added protections are vital. Additionally, passive acoustic monitoring should be employed in all vessel transit lanes, to supplement the efforts of observers in visually detecting marine mammals.

#### IV. CONCLUSION

Our organizations are excited about the contribution that the CVOW Commercial Project will make in providing clean energy for the state and region. Marine mammal health and habitat will continue to be threatened by changes in the ocean environment brought on by climate change, further underscoring the need to transition to clean energy. For the above reasons, however, NMFS must revise its analysis to be consistent with the agency’s statutory obligations. Considering the elevated level of threat to all federally protected marine mammal species and populations in the mid-Atlantic, including the critically endangered North Atlantic right whale, and emerging evidence of dynamic shifts in the distribution of large whale habitat, NMFS must ensure that any potential stressors posed by the proposed activity are mitigated to effectuate the least practicable impact on affected species and stocks. It is our view that offshore wind projects can and must move forward in a manner that is protective of vulnerable marine wildlife. To that end, it is crucial that the agency afford special attention to the importance of the waters off Virginia to marine mammals when permitting offshore wind development activities in this region.

Thank you for your consideration of these comments.

Sincerely,

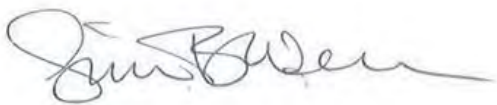
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<sup>135</sup> 85 Fed. Reg. at 36,558.

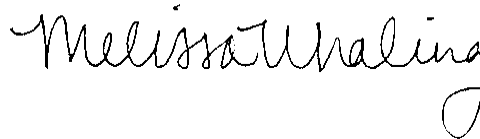
<sup>136</sup> *Id.*

<sup>137</sup> Paul B. Conn & Gregory K. Silber, *Vessel speed restrictions reduce risk of collision-related mortality for North Atlantic right whales*, ECOSPHERE (Apr. 2013).

<sup>138</sup> This measure should be considered in addition to the seasonal restriction on geophysical surveys recommended in Section III.A of this letter.



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[Attachment]

# ATTACHMENT 2

# SOUTHERN ENVIRONMENTAL LAW CENTER

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November 25, 2020

Submitted via electronic mail

Jolie Harrison  
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Office of Protected Resources  
National Marine Fisheries Service  
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**Re: Comments on a Notice to Modify the Incidental Harassment Authorization for Marine Site Characterization Surveys in the OCS-A-0483 Lease Area and the Coastal Waters off Virginia**

Ms. Harrison,

The Southern Environmental Law Center (“SELC”) submits these comments on behalf of Conservation Law Foundation, Defenders of Wildlife, Natural Resources Defense Council, Whale and Dolphin Conservation, Sierra Club Virginia Chapter, Assateague Coastal Trust, Inland Ocean Coalition, the International Marine Mammal Project of Earth Island Institute, and NY4WHALES, in response to the National Marine Fisheries Service’s (“NMFS”) proposal to modify an incidental harassment authorization (“IHA”) originally issued to Dominion Energy Virginia (“Dominion”) on September 8, 2020, for high-resolution geophysical (“HRG”) surveys off the coast of Virginia in the area of Commercial Lease of Submerged Lands for Renewable Energy Development on the Outer Continental Shelf (OCS-A-0483) and in the coastal waters off Virginia (“Project Area”), in support of the Coastal Virginia Offshore Wind Commercial Project.<sup>1</sup> Our organizations highlighted the numerous deficiencies with the Draft IHA in comments submitted to the agency on July 17, 2020, which are attached and incorporated by reference here.<sup>2</sup>

Our organizations are profoundly concerned about NFMS’ authorization for Dominion to incidentally harass roughly *90 times* more Atlantic spotted dolphin than were previously authorized earlier this fall. The agency’s updated Level B take limit—a staggering 2,427 animals, up from merely 27 animals—represents about 5% of the total population and is more than 750% greater than the potential biological removal for the population.<sup>3</sup> This change runs contrary to the conservation mandate of the Marine Mammal Protection Act (“MMPA”).

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<sup>1</sup> Takes of Marine Mammals Incidental to Specified Activities; Taking Marine Mammals Incidental to Marine Site Characterization Surveys Off of Coastal Virginia, 85 Fed. Reg. 71,881 (Nov. 12, 2020).

<sup>2</sup> Letter from SELC et al. to Jolie Harrison, Chief, Permits & Conservation Div., Nat’l Marine Fisheries Serv. (NMFS) (July 17, 2020) [hereinafter “Draft IHA Comments”], provided as Attachment 1.

<sup>3</sup> See Sean A. Hayes et al., *U.S. Atlantic and Gulf of Mexico Marine Mammal Stock Assessments – 2019*, NMFS (July 2020), available at <https://www.fisheries.noaa.gov/national/marine-mammal-protection/marine-mammal-stock-assessment-reports-region>, at 232.

The MMPA requires that NMFS, in authorizing harm, meet a number of basic, protective standards: that only “small numbers” of marine mammals will be taken, that the impacts on those species and populations will be “negligible,” and that, through mitigation, the “least practicable adverse impact” on marine mammals and their habitat is achieved.<sup>4</sup> At every step, the agency must use the “best scientific evidence available.”<sup>5</sup> The proposed modification falls short of these standards for a number of reasons.

First, the agency’s interpretation of “small numbers” is contrary to the purpose of the MMPA. The MMPA allows NMFS to authorize takes of “small numbers” of marine mammals under certain conditions.<sup>6</sup> The statute does not define this term, but the “small numbers” requirement is distinct from the agency’s “negligible impact” analysis.<sup>7</sup> Here, the agency proposes to take “small numbers of spotted dolphins relative to the population size (less than 5 percent), as take that is less than one third of the species or stock abundance is considered by NMFS to be small numbers.”<sup>8</sup> Yet this fails to consider the unique conservation status of individual populations. Rather than apply a 30% ceiling for all species, NMFS should revisit its “small numbers” interpretation to consider whether the specific take percentage for Atlantic spotted dolphin will ensure that population levels are maintained at or restored to healthy population numbers.<sup>9</sup>

Second, NMFS’ updated negligible impact analysis consists of mere conclusory statements which underestimate the potential impacts of HRG surveys on small cetaceans like the Atlantic spotted dolphin. The MMPA authorizes NMFS to issue an IHA only if the agency finds that the authorized harassment caused by a “specified activity” will have a “negligible impact” on marine mammals.<sup>10</sup> Here, NMFS argues that because “no new information” suggests that the previous negligible impact finding for Atlantic spotted dolphin should change, the proposed 90-fold increase in takes will have a negligible impact on the stock.<sup>11</sup> The agency supports this finding with the fact that harassment is expected to be of “lower severity, predominantly in the form of avoidance of the sound source and potential occasional interruption of foraging.”<sup>12</sup> Such a cursory analysis is wholly inadequate in light of the magnitude of the change in take levels Dominion is requesting. In fact, the existing science indicates that Atlantic

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<sup>4</sup> 16 U.S.C. § 1371(a)(5)(D).

<sup>5</sup> See, e.g., 16 U.S.C. § 1373(a).

<sup>6</sup> 16 U.S.C. § 1371(a)(5)(D)(i).

<sup>7</sup> See, e.g., *Ctr. for Biological Diversity v. Salazar*, 695 F.3d 893, 903-04 (9th Cir. 2012).

<sup>8</sup> 85 Fed. Reg. at 71,885.

<sup>9</sup> H.R. Rep. No. 103-439, at 22, 1994 WL 93670 (Mar. 21, 1994); see *Native Vill. of Chickaloon v. Nat’l Marine Fisheries Serv.*, 947 F. Supp. 2d 1031, 1052–53 (D. Alaska 2013) (upholding agency’s “small numbers” determination where the agency did not “categorically establish 10% as a small number; rather, it determined, through consideration of the available data, that 10% was a small number in the specific context of the Cook Inlet beluga whale and the nature of the proposed activity”).

<sup>10</sup> 16 U.S.C. § 1371(a)(5)(D)(i). To make a finding of “negligible impact” under its regulations, NMFS must determine that the authorized harassment “cannot be reasonably expected to, and is not reasonably likely to, adversely affect” annual rates of recruitment or survival in any marine mammal species or population. 50 C.F.R. § 216.103.

<sup>11</sup> 85 Fed. Reg. at 71,885.

<sup>12</sup> *Id.*

spotted dolphin, a particularly acoustically sensitive species,<sup>13</sup> have the potential to be displaced,<sup>14</sup> shift their behavioral state,<sup>15</sup> and stop or alter vocalizations<sup>16</sup> in response to a variety of anthropogenic noises, with potentially adverse energetic effects even from minor changes.<sup>17</sup>

Furthermore, our organizations would like to reiterate that the agency's reliance on a 160 dB threshold for behavioral harassment is not supported by best available scientific information (which indicates that Level B takes occur with near certainty at levels well below this threshold), as discussed in our Draft IHA Comments.<sup>18</sup> Reliance on such an outdated, incorrect threshold further underestimates impacts and results in an inaccurate negligible impact analysis.

Finally, as described in our Draft IHA Comments, we do not agree that the mitigation measures in the IHA—which remain unchanged despite the significant modification in take numbers—are adequately protective of Virginia's marine mammals.<sup>19</sup> In authorizing “take” by incidental harassment under the general authorization provision of the MMPA, NMFS must prescribe “methods” and “means of effecting the least practicable adverse impact” on marine mammals and set additional “requirements pertaining to the monitoring and reporting of such taking.”<sup>20</sup> We once again urge the agency, especially in light of the higher-than-expected detections of Atlantic spotted dolphin in the Project Area, to modify Dominion's IHA as follows:

- HRG surveys should commence, with ramp-up, during daylight hours only, to maximize the chance that marine mammals are detected and confirmed clear of the exclusion zone;
- NMFS should establish a standard 500-meter exclusion zone for all marine mammal species around survey vessels; and
- a combination of visual monitoring—by four protected species observers adhering to a two-on/two-off schedule—and passive acoustic monitoring should be used at all times that survey work is underway, and, for efforts that continue into the nighttime, night vision or infrared technology should also be used.

Our organizations would also like to restate the recommendations in our Draft IHA Comments which focused on the need for stronger mitigation measures for North Atlantic right

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<sup>13</sup> Caroline R. Weir, *Overt responses of humpback whales (Megaptera novaeangliae), sperm whales (Physeter microcephalus), and Atlantic spotted dolphins (Stenella frontalis) to seismic exploration off Angola*, AQUATIC MAMMALS (2008) (pronounced response of Atlantic spotted dolphin to airgun noise).

<sup>14</sup> Carolyn J. Stone & Mark L. Tasker, *The effects of seismic airguns on cetaceans in UK waters*, J. CETACEAN RESEARCH & MGMT. (Dec. 2005) (showing, in the presence seismic vessels, more pronounced displacement in small odontocetes than in larger cetaceans).

<sup>15</sup> Howard Gray & Koen Van Waerebeek, *Postural instability and akinesia in a pantropical spotted dolphin, Stenella attenuata, in proximity to operating airguns of a geophysical seismic vessel*, J. NATURE CONSERVATION (Dec. 2011) (observing severe injury or impaired neurological function in spotted dolphin exposed to airgun noise).

<sup>16</sup> Marc O. Lammers et al., *Acoustic monitoring of dolphin occurrence and activity in a MINEX training range*, PROCEEDINGS OF MEETINGS ON ACOUSTICS (July 10, 2016) (demonstrating repeated cessation of dolphin calls around Navy training with low-weight explosives).

<sup>17</sup> Terrie M. Williams et al., *Swimming and diving energetics in dolphins: A stroke-by-stroke analysis for predicting the cost of flight responses in wild odontocetes*, J. EXPERIMENTAL BIOLOGY (Jan. 7, 2017); Marla M. Holt et al., *Vocal performance affects metabolic rate in dolphins: Implications for animals communicating in noisy environments*, J. EXPERIMENTAL BIOLOGY (Mar. 30, 2015).

<sup>18</sup> See Draft IHA Comments at 11-12.

<sup>19</sup> See *id.* at 15-22.

<sup>20</sup> 16 U.S.C. § 1371(a)(5)(D)(vi).



whales. In light of updated North Atlantic right whale population numbers released last month, which put the population size at 356 individuals,<sup>21</sup> and given that whales are present in the Project Area year-round, we reiterate the need for strong mitigation measures on the activities covered by Dominion's IHA. In addition to the above measures, our organizations once again urge NMFS to:

- impose a seasonal restriction on HRG surveys that have the potential to injure or harass the North Atlantic right whale from November 1 through April 30, to avoid the time period that poses the highest risk for the population;
- establish, to the extent feasible, an extended 1,000-meter exclusion zone for North Atlantic right whales around survey vessels; and
- require that all vessels operating traveling *to and from* the Project Area maintain a speed of 10 knots or less throughout the survey period.<sup>22</sup> NMFS should also consider requiring that Dynamic Management Areas become active anytime a single North Atlantic right whale is sighted or acoustically detected.

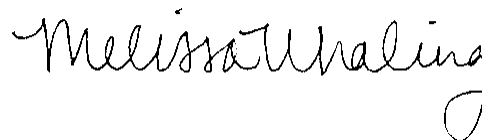
NMFS is charged under the MMPA with prioritizing the protection of marine mammals. For the above reasons, the agency must withdraw its proposed IHA modification and revise its analysis to be consistent with the agency's statutory obligations. Considering the elevated level of threat to all federally protected marine mammal species and populations in the mid-Atlantic, NMFS must ensure that any potential stressors posed by the proposed activity are mitigated to effectuate the least practicable impact on affected species and stocks.

Thank you for your consideration of these comments.

Sincerely,



Sierra B. Weaver, Senior Attorney  
Southern Environmental Law Center



Melissa L. Whaling, Science & Policy Associate  
Southern Environmental Law Center

[signature page follows]

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<sup>21</sup> *Right Whale Consortium: Only 356 North Atlantic Right Whales Survive*, DEFS. OF WILDLIFE (Oct. 30, 2020), <https://defenders.org/newsroom/right-whale-consortium-only-356-north-atlantic-right-whales-survive>.

<sup>22</sup> We note that this measure is stronger than what our organizations previously requested in our Draft IHA Comments, which would have required all vessels operating *within* the Project Area to maintain a speed of 10 knots or less outside the period of November 1 and April 30, during which this speed limit would have been extended to all vessels traveling *to and from* the Project Area. We are strengthening this recommended measure given the declining population status of the North Atlantic right whale.

On behalf of:

Conservation Law Foundation  
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Defenders of Wildlife  
Jane Davenport  
Senior Attorney

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