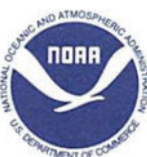




INCIDENTAL HARASSMENT AUTHORIZATION

The applicant, Columbia Gulf Transmission LLC (a wholly owned subdivision of TC Energy), and its designees are hereby authorized under section 101(a)(5)(D) of the Marine Mammal Protection Act (MMPA; 16 U.S.C. 1371(a)(5)(D)) to incidentally harass marine mammals, under the following conditions:

1. This incidental harassment authorization (IHA) is valid for one year from the date of issuance.
2. This IHA authorizes take incidental to impact pile driving, as specified in Columbia Gulf Transmission LLC's March 2023 IHA application, associated with the East Lateral Express project in Barataria Bay, Louisiana. Hereafter (unless otherwise specified) the term "pile driving" is used to refer to both pile installation and pile removal.
3. General Conditions
 - (a) A copy of this IHA must be in the possession of the Holder of the Authorization (Holder), supervisory construction personnel, lead protected species observers (PSOs), and any other relevant designees of the Holder operating under the authority of this IHA at all times that activities subject to this IHA are being conducted.
 - (b) The species and/or stocks authorized for taking is Barataria Bay Estuarine Stock (BBES) of bottlenose dolphin (*Tursiops truncatus*). Authorized take, by Level B harassment only, is limited to 42 individuals of the specified stock.
 - (c) The taking by serious injury or death of BBES bottlenose dolphins or any taking of any other species of marine mammal is prohibited and may result in the modification, suspension, or revocation of this IHA. Any taking exceeding the authorized amount is prohibited and may result in the modification, suspension, or revocation of this IHA.
 - (d) The Holder must ensure that construction supervisors and crews, the monitoring team, and relevant Columbia Energy staff, contractors and sub-contractors are trained prior to the start of activities subject to this IHA, so that responsibilities,



communication procedures, monitoring protocols, and operational procedures are clearly understood. New personnel joining during the project must be trained prior to commencing work.

4. Mitigation Requirements

- (a) The Holder must employ Protected Species Observers (PSOs) and establish monitoring locations as described in section 5 of this IHA. The Holder must monitor the project area to the maximum extent possible based on the required number of PSOs, required monitoring locations, and environmental conditions.
- (b) Monitoring must commence 30 minutes prior to initiation of pile driving activity. (i.e., pre-start clearance monitoring) and be continuously maintained until 30 minutes post-completion of pile driving activity.
- (c) Pile driving may only begin if visibility is sufficient to allow monitoring of the entire pre-clearance zone (430 m) and the lead PSO determines that it has been clear of marine mammals for 30 consecutive minutes.
- (d) If a marine mammal is observed entering or within the shutdown zone (50 m), pile driving activity must be suspended. Pile driving may only commence or resume as described in condition 4(e) of this IHA.
- (e) If pile driving is delayed due to the presence of a marine mammal in the pre-start clearance zone or the shutdown zone, the activity may not commence or resume until either the animal has voluntarily exited and been visually confirmed beyond the applicable protective zone, or after 15 minutes have passed without re-detection of the animal.
- (f) The Holder must employ soft-start procedures at the start of each day's pile driving activity, and at any time following cessation of impact pile driving that lasts for 30 minutes or longer. Soft-starts require an initial set of three strikes at reduced energy, followed by a 30-second waiting period, then two subsequent reduced-energy strike sets.
- (g) The Holder must use a bubble curtain during impact pile driving. The bubble curtain must be operated in a manner most likely to achieve optimal sound dampening performance. At a minimum, the Holder must adhere to the following performance standards:

- (i) The bubble curtain must distribute air bubbles around 100 percent of the piling circumference for the full depth of the water column.
 - (ii) The lowest bubble ring must be in contact with the substrate for the full circumference of the ring, and weights attached to the bottom ring shall ensure 100 percent substrate contact. No parts of the ring or other objects shall prevent full substrate contact.
 - (iii) Air flow to the bubblers must be balanced around the circumference of the pile.
- (h) Pile driving activity must be halted (as described in condition 4(d) of this IHA) upon observation, at any distance, of either a species for which incidental take is not authorized or a species for which incidental take has been authorized but the authorized number of takes has been met (as shown in Table 1).
- (i) The Holder, construction supervisors and crews, PSOs, and other personnel must avoid direct physical interaction with marine mammals during construction. If a marine mammal comes within 10 meters of construction activity, operations must cease and vessels must reduce speed to the minimum level required to maintain steerage and safe working conditions, and take other actions as may be necessary to avoid direct physical interaction with the animal.

5. Monitoring Requirements

- (a) Marine mammal monitoring must be conducted in accordance with Section 13 of the Request for Authorization and the conditions in this IHA.
- (b) Monitoring must be conducted by qualified, NMFS-approved PSOs, in accordance with the following conditions:
 - (i) PSOs must be independent of the contractor conducting the specified pile driving activity (for example, employed by a subcontractor) and have no other assigned tasks during monitoring periods.
 - (ii) At least one PSO must have prior experience performing the duties of a PSO during construction activity pursuant to a NMFS-issued incidental take authorization.

- (iii) Other PSOs may substitute other relevant experience, education (degree in biological science or related field), or training for prior experience performing the duties of a PSO during construction activity pursuant to a NMFS-issued incidental take authorization.
 - (iv) If a team of three or more PSOs is needed in order to meet monitoring requirements, a lead observer or monitoring coordinator must be designated. The lead observer must have prior experience performing the duties of a PSO during construction activity pursuant to a NMFS-issued incidental take authorization.
 - (v) PSOs must be approved by NMFS prior to beginning any activity subject to this IHA.
- (c) The Holder must establish at least one monitoring location that provides optimal visibility of the pre-clearance and shutdown zone for each location where pile driving will occur. For all pile driving activities, a minimum of one PSO must be assigned to each active pile driving location to log all marine mammal sightings and to monitor the shutdown zone.
- (d) PSOs must record all observations of marine mammals, regardless of distance from the pile being driven, as well as the additional data indicated in section 6 of this IHA.

6. Reporting

- (a) The Holder must submit its draft marine mammal monitoring report for the project describing all monitoring activities conducted under this IHA within 90 calendar days of the completion of monitoring, or 60 calendar days prior to the requested issuance of any subsequent IHA for construction activity at the same location, whichever comes first. A final report must be prepared and submitted within 30 calendar days following receipt of any NMFS comments on the draft report. If no comments are provided by NMFS within 30 calendar days of receipt of the draft report, the report shall be considered final.
- (b) All draft and final monitoring reports must be submitted to both *PR.ITP.MonitoringReports@noaa.gov* and *ITP.Laws@noaa.gov*.
- (c) The marine mammal monitoring report must contain the informational elements described in the Request for Authorization, and must include:

- (i) Dates and times (begin and end) of all marine mammal monitoring shifts;
- (ii) Construction activities occurring during each daily observation period, including:
 - A. The number and type of piles that were driven and the method (e.g., impact, vibratory, down-the-hole);
 - B. The number of strikes required to install each pile, or the duration that any vibratory equipment is in use.
- (iii) PSO locations during marine mammal monitoring;
- (iv) Environmental conditions during monitoring periods (at beginning and end of PSO shift and whenever conditions change significantly), including Beaufort sea state and any other relevant weather conditions including cloud cover, fog, sun glare, and overall visibility to the horizon, and estimated observable distance;
- (v) Summary of all observations of marine mammals, including:
 - A. Name and location of PSO who sighted the animal(s), bearing to the sighted animal, means of detection and potentially relevant human activity in the area (including construction activity) at time of sighting;
 - B. Time of sighting;
 - C. Identification of the animal(s) (e.g., genus/species, lowest possible taxonomic level, or unidentified), PSO confidence in identification, and the composition of the group if there is a mix of species;
 - D. Distance and location of each observed marine mammal relative to the pile being driven at the time of each sighting;
 - E. Estimated number of animals (min/max/best estimate);
 - F. Estimated number of animals by cohort (adults, juveniles, neonates, group composition, etc.);

- G. Animal's closest point of approach and estimated time spent within the pre-start clearance and/or shutdown zone;
 - H. Description of any marine mammal behavioral observations (e.g., observed behaviors such as feeding or traveling), including an assessment of behavioral responses that may be attributable to construction activity (e.g., no response or changes in behavioral state such as ceasing feeding, changing direction, flushing, or breaching);
 - I. Observations of skin and body condition, including atypical skin or body condition (if any) and potentially identifying marks or other novel physical characteristics.
- (vi) Number of marine mammals detected within the harassment zones, by species; and
 - (vii) Detailed information about implementation of any mitigation (e.g., shutdowns and delays), a description of specific actions that ensued, and resulting changes in behavior of the animal(s), if any.
 - (viii) An assessment of implementation and effectiveness of prescribed mitigation and monitoring measures.
- (d) The Holder must submit all PSO datasheets and/or raw sighting data with the draft report.
 - (e) Reporting injured or dead marine mammals:

In the event that personnel involved in the construction activities discover an injured or dead marine mammal, the Holder must report the incident to the Office of Protected Resources (OPR), NMFS (*PR.ITP.MonitoringReports@noaa.gov* and *ITP.Laws@noaa.gov*) and to the Southeast Region marine mammal stranding network (1-877-433-8299) as soon as is feasible. If the death or injury was clearly caused by the specified activity, the Holder must immediately cease the activity until NMFS OPR reviews the circumstances of the incident determines what, if any, additional measures are appropriate to ensure compliance with the terms of this IHA and notifies the Holder of these findings and any additional requirements that must be met prior to re-initiation of the activity.

The report of an injured or dead marine mammal must include the following information:

- (i) Time, date, and location (latitude/longitude) of the first discovery (and updated location information if known and applicable);
- (ii) Species identification (if known) or description of the animal(s) involved;
- (iii) Condition of the animal(s) (including carcass condition if the animal is dead);
- (iv) Observed behaviors of the animal(s), if alive;
- (v) If available, photographs or video footage of the animal(s); and
- (vi) General circumstances under which the animal was discovered.

7. This Authorization may be modified, suspended or revoked if the Holder fails to abide by the conditions prescribed herein (including, but not limited to, failure to comply with monitoring or reporting requirements), or if NMFS determines: (1) the authorized taking is likely to have or is having more than a negligible impact on the species or stocks of affected marine mammals or (2) the prescribed measures are likely not or are not effecting the least practicable adverse impact on the affected species or stocks and their habitat.

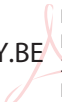
8. Renewals

On a case-by-case basis, NMFS may issue a one-time, one-year Renewal IHA following notice to the public providing an additional 15 days for public comments when (1) up to another year of identical, or nearly identical, activities (or a subset of those activities) are planned or (2) the specified activities will not be completed by the time the IHA expires and a Renewal would allow for completion of the activities, provided all of the following conditions are met:

- (a) A request for renewal is received no later than 60 days prior to the needed Renewal IHA effective date (note a Renewal IHA expiration date cannot extend beyond one year from expiration of this IHA).
- (b) The request for renewal must include the following:

- (i) An explanation that the activities to be conducted under the requested Renewal IHA are identical to the activities analyzed for this IHA, are a subset of the activities, or include changes so minor (e.g., reduction in pile size) that the changes do not affect the previous analyses, mitigation and monitoring requirements, or take estimates (with the exception of reducing the type or amount of take).
- (ii) A preliminary monitoring report showing the results of the required monitoring to date and an explanation showing that the monitoring results do not indicate impacts of a scale or nature not previously analyzed or authorized.
- (c) Upon review of the request for Renewal, the status of the affected species or stocks, and any other pertinent information, NMFS determines that there are no more than minor changes in the activities, the mitigation and monitoring measures will remain the same and appropriate, and the findings made in support of this IHA remain valid.

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Kimberly Damon-Randall,
Director, Office of Protected Resources
National Marine Fisheries Service

Table 1. Authorized Incidental Take.

Common name	Scientific name	Stock	Level A harassment	Level B harassment
Bottlenose Dolphin	<i>Tursiops truncatus</i>	Barataria Bay Estuarine Stock	0	42