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**Draft**
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# POLICIES FOR THE PROTECTION AND RESTORATION OF ESSENTIAL FISH HABITATS FROM ENERGY EXPLORATION, DEVELOPMENT TRANSPORTATION AND HYDROPOWER LICENSING

## Policy Context

This document establishes the policies of the South Atlantic Fishery Management Council (SAFMC) regarding protection of Essential Fish Habitat (EFH) and Essential Fish Habitat - Habitat Areas of Particular Concern (EFH-HAPCs) from threats associated with energy exploration, development, transportation and hydropower licensing. The policies are designed to be consistent with the overall habitat protection policies of the SAFMC as formulated and adopted in the Habitat Plan (SAFMC 1998a), the Comprehensive EFH Amendment (SAFMC 1998b) and the various Fishery Management Plans (FMPs) of the Council.

The findings presented below assess the threats to EFH potentially posed by activities related to energy development and hydropower licensing in offshore and coastal waters, riverine systems, and adjacent wetland habitats, and the processes whereby those resources are placed at risk. The policies established in this document are designed to avoid, minimize, and offset damage caused by these activities, in accordance with the general habitat policies of the SAFMC as mandated by law. To address any future energy projects in the South Atlantic region, the SAFMC reserves the right to revise this policy when more information becomes available.

## EFH At Risk from Energy Exploration, Development Transportation and Hydropower Licensing Activities

The SAFMC finds:

1. That oil or gas drilling for exploration or development on or closely associated with EFH including – but not limited to – coral, coral reefs, and live/hardbottom habitat at all depths in the Exclusive Economic Zone (EEZ), EFH-HAPCs, or other special



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Comment [p2]: Hydropower licensing includes both original license and re-licensing proceedings…

Comment [p3]: Just a thought: We have not included other forms of electric power generation such as coal fired plants and Nuclear plants. Those can have important effects through thermal effluents, impingement and entrainment of fish, eggs, and larvae. Do you want to include those facilities?

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biological resources essential to commercial and recreational fisheries under SAFMC jurisdiction, be prohibited.

2. That all facilities associated with oil and gas exploration, development, and transportation be designed to avoid impacts on coastal ecosystems and sand sharing systems.

3. That adequate spill containment and cleanup equipment be maintained for all development and transportation facilities and, that the equipment be available on-site or located so as to be on-site within the landing time trajectory. An environmental bond should be required to assure that adequate resources will be available for unanticipated environmental impacts, spill response, clean-up and environmental impact assessment.

4. That exploration and development activities should be scheduled to avoid migratory patterns, breeding and nesting seasons of endangered and threatened species, including – but not limited to – northern right whales in coastal waters off the southeastern United States.

5. That the Environmental Impact Statement (EIS) for any Lease Sale address impacts from activities specifically related to natural gas production, safety precautions required in the event of the discovery of "sour gas" or hydrogen sulfide reserves and the potential for transport of hydrocarbons to nearshore and inshore estuarine habitats resulting from the cross-shelf transport by Gulf Stream spin-off eddies. The EIS should also address the development of contingency plans to be implemented if problems arise due to oceanographic conditions or bottom topography, the need for and availability of onshore support facilities in coastal areas, and an analysis of existing facilities and community services in light of existing major coastal developments.

6. That EISs prepared for liquefied natural gas (LNG) pipeline projects or other energy-related projects must fully describe direct and cumulative impacts to EFH, including deepwater coral communities. Impact evaluations should include quantitative assessments for each habitat based on recent scientific studies pertinent to that habitat, and the best available information.

7. That construction and operation of open-loop (flow-through) LNG processing facilities be prohibited in areas that support EFH.

8. That hydropower project licenses issued by the Federal Energy Regulatory Commission include specific terms and conditions to ensure that the amount and timing of river flows mimic natural conditions to the extent possible for protection of migratory diadromous fish species and their spawning habitats. In addition, the best available technologies that allow for safe, timely, and effective upstream and downstream fish passage should be integrated into the project design as specified in prescriptions issued by National Marine Fisheries Service.

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9. That projects requiring expanded EFH consultation provide a full range of alternatives, along with assessments of the relative impacts of each on each type of EFH, EFH-HAPC and state-designated Critical Habitat Areas (CHAs).

10. That energy development activities have the potential to cause impacts to a variety of habitats across the shelf and to nearshore, estuarine, and riverine systems and wetlands, including:

    a) waters and benthic habitats in or near drilling and disposal sites, including those potentially affected by sediment movement and by physical disturbance associated with drilling activities and site development;
    b) waters and benthic habitats in or near LNG processing facilities or other energy development or transportation sites,
    c) exposed hardbottom (e.g. reefs and live bottom) in shallow and deep waters,
    d) coastal wetlands and
    e) riverine systems and associated wetlands.

11. That certain offshore, nearshore and riverine habitats are particularly important to the long-term viability of commercial and recreational fisheries under SAFMC management, and potentially threatened by oil and gas and other energy exploration, development, transportation, and hydropower licensing activities:

    a) coral, coral reef and live/hardbottom habitat, including deepwater coral communities,
    b) marine and estuarine waters,
    c) estuarine wetlands, including mangroves and marshes,
    d) submersed aquatic vegetation,
    e) waters that support diadromous fishes, and their spawning habitats
    f) waters hydrologically and ecologically connected to waters that support EFH.

12. That siting and design of onshore receiving, holding, and transport facilities could have impacts on wetlands and endangered species' habitats if they are not properly located.

13. Sections of South Atlantic waters potentially affected by these projects, both individually and collectively, have been identified as EFH or EFH-HAPC by the SAFMC. Potentially affected species and their EFH under federal management include (SAFMC, 1998b):

    a) summer flounder (various nearshore waters, including the surf zone and inlets; certain offshore waters),
    b) bluefish (various nearshore waters, including the surf zone and inlets),
    c) red drum (ocean high-salinity surf zones and unconsolidated bottoms in the nearshore), (Myra, how about riverine and upper estuarine habitats frequented by red drum??

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d) many snapper and grouper species (live hardbottom from shore to 600 feet, and – for estuarine-dependent species (e.g., gag grouper and gray snapper) – unconsolidated bottoms and live hardbottoms to the 100 foot contour),
e) black sea bass (various nearshore waters, including unconsolidated bottom and live hardbottom to 100 feet, and hardbottoms to 600 feet),
f) penaeid shrimp (offshore habitats used for spawning and growth to maturity, and waters connecting to inshore nursery areas, including the surf zone and inlets), How about including estuarine emergent wetlands and deepwater habitats??
g) coastal migratory pelagics (e.g., king mackerel, Spanish mackerel) (sandy shoals of capes and bars, barrier island ocean-side waters from the surf zone to the shelf break inshore of the Gulf Stream; all coastal inlets),
h) corals of various types and associated organisms (on hard substrates in shallow, mid-shelf, and deepwater),
i) muddy, silt bottoms from the subtidal to the shelf break, deepwater corals and associated communities),
j) areas identified as EFH for Highly Migratory Species managed by the Secretary of Commerce (e.g., sharks: inlets and nearshore waters, including pupping and nursery grounds), and
k) riverine areas that support diadromous fishes, including important prey species such as shad, herring and other alosines in addition to shortnose and Atlantic sturgeon.

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14. Many of the habitats potentially affected by these activities have been identified as EFH-HAPCs by the SAFMC. Each habitat, type of activity posing a potential threat and FMP is provided as follows:

a) all nearshore hardbottom areas – exploration, transportation and development (SAFMC snapper grouper);
b) all coastal inlets – transportation and development (SAFMC penaeid shrimp, red drum, and snapper grouper);
c) nearshore spawning sites – transportation and development (SAFMC penaeid shrimps and red drum);
d) benthic Sargassum – exploration, transportation and development (SAFMC snapper grouper);
e) from shore to the ends of the sandy shoals of Cape Lookout, Cape Fear, and Cape Hatteras, North Carolina; Hurl Rocks, South Carolina; and *Phragmatopoma* (worm reefs) reefs off the central coast of Florida and near shore hardbottom south of Cape Canaveral – transportation and development (SAFMC coastal migratory pelagics);
f) Atlantic coast estuaries with high numbers of Spanish mackerel and cobia from ELMR, to include Bogue Sound, New River, North Carolina; Broad River, South Carolina – transportation and development (SAFMC coastal migratory pelagics);
g) Florida Bay, Biscayne Bay, Card Sound, and coral hardbottom habitat from Jupiter Inlet through the Dry Tortugas, Florida – exploration, transportation and development (SAFMC spiny lobster);

h) Hurl Rocks (South Carolina); The *Phragmatopoma* (worm reefs) off central east coast of Florida; nearshore (0-4 meters; 0-12 feet) hardbottom off the east coast of Florida from Cape Canaveral to Broward County; offshore (5-30 meters; 15-90 feet) hardbottom off the east coast of Florida from Palm Beach County to Fowey Rocks; Biscayne Bay, Florida; Biscayne National Park, Florida; and the Florida Keys National Marine Sanctuary – transportation and development (SAFMC Coral, Coral Reefs and Live Hardbottom Habitat); and

i) EFH-HAPCs designated for HMS species (e.g., sharks) in the South Atlantic region – exploration, transportation and development (NMFS Highly Migratory Species).

15. Habitats likely to be affected by oil and gas exploration, development and transportation, and hydropower re-licensing activities include many recognised in state level fishery management plans. Examples of these habitats include Critical Habitat Areas (CHAs) established by the North Carolina Marine Fisheries Commission, either in FMPs or in Coastal Habitat Protection Plans.

16. Scientists in east Florida have documented exceptionally important habitat values for nearshore hardbottom used by over 500 species of fishes and invertebrates, including juveniles of many reef fishes. Equivalent scientific work is just beginning in other South Atlantic states, but life histories suggest that similar habitat use patterns will be found.

17. Proposed Deepwater Coral HAPCs and the pelagic and benthic species including their early life stages are potentially affected by oil and gas exploration, development and transportation, LNG development and alternative energy development including ocean current and wave energy facilities.

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**Threats to Marine and Estuarine Resources from Energy Exploration, Development, Transportation and Hydropower Licensing Activities**

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The SAFMC finds that energy exploration, development, transportation and hydropower licensing activities threaten or potentially threaten EFH through the following mechanisms:

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1. Direct mortality and displacement of organisms at and near drilling, dredging, and/or trenching sites,

2. Deposition of fine sediments (sedimentation) and drilling muds down-current from drilling, dredging, trenching, and/or backfilling sites,

3. Chronic elevated turbidity in and near drilling, dredging, trenching, and/or backfilling sites,

4. Direct mortality of larvae, post-larvae, juveniles and adults of marine and estuarine organisms occurring from water intake, spills from pipelines, or from vessels in transit near or close to inlet areas,

5. Alteration of long-term shoreline migration patterns (with complex, often indeterminable, ecological consequences),

6. Burial of sensitive coral resources and associated habitat resulting from "frac-outs" associated with horizontal directional drilling,

7. Permanent conversion of soft bottom habitat to artificial hardbottom habitat through installing a hard linear structure (i.e., a pipe covered in articulated concrete mats),

8. Impacts to benthic resources from placement and shifting of pipelines and cables, and from other types of direct mechanical damage,

9. Alterations in amount and timing of riverflow and significant blockage or reduction in area of critical spawning habitat resulting from damming or diverting rivers, and

10. Alteration of community diversity, composition, food webs and energy flow due to addition of structure.

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In addition, the interactions between cumulative and direct (lethal and sub-lethal) effects among the above-listed can affect the magnitude of the overall impacts. Such interactions may result in a scale of effect that is multiplicative rather than additive. Those effects are at present nearly completely unstudied.

**Potential Impacts of Offshore Ocean Current Energy Installations on Benthic Resources (USDOI, MMS 2007a):**

**Construction**

- **Bottom disturbances from installation of foundations or anchoring systems and anchoring of construction and maintenance vessels**
- **Sediment disturbance and suspension during installation of foundations or anchoring systems**
- **Sound during pile driving or drilling**
- **Habitat loss from foundations and units attached to the seafloor to gather the power and feed to the transmission cable to shore**
- **Habitat disturbance during cable laying**
- **Introduction of hard substrates**
- **Habitat disturbance resulting from scour**

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**Operation**

- **Operational sound and vibration**
- **Introduction of contaminants from use of antifouling coatings and cleaning of marine fouling**
- **Introduction of different communities from fouling growth on monopiles and scour protection around the foundation or anchoring systems**

**Potential Impacts to Fishery Resources from Ocean Current Installations:**

**Construction activities**

- **Habitat disturbance or loss from foundations, moorings, anchors, and cable laying**
- **Sound associated with pile driving and drilling**

**Operations activities**

- **Introduction of artificial hard substrates**
- **Scour impacts on benthic habitats**
- **EMF effects on sensitive species**
- **Collisions with moving parts**
- **Changes in water flow and pressures**

**Potential Impacts to Fishery Resources from Wave Installations:**

- **anchored on hard bottom, a more sensitive habitat than soft sediments, and could affect essential fish habitat and Habitat Areas of Particular Concern**
- **transmission cable cannot be buried in hard bottom areas, creating concerns for those species that have EMF sensitivities**
- **antifouling agents (e.g., Tri-butyl tin) have toxic effects on many marine and estuarine organisms, and specifically different life stages of fishes**
- **some of the devices that use overtopping as part of their process might entrain fish, primarily embryos and larvae, that live at the surface of the ocean**

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**SAFMC Policies for Energy Exploration, Development, Transportation and Hydropower Licensing Activities**

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The SAFMC establishes the following general policies related to energy exploration, development, transportation, and hydropower licensing activities and related projects, to clarify and augment the general policies already adopted in the Habitat Plan and Comprehensive Habitat Amendment (SAFMC, 1998a; SAFMC, 1998b):

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1. Projects should avoid, minimize, and – where possible – offset damage to EFH and EFH-HAPCs. This should be accomplished, in part, by integrating the best available and least impactive technologies into the construction design.

2. Agencies with oversight authority should require expanded EFH consultation for projects with the potential to significantly damage EFH. Projects requiring expanded EFH consultation should include detailed analyses for a full range of alternatives of possible impacts to each type of EFH, each EFH-HAPC and each CHA, including short and long-term effects and cumulative impacts at local, population and ecosystem scales. These analyses should utilize resource-protective assumptions and the best available science.

3. Projects should utilize the alternative that minimizes total impact EFH, EFH-HAPCs, and CHAs.

4. Projects should include detailed assessments of potentially unavoidable damage to EFH and other marine resources associated with the preferred or selected alternative and cumulative impacts, using conservative assumptions and the best available science.

5. Compensatory mitigation should not be considered until avoidance and minimization measures have been duly demonstrated. Compensatory mitigation should be required to offset losses to EFH, including losses associated with temporary impacts, and should take into account uncertainty and the risk of the chosen mitigation measures inadequately offsetting the impacts. Mitigation should be local, "up-front," and "in-kind," and include long-term monitoring to assess and ensure the efficacy of the mitigation program selected.

6. Projects should include pre-project, project-related, and post-project monitoring adequate to document pre-project conditions and the initial, long-term and cumulative impacts of the project on EFH.

7. All EFH assessments should be based upon the best available science, be conservative, and follow precautionary principles as developed for various Federal and State policies.

8. All EFH assessments should document the cumulative impacts associated with all natural and anthropogenic stressors on EFH, including other energy exploration, development, transportation, and re-licensing projects that are geographically and ecologically related.

9. Projects should comply with existing standards and requirements regulating domestic and international transportation of energy products including regulated waste disposal and emissions which are intended to minimize negative impacts on and preserve the quality of the marine environment.

10. Open-loop LNG processing facilities should be avoided in favor of closed-loop systems. Water intake associated with closed-loop should be minimized and the effects to fishery resources should be determined through baseline studies and project monitoring.

11. The original licensing or re-licensing of hydropower projects should provide for adequate and ecologically based instream flows, and safe, timely, and effective upstream and downstream fish passage.

**Deleted:** amount and timing of water flow, in addition to fish passage.

12. Third party environmental inspectors should be required on all projects to provide for independent monitoring and permit compliance.

13. Resource sensitivity training modules should be developed specific to each project, construction procedures and habitat types found within the project impact area. This training should be provided to all contractors and sub-contractors that are anticipated to work in or adjacent to areas that support sensitive habitats.

The SAFMC recommends the following specific concerns and issues be addressed by the Federal Energy Regulatory Commission, Minerals Management Service, and/or the U.S. Army Corps of Engineers prior to approval of any license, application, or permit.

A. The following requirements should apply to any permit to drill any exploratory well or wells in any Lease Sale with the potential to affect EFH in the SAFMC's jurisdiction. These concerns and issues should also be included in a new EIS for any future Outer Continental Shelf (OCS) Leasing Plan:

1. Identification of the on-site fisheries resources, including both pelagic and benthic communities, that inhabit, spawn, or migrate through the lease sites with special focus on those specific lease blocks where industry has expressed specific interest in the pre-lease phases of the leasing process. Particular attention should be given to critical life history stages (i.e. eggs and larvae) that are most sensitive to oil spills and seismic exploration.

2. Identification of on-site or potentially affected state or federally-listed species (e.g. endangered, threatened, special concern, etc.), marine mammals, pelagic birds, diadromous fishes, and all species regulated under federal fishery management plans.

3. Determination of impacts of all exploratory and development activities on the fisheries resources prior to MMS approval of any applications for permits to drill in the Exploratory Unit area, including effects of seismic survey signals on fish behavior, eggs and larvae.

4. Identification of commercial and recreational fishing activities in the vicinity of the lease or Exploratory Unit area, their season of occurrence and intensity, and any impacts whether temporary or permanent on the potential to continue those activities associated with the project or activity.

5. Determination of the physical and chemical oceanographic and meteorological characteristics of the area through field studies by MMS or the applicant, including on-site direction and velocity of currents and tides, sea states, temperature, salinity, water quality, wind storms frequencies, and intensities and icing conditions. Such studies must be required prior to approval of any exploration plan submitted in order to have adequate information upon which to base decisions related to site-specific proposed activities. Studies should include detailed characterization of seasonal surface currents and likely spill trajectories.

6. Description of required monitoring activities to be used to evaluate environmental conditions, and assess the impacts of exploration activities in the lease area or the Exploratory Unit.

7. Identification of the quantity, composition, and method of disposal of solid and liquid wastes and pollutants likely to be generated by offshore, onshore, and transportation operations associated with oil and gas exploration development and transportation.

8. Development of an oil spill contingency plan which includes oil spill trajectory analyses specific to the area of operations, dispersant-use plan including a summary of toxicity data for each dispersant, identification of response equipment and strategies, establishment of procedures for early detection and timely notification of an oil spill, and "chain-of-command" and notification procedures inclusive of all local, state and federal agencies and agency personnel to be notified when an oil spill is discovered, as well as defined and specific actions to be taken after discovery of an oil spill.

9. Mapping of environmentally sensitive areas (e.g., spawning aggregations of snappers and groupers); coral resources and other significant benthic habitats (e.g., tilefish mudflats) along the edge of the continental shelf (including the upper slope); calico scallop, royal red shrimp, and other productive benthic fishing grounds; other special biological resources; and northern right whale calving grounds and migratory routes, and subsequent deletion from inclusion in the respective lease block(s).

10. Planning for oil and gas product transport should be done to determine methods of transport, pipeline corridors, and onshore facilities.

11. The applicant, or MMS, must provide an analysis of biological community dynamics, and pathways and flows of energy, to ascertain accumulation of toxins and impacts on biological communities.

12. Due to the critical nature of canyons and steep relief to important fisheries (e.g. billfishes, swordfish and tunas) an evaluation of shelf-edge and down-slope

dynamics, and a resource assessment to determine transport and fate of contaminants should be required.

13. Discussion of the potential adverse impacts upon fisheries resources of the discharges of all drill cuttings and all drilling muds that may be approved for use in the lease area or the Exploration Unit, as well as discharges associated with production activities (i.e. produced waters). This should include: physical and chemical effects upon pelagic and benthic species and communities, including spawning behavior, effects on eggs and larval stages; effects upon sight-feeding species of fish; and analysis of methods and assumptions underlying the model used to predict the dispersion of discharged muds and cuttings from exploration activities.

14. Discussion of secondary impacts affecting fishery resources associated with onshore oil and gas related development such as storage and processing facilities, dredging and dredged material disposal, roads and rail lines, fuel and electrical transmission line routes, waste disposal, and others.

B. The following requirements should apply to any permit or license to construct LNG gas pipelines and related facilities with the potential to affect EFH in the SAFMC's jurisdiction:

1. The least damaging construction method for traversing reef tracts and deepwater corals should be integrated into the project design.

2. Hydrotest chemicals that may be harmful to fish and wildlife resources shall not be discharged into waters of the United States.

3. Geotechnical studies shall be completed to ensure that the geology of the area is appropriate for the construction method and that geological risks are appropriately mitigated.

4. All work vessels associated with construction that traverses any reef system should be equipped with standard navigation aids, safety lighting and communication equipment. A vessel monitoring system with global positioning system will be employed to continuously monitor all vessel movements and locations in real time.

5. Any anchor placement should completely avoid corals and be diver verified. In addition, measures to avoid anchor sweep should be developed and implemented.

6. Appropriate exclusion zones should be designated around sensitive marine habitats.

7. Pre- and post-project monitoring should be completed in addition to monitoring during construction. The pre-project monitoring should establish pre-project

conditions; project monitoring should examine if unanticipated impacts are occurring and if corrective actions are needed; and post-project (immediate and long-term) monitoring should document impacts to resources resulting from the project, and any recovery from those impacts.

8. All feasible avoidance and minimization measures must be used to protect deepwater coral communities. Those measures must be fully described in detail prior to authorization of any permit or license.

9. A contingency plan should be required to address catastrophic blowouts or more chronic material losses from LNG facilities, including trajectory and other impact analyses and remediation measures and responsibilities.

10. Periodic long-term monitoring of pipelines and nearby deepwater resources should be conducted to evaluate the environmental effects of these installations on deepwater marine communities.

11. Appropriate mitigation should be developed in concert with the NMFS Habitat Conservation Division to offset unavoidable impacts.

C. The requirement listed below should apply to any relevant permit or license to construct windfarms or hydroturbine energy producing facilities with the potential to affect EFH in the SAFMC jurisdiction. To date, such projects are conceptual, yet reasonably foreseeable as future proposed actions. Given the existing information, it is reasonable to conclude that such projects may have an impact on EFH. However, at this time sufficient information is not available to make general project-type recommendations.

1. Submarine cables should be placed in a manner that avoids impacts to EFH; use of existing conduits is preferred over creating new conduits. The best available technologies should be used to install such cables to avoid and minimize temporary and long-term impacts to EFH. If placed on the seabed, cables should be anchored and/or stabilized, and stability analyses should be conducted to ensure that the cable can withstand a 100-year storm event in appropriate water depths.

2. Many of the areas designated as EFH are important to protected resources (e.g., endangered and threatened species and marine mammals) in the region. Direct and indirect impacts may result from noise, electromagnetic fields, vessel traffic, pollutants/water quality issues, alteration of the benthos and habitat degradation or habitat exclusion. The degree of impact can depend on the species, the type of turbine, the method of installation, site characteristics and the layout and size of the facility. Therefore, any EIS prepared for the construction, operation or decommissioning of a wind energy generating facility should include maps of

species' ranges, migratory pathways, and use of habitat as part of an evaluation of direct and cumulative impacts to protected resources.

**Alternative Energy Environmental Information Needs (USDOI, MMS 2007a):**

1. Finer-grained data on the distribution and life history for key species in each regional ecosystem; environmental assessments for specific projects need more detailed data on benthic habitats and multiyear studies of seasonal abundance and distribution of key species of each resource.

2. Development of better field data collection methods for baseline studies and Post-construction monitoring surveys to improve the confidence of impact detection; study of highly mobile species in offshore areas is particularly difficult, requiring new approaches and technologies.

3. Focused laboratory studies to determine thresholds for potential effects resulting from exposure to the types and levels of sound and electromagnetic fields likely to be generated by different types of alternative energy devices in full-scale installations.4. Development of protocols for field studies on potential effects from exposure to sound, electromagnetic fields, and obstructions on the behavior and survival of key species of each resource of concern.

5. Development of guidelines to set acceptable limits of direct, indirect, and cumulative impacts resulting from the installation and operation of offshore alternative energy projects; guidelines are needed for all types of potential impacts such as changes to the hydrodynamic climate, erosion of adjacent shorelines, habitat loss and alteration, avoidance and attraction behavior, mortality, aesthetics, and lost use.

D. The following requirements should apply to the initial licensing or re-licensing of hydropower plants on rivers draining to waters under SAFMC jurisdiction:

1. The construction of adequate fish passage facilities (ladders, lifts, bypasses and screens) should be provided to ensure safe, timely and effective passage of fish to and from vital upstream spawning and maturation habitats.

2. Adequate, ecologically based instream flows approximating natural conditions should be provided to protect, enhance, or restore important riverine spawning and maturation habitats affected or potentially affected by hydropower projects.

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**SAFMC Policy and Position on Previous Oil and Gas Exploration Proposals**

The SAFMC urged the Secretary of Commerce to uphold the 1988 coastal zone inconsistency determination of the State of Florida for the respective plans of exploration filed with MMS by Mobil Exploration and Producing North America, Inc. for Lease

OCS-G6520 (Pulley Ridge Block 799) and by Union Oil Company of California for Lease OCS-G6491/6492 (Pulley Ridge Blocks 629 & 630). Both plans of exploration involved lease blocks lying within the lease area comprising the offshore area encompassed by Part 2 of Lease Sale 116, and south of 26° North latitude. The Council's objection to the proposed exploration activities was based on the potential degradation or loss of extensive live bottom and other habitat essential to fisheries under Council jurisdiction.

The SAFMC also supported North Carolina's determination that the plans of exploration filed with MMS by Mobil Exploration and Producing North America, Inc. for Lease OCS Manteo Unit are not consistent with North Carolina's Coastal Zone Management program.

The Council has expressed concern to the Outer Continental Shelf Leasing and Development Task Force about the proposed area and recommended that no further exploration or production activity be allowed in the areas subject to Presidential Task Force Review (the section of Sale 116 south of 26° N latitude).

The following section addresses the recommendations, concerns and issues expressed by the South Atlantic Council (Source: Memorandum to Regional Director, U.S. Fish and Wildlife Service, Atlanta, Georgia from Regional Director, Gulf of Mexico OCS Region dated October 27, 1995):

"The MMS, North Carolina, and Mobil entered into an innovative Memorandum of Understanding on July 12, 1990, in which the MMS agreed to prepare an Environmental Report (ER) on proposed drilling offshore North Carolina. The scope of the ER prepared by the MMS was more comprehensive than an EIS would be. The normal scoping process used in preparation of a NEPA-type document would not only 'identify significant environmental issues deserving of study' but also 'de-emphasize insignificant issues, narrowing the scope' (40 CFR 1500.4) by scoping out issues not ripe for decisions.

Of particular interest to North Carolina are not the transient effects of exploration, but rather the downstream and potentially broader, long-term effects of production and development. The potential effects associated with production and development would normally be "scoped out" of the (EIS-type) document and would be the subject of extensive NEPA analysis only after the exploration phase proves successful, and the submittal of a full-scale production and development program has been received for review and analysis. The ER addressed three alternatives: the proposed Mobil plan to drill a single exploratory well, the no-action alternative and the alternative that the MMS approve the Mobil plan with specific restrictions (monitoring programs and restrictions on discharges). The ER also analyzes possible future activities, such as development and production, and the long-term environmental and socioeconomic effects associated with such activities. The MMS assured North Carolina that all of the State's comments and concerns would be addressed in the Final ER (USDOI 1990).

The MMS also funded a Literature Synthesis study (USDOI MMS 1993a) and a Physical Oceanography study (USDOI MMS 1994), both recommended by the Physical Oceanography Panel and the Environmental Sciences Review Panel (ESRP). Mobil also submitted a draft report to the MMS titled *Characterization of Currents at Manteo Block 467 off Cape Hatteras, North Carolina*. The MMS also had a Cooperative Agreement with the Virginia Institute of Marine Science to fund a study titled *Seafloor Survey in the Vicinity of the Manteo Prospect Offshore North Carolina* (USDOI MMS 1993b). The MMS had a Cooperative Agreement with East Carolina University to conduct a study titled *Coastal North Carolina Socioeconomic Study* (USDOI MMS 1993c). The above-mentioned studies were responsive to the ESRP's recommendations as well as those of the SAFMC and the State of North Carolina."

Copies of these studies can be acquired from the address below:
Minerals Management Service, Technical Communication Services
MS 4530 381 Elden Street
Herndon, VA 22070-4897 (703) 787-1080

In addition, by letter dated November 21, 2003, the SAFMC provided the following recommendations on the AES Ocean Express LNG pipeline project:

- The deepwater touch down route should be pre-inspected by ROV and the pipeline right of way shall be clear of all deepwater resources;
- Adjust deepwater touchdown position to maintain an appropriate buffer from any such deepwater resources;
- Require deepwater resources, other EFH and the deepwater touchdown position be mapped by ROV to confirm the resource position in relation to the installed pipeline;
- Conduct pre-installation video surveys to select the route that maximizes avoidance of these deepwater coral and live bottom habitats; and
- Monitor pipelines and nearby deepwater resources after installation to evaluate the environmental effects of these installations on deepwater marine communities.

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