

Table B
Routine Program Change
Coastal Permit Program rules, N.J.A.C. 7:7-1.3, 2.1, 2.3, 4.2, 7.2, 7.30 and 7.31

| Legal Citation | Description of change | Enforcement Mechanism | Date adopted by State | Date Effective in State | Significance of Change |
|---|---|--|-----------------------|-------------------------|---|
| SUBCHAPTER 1. GENERAL PROVISIONS | | | | | |
| 7:7-1.3 Definitions | ADDED: Added definitions of floodway, impervious cover and rotor swept area | N.J.S.A. 12:5-3 N.J.S.A. 13:1D-9 N.J.S.A. 13:1D-29 et seq. N.J.S.A. 13:9A-1 et seq. N.J.S.A. 13:19-1 et seq. State Permitting Program | | | <p>A definition of “floodway” has been added because floodways are one of the areas where construction of a wind turbine tower or site disturbance can not be authorized under the permit-by-rule or general permits.</p> <p>A definition of “impervious cover” has also been added. Impervious cover reduces and/or prevents absorption of stormwater into the land. The definition includes examples of items that are considered impervious cover (such as structures) as well as examples that are not considered impervious cover under the rules (such as lawns). The definition is the same as the definition of “impervious cover” in the CZM rules at N.J.A.C. 7:7E-1.8. As exceptions are made for the installation of wind turbines and solar panels on legally existing impervious cover in certain situations, inclusion of this definition is necessary to assure that there is no confusion as to what constitutes impervious cover under this rule.</p> <p>A definition of “rotor swept area” has also been added. The size of the rotor swept area is one of the factors that determines whether a permit-by-rule or coastal general permit is applicable to a particular proposed wind turbine project. The impacts of wind turbines on birds and bats vary depending upon a number of factors, including the height of the turbine and the size of the rotor swept area. The greater the rotor swept area, generally the greater the potential for negative impacts to flying organisms and the greater the need for the Department to review and analyze the impact of a particular proposed installation. Wind turbines can be constructed on either a horizontal or a vertical axis. The rotor swept area is calculated differently for a horizontal axis turbine than for a vertical axis turbine. The tips of the blades on a horizontal axis turbine form a circle as they rotate. The</p> |

| Legal Citation | Description of change | Enforcement Mechanism | Date adopted by State | Date Effective in State | Significance of Change |
|--|--|--|-----------------------|-------------------------|--|
| 7:7-1.3 (continued) | | | | | <p>rotor swept area for this type of turbine is the area of the circle delineated by the tips of the blades. The designs of vertical axis turbines vary greatly in the arrangement of the blades. The rotor area for this type of turbine is calculated by multiplying the rotor radius by the rotor height by 3.14.</p> <p>This section has been revised by incorporating additional terms used in the chapter. These changes are not substantial changes to special management areas, uses subject to management, authorities and organization, or national interest as they merely define the terms used throughout the Chapter.</p> |
| SUBCHAPTER 2. Activities for which a permit is required | | | | | Subchapter 2 describes development activities for which a coastal permit (including CAFRA, coastal wetlands and waterfront development permits) is required |
| 7:7-2.1 CAFRA | <p>MODIFIED: 7:7-2.1(b) to include exemptions for:</p> <ul style="list-style-type: none"> • wind turbines on or structurally attached to an existing building provided turbine is less than 200 feet tall, has a rotor swept area of 2,000 square feet or less and any portion of the tower over 120 feet above the ground be a freestanding monopole; and • solar panels on or structurally attached to an existing building, utility pole, legally existing impervious cover outside of the floodway or on a sanitary landfill. | <p>N.J.S.A. 12:5-3 N.J.S.A. 13:1D-9 N.J.S.A. 13:1D-29 et seq. N.J.S.A. 13:9A-1 et seq. N.J.S.A. 13:19-1 et seq. State Permitting Program</p> | | | <p>N.J.A.C. 7:7-2.1 specifies the types of development for which a CAFRA permit is required, and, at N.J.A.C. 7:7-2.1(b), provides Department interpretations of the statutory intent as it applies to particular forms of development. As indicated in existing N.J.A.C. 7:7-2.1(b), the Department interprets the statutory intent to exclude developments with relatively minor impacts and, consistent with that over-arching determination, interprets how the statutory intent applies to particular types of development. The Department has determined that the construction of a wind turbine on or structurally attached to an existing building will have only minor impacts, provided it is less than 200 feet in height, has a cumulative rotor swept area of 2,000 square feet or less, and any portion of the tower of the turbine more than 120 feet above the ground surface is a freestanding monopole. Therefore a CAFRA permit is not required for the construction of wind turbines on or structurally attached to an existing building provided the above criteria are satisfied.</p> <p>Similarly, N.J.A.C. 7:7-2.1(b)13 provides that the installation of solar panels on or structurally attached to an existing building or on a utility pole (electric, telephone, cable and lighting) in a maintained utility right-of-way or on or structurally attached to a parking light pole does</p> |

| Legal Citation | Description of change | Enforcement Mechanism | Date adopted by State | Date Effective in State | Significance of Change |
|---------------------------|-----------------------|-----------------------|-----------------------|-------------------------|---|
| 7:7-2.1 CAFRA (continued) | | | | | <p>not require a CAFRA permit, nor does the installation of solar panels on legally existing impervious cover outside of a floodway or on a sanitary landfill. The coastal permitting process establishes impervious cover limits and vegetative cover requirements based on a site's location in order to control the amount of development that can occur in an area and protect environmentally sensitive areas, waters, agricultural lands and open space. The Department has determined that solar panels would have only minor impacts when placed on areas that are already impervious, except if they were proposed in a floodway, where they may be damaged and may cause damage to other structures in a flood. Because of these concerns, this exemption applies to existing impervious cover located outside of the floodway.</p> <p>A CAFRA permit is not required for the enlargement of a building provided it does not increase the footprint of the development or increase the number of dwelling units or parking spaces. The construction of a wind turbine on or structurally attached to a building or solar panel attached to a building or utility pole is similar to this exemption in that the turbine or solar panel does not increase the footprint of development and does not increase the number of parking spaces or dwelling units. By attaching a wind turbine or solar panel to an existing structure any on-the-ground impacts are avoided. The primary impacts associated with the construction of solar panels that are not structurally attached to buildings or utility poles is the clearing of land and associated habitat loss and the creation of new impervious cover. The construction of solar panels on existing impervious cover and landfills will not result in the clearing of additional land areas or increase in impervious cover. Therefore the exemptions for wind turbines and solar panels described above are not substantial changes to uses subject to management, special management areas, authorities and organization and consideration of the national interest.</p> |

| Legal Citation | Description of change | Enforcement Mechanism | Date adopted by State | Date Effective in State | Significance of Change |
|---|--|--|-----------------------|-------------------------|---|
| 7:7-2.3 Waterfront Development | <p>MODIFIED: 7:7-2.3(d) to include exemptions for:</p> <ul style="list-style-type: none"> • Wind turbines on or structurally attached to an existing building provided turbine is less than 200 feet tall, has a rotor swept area of 2,000 square feet or less and any portion of the tower over 120 feet above the ground be a freestanding monopole; and • Solar panels on or structurally attached to an existing building, utility pole, legally existing impervious cover outside of the floodway or on a sanitary landfill. | <p>N.J.S.A. 12:5-3 N.J.S.A. 13:1D-9 N.J.S.A. 13:1D-29 et seq. N.J.S.A. 13:9A-1 et seq. N.J.S.A. 13:19-1 et seq. State Permitting Program</p> | | | <p>N.J.A.C. 7:7-2.3, Waterfront development, describes jurisdiction under the Waterfront Development law. N.J.A.C. 7:7-2.3(d) identifies those development activities that do not require a Waterfront Development permit. For the same reasons the Department added N.J.A.C. 7:7-2.1(b)12 and 13 as described above, the Department added similar exceptions from waterfront development permitting requirements at N.J.A.C. 7:7-2.3(d)4 and 5. Specifically, these changes provide that the construction of a wind turbine on or structurally attached to a legally existing building does not require a Waterfront Development permit provided it is less than 200 feet in height, has a cumulative rotor swept area of 2,000 square feet or less, and any portion of the tower of the turbine more than 120 feet above the ground surface is a freestanding monopole, and the installation of solar panels does not require a Waterfront Development permit when the solar panels are installed on an existing building or utility pole, when installed on existing legal impervious cover and outside of a floodway, or when installed on a sanitary landfill.</p> <p>A waterfront development permit is not required for the construction, alteration, expansion, reconstruction or enlargement of certain buildings which have been deemed to have relatively minor impacts. For the reasons described at N.J.A.C. 7:7-2.1, the addition of exemptions for the construction of wind turbines structurally attached to buildings or solar panels structurally attached to buildings or utility poles are not substantial changes to uses subject to management, special management areas, authorities and organization or consideration of the national interest.</p> |
| SUBCHAPTER 4. Permit Application Procedure | | | | | |
| 7:7-4.2(g) Application contents | <p>ADDED: • requirement that applicants for wind turbines include their pre and/or post construction monitoring methodologies in their application submission</p> | <p>N.J.S.A. 12:5-3 N.J.S.A. 13:1D-9 N.J.S.A. 13:1D-29 et seq. N.J.S.A. 13:9A-1 et seq. N.J.S.A. 13:19-1 et seq. State Permitting Program</p> | | | <p>Subchapter 4 identifies the materials that must be included in an application for an individual waterfront development, wetland or CAFRA permit. New N.J.A.C. 7:7-4.2(g) requires that applications for wind turbines include the pre and/or post-construction monitoring methodologies as part of the submission. As stated in the summary of the changes to the Energy facility use rule, N.J.A.C. 7:7E-7.4 (see Table A), the Department is requiring monitoring for the presence of and</p> |

| Legal Citation | Description of change | Enforcement Mechanism | Date adopted by State | Date Effective in State | Significance of Change |
|--|--|--|-----------------------|-------------------------|--|
| 7:7-4.2 (continued) | | | | | <p>impacts to birds and bats and, for wind turbines in tidal waters, marine organisms, to enable the Department to evaluate the impacts of large turbines and determine the extent to which operations are affecting the behavior and distribution of birds and bats and, in tidal waters, marine organisms. The Department is requiring that the methods proposed to be utilized in conducting the required monitoring be submitted as part of the application. This will allow the Department to ensure that the methods proposed will result in the gathering of information that is useful to assess the impacts of the wind turbine development. The Department has developed pre- and post- construction monitoring protocols which are contained in the Technical Manual for Evaluating the Effects of Wind Turbines Requiring Coastal Permits (See <i>Section VI. NJDEP Technical Manual for Evaluating Impacts of Wind Turbines Requiring Coastal Permits</i>).</p> <p>The Department does not consider this additional application submission requirement to be a substantial change to special management areas, uses subject to management, authorities and organization, or national interest as this change merely provides the Department with the information necessary to ensure the proposed monitoring will be effective.</p> |
| Subchapter 7. General permits and permits-by-rule | | | | | |
| 7:7-7.2(a)12 and 13 Permits-by-rule | <p>Added: Permits-by-rule for:</p> <ul style="list-style-type: none"> • Construction of one, two or three wind turbines on land; and • Installation of solar panels at a single family home or duplex lot | <p>N.J.S.A. 12:5-3 N.J.S.A. 13:1D-9 N.J.S.A. 13:1D-29 et seq. N.J.S.A. 13:9A-1 et seq. N.J.S.A. 13:19-1 et seq. State Permitting Program</p> | | | <p>A permit-by-rule (PBR) is a permit for activities that the Department has determined have minimal potential for environmental impact, provided the conditions of the PBR are met. No plans, application forms, or photographs need to be submitted to the Department for an activity or development eligible for a PBR.</p> <p><u>PBR for the construction of one, two and three wind turbines on land</u> This new PBR at N.J.A.C. 7:7-7.2(a)12 authorizes the construction of one, two or three wind turbines on land provided certain criteria are met. Based on the information currently available, the Department has determined that turbines 200 feet in height or taller must be individually reviewed, either through a general or an individual permit application. Accordingly, to be eligible for this PBR, the wind turbines must be less than 200 feet in height and must have a cumulative rotor</p> |

| Legal Citation | Description of change | Enforcement Mechanism | Date adopted by State | Date Effective in State | Significance of Change |
|---------------------|-----------------------|-----------------------|-----------------------|-------------------------|--|
| 7:7-7.2 (continued) | | | | | <p>swept area of no greater than 2,000 square feet. The height of the turbine is measured from the ground surface to the tip of the blade at its highest position. The limitation on the rotor swept area under the PBR will allow the construction of most 50 KW and smaller wind turbines, the power rating typically used at single family dwellings and small businesses, while not posing a risk to birds and bats.</p> <p>The PBR provides that the wind turbine shall not be installed in, on or overhanging dunes, beaches, wetlands, or coastal bluffs because of the environmentally sensitive nature of these areas. Further, the PBR provides that it does not apply in wild and scenic river corridors. Wild and scenic river corridors have been established under the National Wild and Scenic Rivers Act, with the primary purpose of protecting the free-flowing character and the outstandingly remarkable resource values of designated rivers. The Act recognizes outstandingly remarkable scenic, recreational, fish and wildlife, historic, cultural and similar values of certain rivers of the State, as well as the importance of protecting these water bodies to reduce the risk of loss of life and property resulting from the over-development of floodplains. In New Jersey's coastal zone, portions of the Great Egg Harbor River and the Maurice River have been designated wild and scenic rivers. In order to protect the scenic values of these rivers, review of individual wind turbine projects through an individual permit application submission is necessary.</p> <p>The PBR provides that no wind turbine tower or associated site disturbance be located in a floodway. This is necessary in order to protect the turbine from flood damage, since the depth and velocity of floodwaters present in the floodway portion of the flood hazard area would subject the wind turbine to unsafe conditions that could undermine and compromise the structural integrity of the tower. Furthermore, the placement of fill or structures within floodways obstructs flow and exacerbates nearby flooding conditions.</p> <p>The PBR contains setbacks from the water, wetlands, beaches and dunes so that these areas and the wildlife that use them will be</p> |

| Legal Citation | Description of change | Enforcement Mechanism | Date adopted by State | Date Effective in State | Significance of Change |
|---------------------|-----------------------|-----------------------|-----------------------|-------------------------|--|
| 7:7-7.2 (continued) | | | | | <p>protected from site disturbance associated with the proposed development. The PBR process does not require any submission to or review by the Department. Coastal waters, wetlands, beaches and dunes are heavily used by wildlife, including avian species. In order to ensure that there are not adverse impacts to these species or habitats, in the absence of a site-specific review, a buffer has been included. Lagoons are highly disturbed areas and construction adjacent to them does not pose the same risk; therefore, no such buffer is required.</p> <p>Endangered and threatened species include wildlife that are facing possible extinction in the State in the immediate future due to loss of suitable habitat, and past overexploitation through human activities or natural causes. The Department has developed maps of endangered and threatened wildlife species habitat, entitled "Landscape Maps of Habitat for Endangered, Threatened and Other Priority Wildlife" (Landscape Maps) (The Landscape Maps were approved by OCRM as enforceable policies under the NJCMP by letter of May 28, 2004). Under this PBR, the Department is addressing the on-the-ground impacts of this size turbine on endangered and threatened wildlife and plant species habitat rather than operational impacts. In order to prevent development that would have adverse on the ground effects on endangered and threatened wildlife species habitat, the PBR provides that, with limited exceptions, development proposed to be located in an area mapped as threatened or endangered species habitat will not qualify for this PBR, but must undergo Department review to determine if the development should be approved and, if it is appropriate, what conditions may be necessary to assure that the particular habitat involved is not negatively impacted. There are two exceptions to this limitation. First, if the wind turbine will be located within 120 feet of an existing building on actively maintained lawn or areas of land that have been manipulated through landscaping and continue to be so maintained. Second, if the wind turbine will be located on existing impervious cover. In these situations, the Department is presuming that, regardless of the mapping, any adverse modification of habitat through site disturbance would be minimal given the scale of the development, its proximity to existing structures and ongoing</p> |

| Legal Citation | Description of change | Enforcement Mechanism | Date adopted by State | Date Effective in State | Significance of Change |
|---------------------|-----------------------|-----------------------|-----------------------|-------------------------|--|
| 7:7-7.2 (continued) | | | | | <p>disturbance in close proximity to the building.</p> <p>The PBR also provides that any turbine more than 120 feet tall must be of monopole construction. Thus lattice towers and guy wires will not be authorized under the PBR for wind turbines more than 120 feet tall. Wind turbines constructed using lattice towers have higher bird mortality, as the lattice work provides a perching area for birds, which may then fly into the rotating blades and be killed. Birds are also known to fly into and be killed by guy wires on tall structures.</p> <p>Birds are affected by lighting on tall structures, particularly steady burning red solid state lights. In order to prevent adverse impacts on birds while allowing for lighting at ground level if desired for security concerns, the PBR provides that no lighting shall be placed on or directed at the wind turbines other than shielded ground level security lighting. Lighting is shielded when it is covered in a way that light rays are not emitted above the horizontal plane of the light.</p> <p>Last, the PBR requires that the number of turbines at the site not exceed three, either solely or in conjunction with a previous wind turbine development. The number of turbines authorized under this PBR is limited to one to three turbines to ensure that the on-the-ground impacts associated with the construction of these facilities are minimized. Such impacts include the amount of impervious cover or the clearing of vegetation on a site.</p> <p><u>Permit-by-rule for the installation of solar panels at a single family home or duplex lot</u></p> <p>This new PBR at N.J.A.C. 7:7-7.2(a)13 authorizes the installation of solar panels at a single family home or duplex on a maintained lawn or areas of land that have been manipulated through landscaping and are maintained as such. This PBR has been limited to solar panels located at single family homes or duplexes because the size of the solar panels at single family homes or duplexes does not require significant site disturbance and therefore does not require a review.</p> |

| Legal Citation | Description of change | Enforcement Mechanism | Date adopted by State | Date Effective in State | Significance of Change |
|---------------------|-----------------------|-----------------------|-----------------------|-------------------------|---|
| 7:7-7.2 (continued) | | | | | <p>The PBR does not apply where the solar panels are proposed to be placed in dunes, beaches, wetlands, floodways and coastal bluffs because of the environmentally sensitive nature of these areas, and their vulnerability to flood damage. A setback from wetlands, beaches and dunes is required so that these areas will be protected from site disturbance associated with the proposed development. In recognition that development in the coastal area may have been subject to a coastal permit that required areas to remain vegetated to comply with CZM rules, the PBR does not apply where such restrictions are in place.</p> <p>As described above, the Department developed the Landscape Maps, mapping areas of endangered or threatened wildlife species habitat. In most cases, the PBR does not apply in areas mapped as endangered or threatened species habitat. There are two exceptions to this limitation. First, if the solar panel will be located within 120 feet of an existing building on actively maintained lawn or areas of land that have been manipulated through landscaping and continue to be maintained as such. Second, if the solar panel will be located on existing impervious cover. In these situations, the Department believes that, regardless of the mapping, any adverse modification of habitat through site disturbance would be minimal given the scale of the development, its proximity to existing structures and ongoing disturbance at the single family home or duplex lot.</p> <p>The addition of these PBRs does not change the jurisdiction of CAFRA or the Waterfront Development Law. The addition of these PBRs merely changes the vehicle under which the activity may be authorized. If a proposed activity is not eligible for a PBR, it may still be eligible for either a general or individual permit. Further, in accordance with N.J.A.C. 7:7-7.1(c), General Standards for issuing coastal general permits and permits-by-rule, the Department may issue a PBR under the Coastal Permit Program rules only if certain conditions are met. Specifically, the Department must determine that the regulated development will cause only minimal adverse environmental impacts when performed separately, will have only minimal cumulative adverse impacts on the environment, and is in keeping with the legislative</p> |

| Legal Citation | Description of change | Enforcement Mechanism | Date adopted by State | Date Effective in State | Significance of Change |
|---------------------|-----------------------|-----------------------|-----------------------|-------------------------|--|
| 7:7-7.2 (continued) | | | | | <p>intent to protect and preserve the coastal area from inappropriate development. It must also determine that the development will be in conformance with the purposes of applicable statutes. Lastly, the Department must provide public notice and a public hearing on the proposed PBR.</p> <p>As indicated above, the Department added two new PBRs; one for the construction of wind turbines on land; and the other for construction of solar panels. The PBRs satisfy the requirements of N.J.A.C. 7:7-7.1(c). The PBRs are limited in a manner that will assure that any development occurring pursuant to one of these permits will not have more than minimal adverse impacts on the environment, either separately or cumulatively (when considered in combination with other projects). As discussed above, the PBRs can only be authorized if the proposed wind turbine(s) or solar panel(s) are not located in environmentally sensitive special areas and are located so as to minimize adverse impacts to endangered and threatened wildlife or plant species habitats as well as critical wildlife habitats.</p> <p>Using a PBR will not compromise the Department's efforts to protect and preserve the coastal areas from inappropriate development, because the proposed PBRs contain specific criteria intended to minimize their environmental impacts. These include requiring that the development is not located on beaches, dunes, wetlands or coastal bluffs, thus protecting these areas from development, and measures to protect wildlife. Additionally, these PBRs do not apply in floodways or wild and scenic river corridors, where such development would be inappropriate unless a case-by-case individual review afforded under an individual coastal permit application indicated compliance with standards for these areas. Based on the above, the Department does not consider the addition of these two PBRs a substantial change to uses subject to management, special management areas, authorities and organization or national interest.</p> |

| Legal Citation | Description of change | Enforcement Mechanism | Date adopted by State | Date Effective in State | Significance of Change |
|---|--|--|-----------------------|-------------------------|--|
| <p>7:7-7.30 Coastal general permit for the construction of one to three wind turbines less than 200 feet in height and having a cumulative rotor swept area no greater than 4,000 square feet</p> | <p>Added: Coastal general permit for the construction of one to three wind turbines less than 200 feet in height and having a cumulative rotor swept area no greater than 4,000 square feet</p> | <p>N.J.S.A. 12:5-3 N.J.S.A. 13:1D-9 N.J.S.A. 13:1D-29 et seq. N.J.S.A. 13:9A-1 et seq. N.J.S.A. 13:19-1 et seq. State Permitting Program</p> | | | <p>N.J.A.C. 7:7-7.30 is a new coastal general permit for the construction of one, two or three wind turbines on land subject to certain criteria. As described <i>Section III, Potential Effects of Wind Turbines on Birds, Bats and Marine Organisms in New Jersey's Coastal Zone</i>, the potential impacts on birds and bats from the construction of wind turbines relate to a number of factors, including the height and rotor swept area of the turbine. After analyzing the potential impacts from these factors, the Department determined that the PBR for wind turbines should be limited to turbines less than 200 feet tall with a rotor swept area no greater than 2,000 square feet. In order to consider the potential impacts of turbines that are less than the 200 feet height limit of the PBR but have a larger rotor swept area, the Department added this coastal general permit. A general permit follows a more streamlined permitting process than an individual coastal permit.</p> <p>The criteria for this coastal general permit differ from those of the PBR described above only in three aspects. First, this general permit is applicable to wind turbine development(s) with a cumulative rotor swept area of 4,000 square feet rather than the 2,000 square feet limitation applicable to the PBR. Secondly, authorization under this coastal general permit is not prohibited in areas mapped as threatened or endangered species habitat on the Landscape Maps as it is under the PBR in all but the two limited circumstances described in that section. Instead, the coastal general permit requires compliance with the standards of the Endangered or threatened wildlife or plant species habitat rule, N.J.A.C. 7:7E-3.38 and the Critical wildlife habitat rule, N.J.A.C. 7:7E-3.39. Because authorization under a coastal general permit requires the submission of an application to and review by the Department, the Department is able to review the proposed wind turbine(s) to consider and address potential wildlife impacts. The application must contain all information necessary to determine compliance with the Endangered or threatened wildlife or plant species habitat rule and the Critical wildlife habitat rule. This requirement will enable the Department to protect these habitats and species through review of the proposed turbines under these rules.</p> |

| Legal Citation | Description of change | Enforcement Mechanism | Date adopted by State | Date Effective in State | Significance of Change |
|----------------------|-----------------------|-----------------------|-----------------------|-------------------------|--|
| 7:7-7.30 (continued) | | | | | <p>Lastly, due to the larger size of these turbines, in order to assess the impact of the operation of these wind turbines on avian and bat species, post-construction monitoring is required of the first 15 wind turbine developments (ranging in scope from one to three turbines) constructed under this coastal general permit. Wind turbines with a rotor swept area of 2,000 square feet or smaller are typically residential, small-scale facilities, whereas those between 2,000 and 4,000 square feet are more likely to be associated with municipal, industrial or commercial facilities. Data gathered from post-construction monitoring of the first 15 wind turbine developments greater than 2,000 square feet in size will enable the Department to evaluate the impacts of these somewhat larger turbines, and determine if operations are causing unanticipated levels of direct mortality to birds and bats. If it is determined that unanticipated mortality is occurring, this information would serve to guide the Department in proposing adjustments to this coastal general permit, and may be used to curtail turbine operations. Because the Department does not anticipate that significant mortality will result from turbines that meet the criteria of this general permit, it believes that data from the first 15 projects constructed will provide sufficient information to assess the effect of these turbines on birds and bats. Post-construction monitoring shall consist of bird and bat carcass searches conducted for one full year beginning immediately after the wind turbines begin operation. These searches shall be accompanied by carcass removal and searcher efficiency trials. In order to ensure that the monitoring methodology collects accurate and comparable data, the methodology must be approved by the Department prior to initiation. The monitoring shall be at a frequency to ascertain mortality, and shall be accompanied by carcass removal and searcher efficiency trials to address potential loss of carcasses due to scavenging and accuracy of search, respectively. A report to the Department will be required in order for the Department to assess the impacts and determine if there is a need to propose amendments to the general permit for future wind turbine applications or curtail operations as described below. The Department shall notify those permittees that are among the first fifteen constructed and are therefore required to monitor. The Department has prepared a</p> |

| Legal Citation | Description of change | Enforcement Mechanism | Date adopted by State | Date Effective in State | Significance of Change |
|----------------------|-----------------------|-----------------------|-----------------------|-------------------------|---|
| 7:7-7.30 (continued) | | | | | <p>technical manual titled "Technical Manual for Evaluating the Effects of Wind Turbines Requiring a Coastal Permit." The Department is seeking approval to incorporate this manual as an enforceable policy under New Jersey's CMP. (See Section VI of this submission for a description and program change analysis).</p> <p>An adaptive management measure the Department will be utilizing to address the operational impacts of wind turbines on birds and bats is curtailment of wind turbine operations. The coastal general permit provides that the Department may require the curtailment of wind turbine operations under certain conditions which could pose a high bird or bat mortality event. As discussed in <i>Section III, Adaptive Management-Curtailment of Wind Turbine Operations</i>, of this submission, curtailment is intended to reduce the impacts of the operation of wind turbines on birds and bats during peak migration periods. Curtailment would be required for specific wind turbine developments based on evolving science including scientific literature and monitoring results in the State and elsewhere. Curtailment shall not exceed 360 hours in a calendar year per turbine within the normal range of operation of the turbine. Given the size of these turbines, the Department does not anticipate that curtailment will be necessary, and this general permit allows their construction in areas that are restricted under the coastal general permit for larger turbines at N.J.A.C. 7:7-7.31 and the standards in the CZM rules at N.J.A.C. 7:7E-7.4(r). However, due to the limited information on the effects of such wind turbines, particularly in highly sensitive coastal areas, the Department has included this provision. The provision is necessary in the event that monitoring results show unanticipated mortality as it will provide a means to minimize such mortality.</p> <p>Application requirements that apply to all applications for coastal general permit authorization are found at N.J.A.C. 7:7-7.3. In addition, each coastal general permit contains information requirements specific to that coastal general permit. These requirements are based on the nature of the activity to which the coastal general permit applies and the conditions of the coastal general permit. The submission of five</p> |

| Legal Citation | Description of change | Enforcement Mechanism | Date adopted by State | Date Effective in State | Significance of Change |
|----------------------|-----------------------|-----------------------|-----------------------|-------------------------|--|
| 7:7-7.30 (continued) | | | | | <p>copies of a site plan that shows the location of the mean high water line, existing features including topography, structures, utilities, beach areas, dune areas, coastal bluffs, floodways, wetlands, and details of the proposed wind turbine, lighting and site disturbance is required. The site features and proposed construction details must be shown on the site plan in order for the Department to determine if the setbacks established in the coastal general permit are met. Details about the proposed turbine, including an elevation plan, which will show the design type (for example lattice, guy wires, or single piling), the length of rotors, and the rotor swept area and height of the proposed wind turbine are also required. This information is necessary to determine compliance with the conditions of this coastal general permit. As described above, post-construction monitoring of constructed wind turbines is required as a condition of the coastal general permit for the first 15 wind turbine developments constructed in accordance with this permit. Therefore, submission of details of the proposed monitoring methodology is required. Lastly, a compliance statement is required, wherein the applicant demonstrates compliance with the criteria of the coastal general permit. The Department is requiring five copies of the site plan and five copies of the monitoring methodology and the compliance statement so that this information can be provided to the various offices in the Department that will review the applications.</p> <p>The addition of this coastal general permit does not change the jurisdiction of CAFRA or the Waterfront Development Law. The addition of this permit merely changes the vehicle under which the activity may be authorized. If a proposed activity is not eligible for a coastal general permit it may still be eligible for an individual permit.</p> <p>Further, in accordance with N.J.A.C. 7:7-7.1(c), General Standards for issuing coastal general permits and permits-by-rule, the Department may issue a coastal general permit under the Coastal Permit Program rules only if certain conditions are met. Specifically, the Department must determine that the regulated development will cause only minimal adverse environmental impacts when performed separately, will have only minimal cumulative adverse impacts on the environment, and is in</p> |

| Legal Citation | Description of change | Enforcement Mechanism | Date adopted by State | Date Effective in State | Significance of Change |
|----------------------|-----------------------|-----------------------|-----------------------|-------------------------|---|
| 7:7-7.30 (continued) | | | | | <p>keeping with the legislative intent to protect and preserve the coastal area from inappropriate development. It must also determine that the development will be in conformance with the purposes of applicable statutes. Lastly, the Department must provide public notice and a public hearing on the proposed coastal general.</p> <p>This coastal general permit satisfies the requirements contained in N.J.A.C. 7:7-7.1(c). The coastal general permit is limited in a manner that will assure that any development occurring pursuant to this coastal general permit will not have more than minimal adverse impacts on the environment, either separately or cumulatively (when considered in combination with other projects). As discussed above, the coastal general permit can only be authorized if the proposed wind turbine(s) or solar panel(s) are not located in environmentally sensitive special areas and are located so as to minimize adverse impacts to endangered and threatened wildlife or plant species habitats as well as critical wildlife habitats.</p> <p>Using a coastal general permit will not compromise the Department's efforts to protect and preserve the coastal areas from inappropriate development, because this coastal general permit contains specific criteria intended to minimize their environmental impacts. These include requiring that the development is not located on beaches, dunes, wetlands or coastal bluffs, thus protecting these areas from development, and measures to protect wildlife. Additionally, the coastal general permit does not apply in floodways or wild and scenic river corridors, where such development would be inappropriate unless a case-by-case individual review afforded under an individual coastal permit application indicated compliance with standards for these areas. Based on the above, the Department does not consider the addition of this coastal general permit a substantial change to uses subject to management, special management areas, authorities and organization or national interest.</p> |

| Legal Citation | Description of change | Enforcement Mechanism | Date adopted by State | Date Effective in State | Significance of Change |
|---|--|--|-----------------------|-------------------------|--|
| <p>7:7-7.31 Coastal general permit for the construction of wind turbines less than 250 feet in height and having a cumulative rotor swept area no greater than 20,000 square feet</p> | <p>ADDED: Coastal general permit for the construction of wind turbines less than 250 feet in height and having a cumulative rotor swept area no greater than 20,000 square feet</p> | <p>N.J.S.A. 12:5-3 N.J.S.A. 13:1D-9 N.J.S.A. 13:1D-29 et seq. N.J.S.A. 13:9A-1 et seq. N.J.S.A. 13:19-1 et seq. State Permitting Program</p> | | | <p>The Department added an additional general permit at N.J.A.C. 7:7-7.31 for the construction of wind turbines that are less than 250 feet in height and have a cumulative rotor swept area no greater than 20,000 square feet. These wind turbines are substantially larger than those authorized under PBR and the coastal general permit described above.</p> <p>The restrictions on location of the wind turbines and requirements for setbacks from natural areas in this coastal general permit mirror those of the coastal general permit for wind turbines that are less than 200 feet tall with a rotor swept area greater than 2,000 square feet, but not greater than 4,000 square feet. These conditions are intended to protect the environmentally sensitive areas listed and to prevent development in a floodway. These areas are beaches, dunes, wetlands, coastal bluffs, tidal waters, and wild and scenic river corridors. Turbines of this height and size may cause unacceptable levels of mortality to birds and bats in some locations. Accordingly, the Department has carefully evaluated the land in the coastal zone and prepared a map that identifies specific areas on land where wind turbines 200 feet in height or taller or having a cumulative rotor swept area of greater than 4,000 square feet are unacceptable due to the operational impacts of the turbines on birds and bats. These areas are identified on the Department's Large Scale Wind Turbine Siting Map. This coastal general permit provides that no portion of the wind turbine including blades, towers and site disturbance be located in or over these areas. Areas identified on the Large Scale Wind Turbine Siting Map are those areas where the Department currently has wildlife data to make the determination that a wind turbine (or turbines) 200 feet in height or taller, or with a cumulative rotor swept area of greater than 4,000 square feet on a site, would pose a significant and unacceptable risk to birds and bats. As such the map is a visual representation of the Department's current wildlife data. Details on the methodology and justification used to map these areas can be found <i>Section III-Potential Effects of Wind Turbines on Birds, Bats and Marine Organisms in New Jersey's Coastal Zone, NJDEP Large Scale Wind Turbine Siting Map</i>.</p> |

| Legal Citation | Description of change | Enforcement Mechanism | Date adopted by State | Date Effective in State | Significance of Change |
|----------------------|-----------------------|-----------------------|-----------------------|-------------------------|--|
| 7:7-7.31 (continued) | | | | | <p>The coastal general permit provides that only wind turbine(s) that are not located in areas identified on the Department's Large Scale Wind Turbine Siting Map or in areas that are within one-quarter mile of the areas identified on the Department's Large Scale Wind Turbine Siting Map are eligible for the general permit. Large wind turbine development is not eligible for the general permit within this one-quarter mile buffer zone because the Department believes that large wind turbines constructed this close to areas identified on the Department's Large Scale Wind Turbine Siting Map may result in unacceptable impacts to birds and bats. Therefore, the detailed review afforded by an individual permit application is required for large scale wind turbines in these areas so that the Department can make a case-by-case determination of the suitability of these areas for large scale wind turbines. Furthermore, the general permit does not apply to wind turbines located in areas mapped as Endangered or threatened wildlife species habitat on the Department's Landscape maps, as a detailed site specific review is necessary at such locations. Additionally compliance with the Critical wildlife habitat rule, N.J.A.C. 7:7E-3.39 is required.</p> <p>The coastal general permit specifies that the cumulative rotor swept area cannot exceed 20,000 square feet on a site. This limitation, similar to the limitations on height and the restrictions on specific areas, is intended to limit the potential impact to both birds and bats, which increase as the size of wind turbine increases. Further, as discussed previously, wind turbines more than 120 feet in height must be a freestanding monopole design. Guy wires and lattice towers are prohibited. In addition, the coastal general permit imposes lighting restrictions on these turbines. As noted previously, birds are affected by lighting on tall structures. In order to minimize adverse impacts on birds, the coastal general permit restricts lighting to that necessary to comply with Federal Aviation Administration requirements which apply due to the height of the structure. However, ground level security lighting is allowed to address security concerns.</p> <p>Last, the coastal general permit requires one year post-construction monitoring. Monitoring shall include carcass searches, searcher</p> |

| Legal Citation | Description of change | Enforcement Mechanism | Date adopted by State | Date Effective in State | Significance of Change |
|----------------------|-----------------------|-----------------------|-----------------------|-------------------------|---|
| 7:7-7.31 (continued) | | | | | <p>efficiency trials and scavenger removal studies. For these larger turbines, the monitoring requirement will not be limited to the first 15 wind turbine developments constructed under this coastal general permit. Because these larger turbines are likely to have a significantly greater impact, this information is necessary to allow the Department to determine if the operation of these turbines is causing unanticipated bird/bat mortality. Monitoring results will be used by the Department to evaluate the impacts of these turbines, and determine if operations need to be curtailed under certain conditions, or changes to this coastal general permit are needed. The Department has prepared a technical manual titled "Technical Manual for Evaluating the Effects of Wind Turbines Requiring a Coastal Permit" which provides guidance on monitoring and reporting. The Department is seeking approval to incorporate this technical manual as an enforceable policy of New Jersey's CMP. (See Section VI of this submission for a description and program change analysis)</p> <p>Similar to the coastal general permit at N.J.A.C. 7:7-7.30 discussed above, this coastal general permit provides that the Department may require the curtailment of wind turbine operations during peak migration periods when migrating birds or bats would likely be flying at the height of the rotor swept area or be present at seasonally high densities throughout the entire air column. Curtailment shall not exceed 360 hours in a calendar year per turbine that occurs within the normal range of operation of the turbine. Curtailment measures include establishing a minimum wind speed that must be achieved prior to starting operations and shutting down operations during certain weather conditions or migratory events. Weather conditions that may necessitate curtailment include low wind speeds, low altitude cloud cover, strong storms, or approaching weather fronts favorable to bird or bat migration (such as southerly winds in the spring or northwest winds in the fall). Migratory events that may necessitate curtailment include high concentrations of migrating birds and bats using the</p> |

| Legal Citation | Description of change | Enforcement Mechanism | Date adopted by State | Date Effective in State | Significance of Change |
|----------------------|-----------------------|-----------------------|-----------------------|-------------------------|--|
| 7:7-7.31 (continued) | | | | | <p>coastal area (for example, high concentrations of shorebirds making daily flights between coastal feeding areas, such as mudflats, and roosting areas during spring migration). (See <i>Section III Adaptive Management-Curtailment of Wind Turbine Operations</i> for a discussion of the curtailment provision)</p> <p>Curtailment may not be required of each wind turbine facility and may not be required in each year or season. For the initial authorizations under the proposed general permit, the Department is unlikely to require curtailment in the first year, to allow for the monitoring to gather data during operations under all conditions and time periods. The Department will notify the permittee in writing when curtailment is required, beginning the first year that it is required for the permitted facility. Such notification will be made by March 15th of the first year curtailment is required during the spring migration and by July 15th of the first year curtailment is required during the fall migration. The 360 hours may be split between the spring and fall migrations. For example, if data indicates that raptors are of more concern in a particular region or facility, the Department may require that the hours of shut down be applied later in the fall migration rather than in the spring migration. The application requirements specific to this coastal general permit are the same as those described above for the coastal general permit at N.J.A.C. 7:7-7.30, except that this coastal general permit requires that the limits of areas identified on the Department's Large Scale Wind Turbine Siting Map and areas within one-quarter mile of the mapped areas be shown on the site plan for this general permit. These provisions identify the information necessary for the Department to determine whether a proposed project meets the criteria of this coastal general permit</p> <p>See the discussion at N.J.A.C. 7:7-7.30 above for a discussion as to why the addition of this general permit is not a significant change to the uses subject to management, special management areas, authorities and organization and national interest.</p> |