Site 301.05 Effects on Aesthetics.

(a) Each application shall include a visual impact assessment of the proposed energy facility, prepared in a manner consistent with generally accepted professional standards by a professional trained or having experience in visual impact assessment procedures, regarding the effects of, and plans for avoiding, minimizing, or mitigating potential adverse effects of, the proposed facility on aesthetics.

(b) The visual impact assessment shall contain the following components:

(1) A description and map depicting the locations of the proposed facility and all associated buildings, structures, roads, and other ancillary components, and all areas to be cleared and graded, that would be visible from any scenic resources, based on both bare ground conditions using topographic screening only and with consideration of screening by vegetation or other factors;

(2) A description of how the applicant identified and evaluated the scenic quality of the landscape and potential visual impacts;

(3) A narrative and graphic description, including maps and photographs, of the physiographic, historical and cultural features of the landscape surrounding the proposed facility to provide the context for evaluating any visual impacts;

(4) A computer-based visibility analysis to determine the area of potential visual impact, which, for proposed:

(a) Wind energy systems shall extend to a minimum of a 10-mile radius from each wind turbine in the proposed facility;
(b) Electric transmission lines longer than 1 mile shall extend to a ½ mile radius if located within any urbanized area;
(c) Electric transmission lines longer than 1 mile shall extend to a 2 mile radius if located within any urban cluster;
(d) Electric transmission lines longer than 1 mile if located within any rural area shall extend to:

1. A radius of 3 miles if the line would be located within an existing transmission corridor and neither the width of the corridor nor the height of any towers, poles, or other supporting structures would be increased; or
2. A radius of 10 miles if the line would be located in a new transmission corridor or in an existing transmission corridor if either or both the width of the corridor or the height of the towers, poles, or other supporting structures would be increased;

(5) An identification of all scenic resources within the area of potential visual impact and a description of those scenic resources from which the proposed facility would be visible;

(6) A characterization of the potential visual impacts of the proposed facility, and of any visible plume that would emanate from the proposed facility, on identified scenic resources as high, medium, or low, based on consideration of the following factors:

a. The expectations of the typical viewer;

b. The effect on future use and enjoyment of the scenic resource;

c. The extent of the proposed facility, including all structures and disturbed areas, visible from the scenic resource;

d. The distance of the proposed facility from the scenic resource;

e. The horizontal breadth or visual arc of the visible elements of the proposed facility;

f. The scale, elevation, and nature of the proposed facility relative to surrounding topography and existing structures;

g. The duration and direction of the typical view of elements of the proposed facility; and

h. The presence of intervening topography between the scenic resource and elements of the proposed facility;

(7) Photosimulations from representative key observation points, from other scenic resources for which the potential visual impacts are characterized as "high" pursuant to (6) above, and, to the extent feasible, from a sample of private property observation points within the area of potential visual impact, to illustrate the potential change in the landscape that would result from construction of the proposed facility and associated infrastructure, including land clearing and grading and road construction, and from any visible plume that would emanate from the proposed facility;

(8) Photosimulations shall meet the following additional requirements:

a. Photographs used in the simulation shall be taken at high resolution and contrast, using a full frame digital camera with a 50 millimeter fixed focal length lens or digital equivalent that creates an angle of view that closely matches human visual perception, under clear weather conditions and at a time of day that provides optimal clarity and contrast, and shall avoid if feasible showing any utility poles, fences, walls, trees, shrubs, foliage, and other foreground objects and obstructions;

b. Photosimulations shall be printed at high resolution at 15.3 inches by10.2 inches, or 390 millimeters by 260 millimeters;

c. At least one set of photosimulations shall represent winter season conditions without the presence of foliage typical of other seasons;

d. Field conditions in which a viewpoint is photographed shall be recorded including:

1. Global Position System (GPS) location points with an accuracy of at least 3 meters for each simulation viewpoint to ensure repeatability;
2. Camera make and model and lens focal length;
3. All camera settings at the time the photograph is taken; and
4. Date, time and weather conditions at the time the photograph is taken; and

e. When simulating the presence of proposed wind turbines, the following shall apply:

1. Turbines shall be placed with full frontal views and no haze or fog effect applied;
2. Turbines shall reasonably represent the shape of the intended turbines for a project including the correct hub height and rotor diameter;
3. Turbine blades shall be set at random angles with some turbines showing a blade in the 12 o'clock position; and
4. The lighting model used to render wind turbine elements shall correspond to the lighting visible in the base photograph;

(9) If the proposed facility is required by Federal Aviation Administration regulations to install aircraft warning lighting or if the proposed facility would include other nighttime lighting, a description and characterization of the potential visual impacts of this lighting, including the number of lights visible and their distance from key observation points; and

(10) A description of the measures planned to avoid, minimize, or mitigate potential adverse effects of the proposed facility, and of any visible plume that would emanate from the proposed facility, and the alternative measures considered but rejected by the applicant.