

to land-use and any requirements imposed by the Commission.

(c) *Safety regulations.* The requirements of this paragraph do not affect a project sponsor's obligations to comply with safety regulations of the U.S. Department of Transportation and recognized safe engineering practices for Natural Gas Act projects and the National Electric Safety Code for section 216 Federal Power Act projects.

(d) *Pipeline and electric transmission facilities construction.* (1) The use, widening, or extension of existing rights-of-way must be considered in locating proposed facilities.

(2) In locating proposed facilities, the project sponsor shall, to the extent practicable, avoid places listed on, or eligible for listing on, the National Register of Historic Places; natural landmarks listed on the National Register of Natural Landmarks; officially designated parks; wetlands; and scenic, recreational, and wildlife lands. If rights-of-way must be routed near or through such places, attempts should be made to minimize visibility from areas of public view and to preserve the character and existing environment of the area.

(3) Rights-of-way should avoid forested areas and steep slopes where practical.

(4) Rights-of-way clearing should be kept to the minimum width necessary.

(5) In selecting a method to clear rights-of-way, soil stability and protection of natural vegetation and adjacent resources should be taken into account.

(6) Trees and vegetation cleared from rights-of-way in areas of public view should be disposed of without undue delay.

(7) Remaining trees and shrubs should not be unnecessarily damaged.

(8) Long foreground views of cleared rights-of-way through wooded areas that are visible from areas of public view should be avoided.

(9) Where practical, rights-of-way should avoid crossing hills and other high points at their crests where the crossing is in a forested area and the resulting notch is clearly visible in the foreground from areas of public view.

(10) Screen plantings should be employed where rights-of-way enter for-

ested areas from a clearing and where the clearing is plainly visible in the foreground from areas of public view.

(11) Temporary roads should be designed for proper drainage and built to minimize soil erosion. Upon abandonment, the road area should be restored and stabilized without undue delay.

(e) *Right-of-way maintenance.* (1) Vegetation covers established on a right-of-way should be properly maintained.

(2) Access and service roads should be maintained with proper cover, water bars, and the proper slope to minimize soil erosion. They should be jointly used with other utilities and land-management agencies where practical.

(3) Chemical control of vegetation should not be used unless authorized by the landowner or land-managing agency. When chemicals are used for control of vegetation, they should be approved by EPA for such use and used in conformance with all applicable regulations.

(f) *Construction of aboveground facilities.* (1) Unobtrusive sites should be selected for the location of aboveground facilities.

(2) Aboveground facilities should cover the minimum area practicable.

(3) Noise potential should be considered in locating compressor stations, or other aboveground facilities.

(4) The exterior of aboveground facilities should be harmonious with the surroundings and other buildings in the area.

(5) For Natural Gas Act projects, the site of above-ground facilities which are visible from nearby residences or public areas, should be planted in trees and shrubs, or other appropriate landscaping and should be installed to enhance the appearance of the facilities, consistent with operating needs.

[Order 603, 64 FR 26619, May 14, 1999, as amended by Order 689, 71 FR 69741, Dec. 1, 2006]

§ 380.16 Environmental reports for section 216 Federal Power Act Permits.

(a) *Introduction.* (1) The applicant must submit an environmental report with any application that proposes the construction or modification of any facility identified in § 380.3(c)(3). The environmental report must include the 11

resource reports and related material described in this section.

(2) The detail of each resource report must be commensurate with the complexity of the proposal and its potential for environmental impact. Each topic in each resource report must be addressed or its omission justified, unless the data is not required for that type of proposal. If material required for one resource report is provided in another resource report or in another exhibit, it may be cross referenced. If any resource report topic is required for a particular project but is not provided at the time the application is filed, the environmental report must explain why it is missing and when the applicant anticipates it will be filed.

(b) *General requirements.* As appropriate, each resource report must:

(1) Address conditions or resources that are likely to be directly or indirectly affected by the project;

(2) Identify significant environmental effects expected to occur as a result of the project;

(3) Identify the effects of construction, operation (including maintenance and malfunctions), as well as cumulative effects resulting from existing or reasonably foreseeable projects;

(4) Identify measures proposed to enhance the environment or to avoid, mitigate, or compensate for adverse effects of the project; and

(5) Provide a list of publications, reports, and other literature or communications, including agency contacts, that were cited or relied upon to prepare each report. This list must include the names and titles of the persons contacted, their affiliations, and telephone numbers.

(6) Whenever this section refers to "mileposts" the applicant may substitute "survey centerline stationing" if so preferred. However, whatever method is chosen must be used consistently throughout the resource reports.

(c) *Resource Report 1—General project description.* This report must describe facilities associated with the project, special construction and operation procedures, construction timetables, future plans for related construction, compliance with regulations and codes, and permits that must be obtained. Resource Report 1 must:

(1) Describe and provide location maps of all project facilities, include all facilities associated with the project (such as transmission line towers, substations, and any appurtenant facilities), to be constructed, modified, replaced, or removed, including related construction and operational support activities and areas such as maintenance bases, staging areas, communications towers, power lines, and new access roads (roads to be built or modified). As relevant, the report must describe the length and size of the proposed transmission line conductor cables, the types of appurtenant facilities that would be constructed, and associated land requirements.

(2) Provide the following maps and photos:

(i) Current, original United States Geological Survey (USGS) 7.5-minute series topographic maps or maps of equivalent detail, covering at least a 0.5-mile-wide corridor centered on the electric transmission facility centerline, with integer mileposts identified, showing the location of rights-of-way, new access roads, other linear construction areas, substations, and construction materials storage areas. Non-linear construction areas must be shown on maps at a scale of 1:3,600 or larger keyed graphically and by milepost to the right-of-way maps. In areas where the facilities described in paragraph (j)(6) of this section are located, topographic map coverage must be expanded to depict those facilities.

(ii) Original aerial images or photographs or photo-based alignment sheets based on these sources, not more than one year old (unless older ones accurately depict current land use and development) and with a scale of 1:6,000, or larger, showing the proposed transmission line route and location of transmission line towers, substations and appurtenant facilities, covering at least a 0.5 mile-wide corridor, and including mileposts. The aerial images or photographs or photo-based alignment sheets must show all existing transmission facilities located in the area of the proposed facilities and the location of habitable structures, radio transmitters and other electronic installations,

and airstrips. Older images/photographs/alignment sheets must be modified to show any residences not depicted in the original. In areas where the facilities described in paragraph (j)(6) of this section are located, aerial photographic coverage must be expanded to depict those facilities. Alternative formats (*e.g.*, blue-line prints of acceptable resolution) need prior approval by the environmental staff of the Office of Energy Projects.

(iii) In addition to the copies required under §50.3(b) of this chapter, the applicant must send three additional copies of topographic maps and aerial images/photographs directly to the environmental staff of the Commission's Office of Energy Projects.

(3) Describe and identify by milepost, proposed construction and restoration methods to be used in areas of rugged topography, residential areas, active croplands and sites where explosives are likely to be used.

(4) Identify the number of construction spreads, average workforce requirements for each construction spread and estimated duration of construction from initial clearing to final restoration, and any identified constraints to the timing of construction.

(5) Describe reasonably foreseeable plans for future expansion of facilities, including additional land requirements and the compatibility of those plans with the current proposal.

(6) Describe all authorizations required to complete the proposed action and the status of applications for such authorizations. Identify environmental mitigation requirements specified in any permit or proposed in any permit application to the extent not specified elsewhere in this section.

(7) Provide the names and mailing addresses of all affected landowners identified in §50.5(c)(4) of this chapter and certify that all affected landowners will be notified as required in §50.4(c) of this chapter.

(d) *Resource Report 2—Water use and quality.* This report must describe water quality and provide data sufficient to determine the expected impact of the project and the effectiveness of mitigative, enhancement, or protective measures. Resource Report 2 must:

(1) Identify and describe by milepost waterbodies and municipal water supply or watershed areas, specially designated surface water protection areas and sensitive waterbodies, and wetlands that would be crossed. For each waterbody crossing, identify the approximate width, State water quality classifications, any known potential pollutants present in the water or sediments, and any potable water intake sources within three miles downstream.

(2) Provide a description of site-specific construction techniques that will be used at each major waterbody crossing.

(3) Describe typical staging area requirements at waterbody and wetland crossings. Also, identify and describe waterbodies and wetlands where staging areas are likely to be more extensive.

(4) Include National Wetland Inventory (NWI) maps. If NWI maps are not available, provide the appropriate State wetland maps. Identify for each crossing, the milepost, the wetland classification specified by the U.S. Fish and Wildlife Service, and the length of the crossing. Include two copies of the NWI maps (or the substitutes, if NWI maps are not available) clearly showing the proposed route and mileposts. Describe by milepost, wetland crossings as determined by field delineations using the current Federal methodology.

(5) Identify aquifers within excavation depth in the project area, including the depth of the aquifer, current and projected use, water quality, and known or suspected contamination problems.

(6) Discuss proposed mitigation measures to reduce the potential for adverse impacts to surface water, wetlands, or groundwater quality. Discuss the potential for blasting to affect water wells, springs, and wetlands, and measures to be taken to detect and remedy such effects.

(7) Identify the location of known public and private groundwater supply wells or springs within 150 feet of proposed construction areas. Identify locations of EPA or State-designated, sole-

source aquifers and wellhead protection areas crossed by the proposed transmission line facilities.

(e) *Resource Report 3—Fish, wildlife, and vegetation.* This report must describe aquatic life, wildlife, and vegetation in the vicinity of the proposed project; expected impacts on these resources including potential effects on biodiversity; and proposed mitigation, enhancement, or protection measures. Resource Report 3 must:

(1) Describe commercial and recreational warmwater, coldwater, and saltwater fisheries in the affected area and associated significant habitats such as spawning or rearing areas and estuaries.

(2) Describe terrestrial habitats, including wetlands, typical wildlife habitats, and rare, unique, or otherwise significant habitats that might be affected by the proposed action. Describe typical species that have commercial, recreational, or aesthetic value.

(3) Describe and provide the affected acreage of vegetation cover types that would be affected, including unique ecosystems or communities such as remnant prairie or old-growth forest, or significant individual plants, such as old-growth specimen trees.

(4) Describe the impact of construction and operation on aquatic and terrestrial species and their habitats, including the possibility of a major alteration to ecosystems or biodiversity, and any potential impact on State-listed endangered or threatened species. Describe the impact of maintenance, clearing and treatment of the project area on fish, wildlife, and vegetation. Surveys may be required to determine specific areas of significant habitats or communities of species of special concern to State, Tribal, or local agencies.

(5) Identify all Federally-listed or proposed threatened or endangered species and critical habitat that potentially occur in the vicinity of the project. Discuss the results of the consultation requirements listed in § 380.13(b) through § 380.13(b)(5)(i) and include any written correspondence that resulted from the consultation. The initial application must include the results of any required surveys unless seasonal considerations make this impractical. If species surveys are im-

practical, there must be field surveys to determine the presence of suitable habitat unless the entire project area is suitable habitat.

(6) Identify all Federally-listed essential fish habitat (EFH) that potentially occurs in the vicinity of the project. Provide information on all EFH, as identified by the pertinent Federal fishery management plans, that may be adversely affected by the project and the results of abbreviated consultations with NMFS, and any resulting EFH assessments.

(7) Describe site-specific mitigation measures to minimize impacts on fisheries, wildlife, and vegetation.

(8) Include copies of correspondence not provided under paragraph (e)(5) of this section, containing recommendations from appropriate Federal and State fish and wildlife agencies to avoid or limit impact on wildlife, fisheries, and vegetation, and the applicant's response to the recommendations.

(f) *Resource Report 4—Cultural resources.* In order to prepare this report, the applicant must follow the principles in § 380.14.

(1) Resource Report 4 must contain:

(i) Documentation of the applicant's initial cultural resources consultations, including consultations with Native Americans and other interested persons (if appropriate);

(ii) Overview and Survey Reports, as appropriate;

(iii) Evaluation Report, as appropriate;

(iv) Treatment Plan, as appropriate; and

(v) Written comments from State Historic Preservation Officer(s) (SHPO), Tribal Historic Preservation Officers (THPO), as appropriate, and applicable land-managing agencies on the reports in paragraphs (f)(1)(i) through (iv) of this section.

(2) The initial application or pre-filing documents, as applicable, must include the documentation of initial cultural resource consultation(s), the Overview and Survey Reports, if required, and written comments from SHPOs, THPOs, and land-managing agencies, if available. The initial cultural resources consultations should

establish the need for surveys. If surveys are deemed necessary by the consultation with the SHPO/THPO, the survey reports must be filed with the initial application or pre-filing documents.

(i) If the comments of the SHPOs, THPOs, or land-management agencies are not available at the time the application is filed, they may be filed separately, but they must be filed before a permit is issued.

(ii) If landowners deny access to private property and certain areas are not surveyed, the unsurveyed area must be identified by mileposts, and supplemental surveys or evaluations must be conducted after access is granted. In those circumstances, reports, and treatment plans, if necessary, for those inaccessible lands may be filed after a permit is issued.

(3) The Evaluation Report and Treatment Plan, if required, for the entire project must be filed before a permit is issued.

(i) In preparing the Treatment Plan, the applicant must consult with the Commission staff, the SHPO, and any applicable THPO and land-management agencies.

(ii) Authorization to implement the Treatment Plan will occur only after the permit is issued.

(4) Applicant must request privileged treatment for all material filed with the Commission containing location, character, and ownership information about cultural resources in accordance with § 388.112 of this chapter. The cover and relevant pages or portions of the report should be clearly labeled in bold lettering: “CONTAINS PRIVILEGED INFORMATION—DO NOT RELEASE.”

(5) Except as specified in a final Commission order, or by the Director of the Office of Energy Projects, construction may not begin until all cultural resource reports and plans have been approved.

(g) *Resource Report 5—Socioeconomics.* This report must identify and quantify the impacts of constructing and operating the proposed project on factors affecting towns and counties in the vicinity of the project. Resource Report 5 must:

(1) Describe the socioeconomic impact area.

(2) Evaluate the impact of any substantial immigration of people on governmental facilities and services and plans to reduce the impact on the local infrastructure.

(3) Describe on-site manpower requirements and payroll during construction and operation, including the number of construction personnel who currently reside within the impact area, will commute daily to the site from outside the impact area, or will relocate temporarily within the impact area.

(4) Determine whether existing housing within the impact area is sufficient to meet the needs of the additional population.

(5) Describe the number and types of residences and businesses that will be displaced by the project, procedures to be used to acquire these properties, and types and amounts of relocation assistance payments.

(6) Conduct a fiscal impact analysis evaluating incremental local government expenditures in relation to incremental local government revenues that will result from construction of the project. Incremental expenditures include, but are not limited to, school operating costs, road maintenance and repair, public safety, and public utility costs.

(h) *Resource Report 6—Geological resources.* This report must describe geological resources and hazards in the project area that might be directly or indirectly affected by the proposed action or that could place the proposed facilities at risk, the potential effects of those hazards on the facility, and methods proposed to reduce the effects or risks. Resource Report 6 must:

(1) Describe, by milepost, mineral resources that are currently or potentially exploitable.

(2) Describe, by milepost, existing and potential geological hazards and areas of nonroutine geotechnical concern, such as high seismicity areas, active faults, and areas susceptible to soil liquefaction; planned, active, and abandoned mines; karst terrain; and areas of potential ground failure, such as subsidence, slumping, and landsliding. Discuss the hazards posed to the facility from each one.

(3) Describe how the project will be located or designed to avoid or minimize adverse effects to the resources or risk to itself, including geotechnical investigations and monitoring that would be conducted before, during, and after construction. Discuss also the potential for blasting to affect structures, and the measures to be taken to remedy such effects.

(4) Specify methods to be used to prevent project-induced contamination from surface mines or from mine tailings along the right-of-way and whether the project would hinder mine reclamation or expansion efforts.

(i) *Resource Report 7—Soils.* This report must describe the soils that will be affected by the proposed project, the effect on those soils, and measures proposed to minimize or avoid impact. Resource Report 7 must:

(1) List, by milepost, the soil associations that would be crossed and describe the erosion potential, fertility, and drainage characteristics of each association.

(2) Identify, by milepost, potential impact from: Soil erosion due to water, wind, or loss of vegetation; soil compaction and damage to soil structure resulting from movement of construction vehicles; wet soils and soils with poor drainage that are especially prone to structural damage; damage to drainage tile systems due to movement of construction vehicles and trenching activities; and interference with the operation of agricultural equipment due to the possibility of large stones or blasted rock occurring on or near the surface as a result of construction.

(3) Identify, by milepost, cropland, and residential areas where loss of soil fertility due to construction activity can occur. Indicate which are classified as prime or unique farmland by the U.S. Department of Agriculture, Natural Resources Conservation Service.

(j) *Resource Report 8—Land use, recreation, and aesthetics.* This report must describe the existing uses of land on, and (where specified) within 0.25 mile of, the edge of the proposed transmission line right-of-way and changes to those land uses that will occur if the project is approved. The report must discuss proposed mitigation measures, including protection and enhancement

of existing land use. Resource Report 8 must:

(1) Describe the width and acreage requirements of all construction and permanent rights-of-way required for project construction, operation and maintenance.

(i) List, by milepost, locations where the proposed right-of-way would be adjacent to existing rights-of-way of any kind.

(ii) Identify, preferably by diagrams, existing rights-of-way that will be used for a portion of the construction or operational right-of-way, the overlap and how much additional width will be required.

(iii) Identify the total amount of land to be purchased or leased for each project facility, the amount of land that would be disturbed for construction, operation, and maintenance of the facility, and the use of the remaining land not required for project operation and maintenance, if any.

(iv) Identify the size of typical staging areas and expanded work areas, such as those at railroad, road, and waterbody crossings, and the size and location of all construction materials storage yards and access roads.

(2) Identify, by milepost, the existing use of lands crossed by the proposed transmission facility, or on or adjacent to each proposed project facility.

(3) Describe planned development on land crossed or within 0.25 mile of proposed facilities, the time frame (if available) for such development, and proposed coordination to minimize impacts on land use. Planned development means development which is included in a master plan or is on file with the local planning board or the county.

(4) Identify, by milepost and length of crossing, the area of direct effect of each proposed facility and operational site on sugar maple stands, orchards and nurseries, landfills, operating mines, hazardous waste sites, wild and scenic rivers, designated trails, nature preserves, game management areas, remnant prairie, old-growth forest, national or State forests, parks, golf courses, designated natural, recreational or scenic areas, or registered natural landmarks, Native American religious sites and traditional cultural

properties to the extent they are known to the public at large, and reservations, lands identified under the Special Area Management Plan of the Office of Coastal Zone Management, National Oceanic and Atmospheric Administration, and lands owned or controlled by Federal or State agencies or private preservation groups. Also identify if any of those areas are located within 0.25 mile of any proposed facility.

(5) *Tribal resources.* Describe Indian tribes, tribal lands, and interests that may be affected by the project.

(i) Identify Indian tribes that may attach religious and cultural significance to historic properties within the project right-of-way or in the project vicinity, as well as available information on Indian traditional cultural and religious properties, whether on or off of any Federally-recognized Indian reservation.

(ii) Information made available under this section must delete specific site or property locations, the disclosure of which will create a risk of harm, theft, or destruction of archaeological or Native American cultural resources or to the site at which the resources are located, or which would violate any Federal law, including the Archaeological Resources Protection Act of 1979, 16 U.S.C. 470w-3, and the National Historic Preservation Act of 1966, 16 U.S.C. 470hh.

(6) Identify, by milepost, all residences and buildings within 200 feet of the edge of the proposed transmission line construction right-of-way and the distance of the residence or building from the edge of the right-of-way. Provide survey drawings or alignment sheets to illustrate the location of the transmission facilities in relation to the buildings.

(i) *Buildings:* List all single-family and multi-family dwellings and related structures, mobile homes, apartment buildings, commercial structures, industrial structures, business structures, churches, hospitals, nursing homes, schools, or other structures normally inhabited by humans or intended to be inhabited by humans on a daily or regular basis within a 0.5-mile-wide corridor centered on the proposed transmission line alignment. Provide a

general description of each habitable structure and its distance from the centerline of the proposed project. In cities, towns, or rural subdivisions, houses can be identified in groups. Provide the number of habitable structures in each group and list the distance from the centerline to the closest habitable structure in the group.

(ii) *Electronic installations:* List all commercial AM radio Transmitters located within 10,000 feet of the centerline of the proposed project and all FM radio transmitters, microwave relay stations, or other similar electronic installations located within 2,000 feet of the centerline of the proposed project. Provide a general description of each installation and its distance from the centerline of the projects. Locate all installations on a routing map.

(iii) *Airstrips:* List all known private airstrips within 10,000 feet of the centerline of the project. List all airports registered with the Federal Aviation Administration (FAA) with at least one runway more than 3,200 feet in length that are located within 20,000 feet of the centerline of the proposed project. Indicate whether any transmission structures will exceed a 100:1 horizontal slope (one foot in height for each 100 feet in distance) from the closest point of the closest runway. List all airports registered with the FAA having no runway more than 3,200 feet in length that are located within 10,000 feet of the centerline of the proposed project. Indicate whether any transmission structures will exceed a 50:1 horizontal slope from the closest point of the closest runway. List all heliports located within 5,000 feet of the centerline of the proposed project. Indicate whether any transmission structures will exceed a 25:1 horizontal slope from the closest point of the closest landing and takeoff area of the heliport. Provide a general description of each private airstrip, registered airport, and registered heliport, and state the distance of each from the centerline of the proposed transmission line. Locate all airstrips, airports, and heliports on a routing map.

(7) Describe any areas crossed by or within 0.25 mile of the proposed transmission project facilities which are included in, or are designated for study

for inclusion in: The National Wild and Scenic Rivers System (16 U.S.C. 1271); The National Trails System (16 U.S.C. 1241); or a wilderness area designated under the Wilderness Act (16 U.S.C. 1132).

(8) For facilities within a designated coastal zone management area, provide a consistency determination or evidence that the applicant has requested a consistency determination from the State's coastal zone management program.

(9) Describe the impact the project will have on present uses of the affected areas as identified above, including commercial uses, mineral resources, recreational areas, public health and safety, and the aesthetic value of the land and its features. Describe any temporary or permanent restrictions on land use resulting from the project.

(10) Describe mitigation measures intended for all special use areas identified under this section.

(11) Describe the visual characteristics of the lands and waters affected by the project. Components of this description include a description of how the transmission line project facilities will impact the visual character of project right-of-way and surrounding vicinity, and measures proposed to lessen these impacts. Applicants are encouraged to supplement the text description with visual aids.

(12) Demonstrate that applications for rights-of-way or other proposed land use have been or soon will be filed with Federal land-management agencies with jurisdiction over land that would be affected by the project.

(k) *Resource Report 9—Alternatives.* This report must describe alternatives to the project and compare the environmental impacts of such alternatives to those of the proposal. It must discuss technological and procedural constraints, costs, and benefits of each alternative. The potential for each alternative to meet project purposes and the environmental consequences of each alternative must be discussed. Resource Report 9 must:

(1) Discuss the "no action" alternative and other alternatives given serious consideration to achieve the proposed objectives.

(2) Provide an analysis of the relative environmental benefits and impacts of each such alternative, including but not limited to:

(i) For alternatives considered in the initial screening for the project but eliminated, describe the environmental characteristics of each alternative, and the reasons for rejecting it. Where applicable, identify the location of such alternatives on maps of sufficient scale to depict their location and relationship to the proposed action, and the relationship of the transmission facilities to existing rights-of-way; and

(ii) For alternatives that were given more in-depth consideration, describe the environmental characteristics of each alternative and the reasons for rejecting it. Provide comparative tables showing the differences in environmental characteristics for the alternative and proposed action. The location, where applicable, of any alternatives in this paragraph shall be provided on maps equivalent to those required in paragraph (c)(2) of this section.

(1) *Resource Report 10—Reliability and Safety.* This report must address the potential hazard to the public from facility components resulting from accidents or natural catastrophes, how these events will affect reliability, and what procedures and design features have been used to reduce potential hazards. Resource Report 10 must:

(1) Describe measures proposed to protect the public from failure of the proposed facilities (including coordination with local agencies).

(2) Discuss hazards, the environmental impact, and service interruptions which could reasonably ensue from failure of the proposed facilities.

(3) Discuss design and operational measures to avoid or reduce risk.

(4) Discuss contingency plans for maintaining service or reducing downtime.

(5) Describe measures used to exclude the public from hazardous areas. Discuss measures used to minimize problems arising from malfunctions and accidents (with estimates of probability of occurrence) and identify standard procedures for protecting services and public safety during maintenance and breakdowns.

(6) Provide a description of the electromagnetic fields to be generated by the proposed transmission lines, including their strength and extent. Provide a depiction of the expected field compared to distance horizontally along the right-of-way under the conductors, and perpendicular to the centerline of the right-of-way laterally.

(7) Discuss the potential for acoustic and electrical noise from electric and magnetic fields, including shadowing and reradiation, as they may affect health or communication systems along the transmission right-of-way. Indicate the noise level generated by the line in both dB and dBA scales and compare this to any known noise ordinances for the zoning districts through which the transmission line will pass.

(8) Discuss the potential for induced or conducted currents along the transmission right-of-way from electric and magnetic fields.

(m) *Resource Report 11—Design and Engineering.* This report consists of general design and engineering drawings of the principal project facilities described under Resource Report 1—General project description. If the version of this report submitted with the application is preliminary in nature, applicant must state that in the application. The drawings must conform to the specifications determined in the initial consultation meeting required by §50.5(b) of this chapter.

(1) The drawings must show all major project structures in sufficient detail to provide a full understanding of the project including:

- (i) Plans (overhead view);
- (ii) Elevations (front view);
- (iii) Profiles (side view); and
- (iv) Sections.

(2) The applicant may submit preliminary design drawings with the pre-filing documents or application. The final design drawings may be submitted during the construction permit process or after the Commission issues a permit and must show the precise plans and specifications for proposed structures. If a permit is granted on the basis of preliminary designs, the applicant must submit final design drawings for written approval by the Director of the Office of Energy

Project's prior to commencement of any construction of the project.

(3) *Supporting design report.* The applicant must submit, at a minimum, the following supporting information to demonstrate that existing and proposed structures are safe and adequate to fulfill their stated functions and must submit such information in a separate report at the time the application is filed:

(i) An assessment of the suitability of the transmission line towers and appurtenant structures locations based on geological and subsurface investigations, including investigations of soils and rock borings and tests for the evaluation of all foundations and construction materials sufficient to determine the location and type of transmission line tower or appurtenant structures suitable for the site;

(ii) Copies of boring logs, geology reports, and laboratory test reports;

(iii) An identification of all borrow areas and quarry sites and an estimate of required quantities of suitable construction material;

(iv) Stability and stress analyses for all major transmission structures and conductors under all probable loading conditions, including seismic, wind, and ice loading, as appropriate, in sufficient detail to permit independent staff evaluation.

(4) The applicant must submit two copies of the supporting design report described in paragraph (m)(3) of this section at the time preliminary and final design drawings are filed. If the report contains preliminary drawings, it must be designated a "Preliminary Supporting Design Report."

[Order 689, 71 FR 69471, Dec. 1, 2006]

APPENDIX A TO PART 380—MINIMUM FILING REQUIREMENTS FOR ENVIRONMENTAL REPORTS UNDER THE NATURAL GAS ACT

ENVIRONMENTAL REPORTS UNDER THE NATURAL GAS ACT.

Resource Report 1—General Project Description

1. Provide a detailed description and location map of the project facilities. (§380.12(c)(1)).

2. Describe any nonjurisdictional facilities that would be built in association with the project. (§380.12(c)(2)).