



# U.S. NUCLEAR REGULATORY COMMISSION

## ENVIRONMENTAL STANDARD REVIEW PLAN

### 4.4.3 ENVIRONMENTAL JUSTICE IMPACTS

#### REVIEW RESPONSIBILITIES

Primary— Organization responsible for the review of socioeconomic information

Secondary— None

#### I. AREAS OF REVIEW

This environmental standard review plan (ESRP) directs the staff's review of environmental impacts on minority and low-income populations by construction to the extent that such information can serve as the basis of an environmental impact statement (EIS) section on environmental justice.

The scope of the review directed by this plan should include consideration and discussion of the methods that are used to identify and quantify impacts on minority and low-income populations, the location and significance of any environmental impacts during construction on populations that are particularly sensitive, and any additional information pertaining to mitigation. The descriptions to be provided by this review should be of sufficient detail to support staff assessment and evaluation of specific impacts, in particular whether these impacts are likely to be adverse and disproportionate.

#### Review Interfaces

The reviewer for this ESRP should obtain input from or provide input to the reviewers for the following ESRPs, as indicated:

- ESRP 2.5.4. Obtain descriptions of the minority and low-income populations that could be disproportionately impacted by proposed project construction activities and the mechanisms (including socioeconomic) by which disproportionate harm could occur.
- ESRPs 4.1.1 through 4.5. Obtain descriptions of potential environmental (including socioeconomic [CEQ 1997]) impacts of construction that may have a bearing on environmental justice.

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NUREG-1555

#### **USNRC ENVIRONMENTAL STANDARD REVIEW PLAN**

This Environmental Standard Review Plan, NUREG-1555, has been prepared to establish guidance for the U.S. Nuclear Regulatory Commission staff responsible for environmental reviews for nuclear power plants. The Environmental Standard Review Plan is not a substitute for the NRC's regulations, and compliance with it is not required.

These documents are made available to the public as part of the Commission's policy to inform the nuclear industry and the general public of regulatory procedures and policies. Individual sections of NUREG-1555 will be revised periodically, as appropriate, to accommodate comments and to reflect new information and experience. Comments and suggestions for improvement will be considered and should be sent to the U.S. Nuclear Regulatory Commission, Office of New Reactors, Washington, D.C. 20555-0001.

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- ESRP 4.6. Provide descriptions of potential environmental (including socioeconomic [CEQ 1997]) impacts of construction that may have a bearing on environmental justice.
- ESRP 4.7. Provide descriptions of cumulative environmental impacts (including socioeconomic impacts and an evaluation of SMALL, MODERATE, or LARGE) that disproportionately affect minority and low-income populations during construction.
- ESRPs 9.3 and 9.4.1 through 9.4.3. Provide descriptions of any potential disproportionate impacts on minority and low-income populations to be compared with those at alternative sites. If the reviewer concludes that construction will result in disproportionate adverse impacts on minority or low-income populations that should be avoided, then request that the reviewers for ESRPs 9.3 and 9.4.1-9.4.3 consider alternative plant designs, locations, or construction activities that would avoid the impacts.

#### Data and Information Needs

The type of data and information needed will be affected by site- and station-specific factors, and the degree of detail should be modified according to the anticipated magnitude of the potential impacts. The data requirements analysis should generally be the same for any type of environmental review that requires the preparation of an environmental report (ER). The following data or information should be obtained:

- pathways where any environmental (including socioeconomic) impact during construction may interact with cultural, economic, or human health circumstances that may result in disproportionate environmental impacts on minority and low-income populations
- an assessment (qualitative or quantitative, as appropriate) of the degree to which minority or low-income populations would disproportionately experience adverse human health or environmental (including socioeconomic) impacts during construction as compared with the general population of the impacted area.
- an assessment (qualitative or quantitative, as appropriate) of the significance or potential significance of such environmental impacts on minority and low-income populations
- an assessment of the degree to which minority and low-income populations would disproportionately receive any benefits compared with the general population
- a discussion of any mitigative measures for which credit is being taken to reduce environmental justice concerns
- when alternative sites are being evaluated, similar reviews should be available for each site.

Supplemental data provided by other individuals and organizations may be useful in determining the completeness of the applicant's identification of minority and low-income populations.

## II. ACCEPTANCE CRITERIA

The acceptance criteria for environmental justice impacts during construction are based on the following:

- 10 CFR 51.45(c) with respect to analysis of socioeconomic data
- NRC specific policy on treatment of environmental justice matters can be found in “Policy Statement on the Treatment of Environmental Justice Matters in NRC Regulatory and Licensing Actions.” *Federal Register*, 69 FR 52040, August 24, 2004.

Regulatory positions and specific criteria necessary to meet the regulations identified above are as follows:

- the Council on Environmental Quality (CEQ) guidance for addressing environmental justice (CEQ 1997) is not binding, but should be followed as appropriate.
- the guidelines for specific information requirements for environmental justice determinations, which are described in *Procedural Guidance for Preparing Environmental Assessments and Considering Environmental Issues*, Appendix D to *Office of Nuclear Reactor Regulation (NRR) Office Instruction LIC-203*, NRC Office of Nuclear Reactor Regulation, Washington, D.C. (NRC 2004). NRR Office Office Instruction LIC-203 is revised periodically. Obtain the latest revision for current guidance. Information submitted by the applicant is adequate and meets the 10 CFR 51.45 requirements and NRR guidelines if it permits the identification of potential disproportionate and negative impacts on minority and low-income populations as required in that guidance.
- Regulatory Guide 4.7, Rev. 2., *General Site Suitability Criteria for Nuclear Power Stations* (NRC 1998a), which specifies the avoidance of disproportionately high and adverse impacts on minority and low-income populations during plant siting.

### Technical Rationale

The technical rationale for evaluating the applicant’s potential environmental justice impacts is discussed in the following paragraphs:

10 CFR 51.45(c) requires applicants to provide the information that the Commission needs in its development of independent analysis of environmental impacts. The NRC is committed to the general goals of Executive Order 12898 by striving to address environmental justice issues in the context of the agency’s NEPA responsibilities.

The purpose of the environmental justice assessment is to identify and address, as appropriate, disproportionately high and adverse human health and environmental effects on minority and low-income populations. These populations may be present in scattered small groups or may have unusual customs, practices, or dependencies on specific resources that would be overlooked in a reconnaissance level analysis that focuses on the majority population. As a result, it is necessary to evaluate impacts for each such population and more carefully examine unusual environmental

pathways (including socioeconomic pathways) that could result in disproportionately high and adverse impacts on them.<sup>(a)</sup>

### III. REVIEW PROCEDURES

To determine which impacts are likely to be of concern and, therefore, what environmental impact areas should be discussed, the reviewer should take the following steps:

- (1) Coordinate with the reviewers of ESRP 2.5.4 and ESRPs 4.1 through 4.6 to ensure that the appropriate impact areas are being discussed.
- (2) Examine the record of the National Environmental Policy Act (NEPA) public scoping process to determine whether appropriate environmental impact areas are being discussed with respect to environmental justice. ESRP 2.5.4 in particular discusses specific efforts that may have been made to interview representatives of minority communities and other regional contacts (such as social service agencies) having specific knowledge about the locations, resource dependencies, customs and practices, and pre-existing health and socioeconomic conditions of minority and low-income populations in the region. The results of this additional outreach, if any, should also be evaluated.
- (3) Contact the cognizant personnel of each affected State for sites located on or near State boundaries, or where transmission line routes, access corridors, or offsite areas pass through more than one State.
- (4) Analyze the potential impacts on minority and low-income populations.
  - (a) Briefly describe pathways by which any environmental impact during construction may interact with cultural, economic, or human health circumstances that may result in disproportionate environmental impacts on minority and low-income populations. If there are none, so state, and provide a brief discussion of why the potential pathways do not result in impact.
  - (b) Assess (qualitative or quantitative, as appropriate) the degree to which each minority or low-income population is disproportionately receiving adverse human health or environmental (including socioeconomic) impacts during construction as compared with impacts on the general population in the impacted area.
  - (c) Assess the degree to which each minority and low-income population is disproportionately receiving any benefits compared with the general population.
  - (d) Assess (qualitatively or quantitatively, as appropriate) the significance or potential significance of such environmental impacts on each minority and low-income population. Significance is determined by considering the disproportionate exposure, multiple-hazard, and cumulative hazard conditions outlined in the Environmental Justice: Guidance Under the National Environmental Policy Act (CEQ 1997).

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(a) An example of unusual practices or pathways can be found in NRC (1998b), where proposed relocation of a road between two settlements disproportionately and adversely affected minority and low-income individuals, who ordinarily walked between the two settlements.

- (e) Discuss any mitigative measures for which credit is being taken to reduce environmental justice concerns.
- (f) When alternative sites are being evaluated, similar reviews should be conducted for each site, using reconnaissance-level data (see ESRP 9.3).

#### IV. EVALUATION FINDINGS

The depth and extent of the input to the EIS will be governed by the extent and significance of the identified minority and low-income populations and by the nature and magnitude of the expected impacts of construction.

Data provided by the applicant should be considered adequate if

- the ER clearly describes outreach efforts undertaken to identify minority and low-income populations and the results of those efforts in identifying such groups, their pre-existing cultural, economic, and health conditions and unique lifestyle and practices that could result in disproportionate impacts
- the ER clearly describes the degree to which each minority or low-income population is disproportionately prone to adverse human health or environmental impacts during construction as compared with the general population.
- the data are consistent with data obtained from other sources, when available. In addition, a similar assessment is made in the ER for each of the alternative sites in comparison with the general population of the impacted area for the alternative site.
- when applicable, the ER clearly describes the significance or potential significance of such environmental impacts on each minority and low-income population
- when applicable, the ER clearly describes the degree to which each minority or low-income population is disproportionately prone to any benefits during construction in comparison to the general population
- when applicable, the ER clearly describes any mitigative measures for which consideration is made to reduce environmental justice concerns
- the ER clearly describes the pre-existing social, economic, and health conditions and unique lifestyle and practices of minority and low-income communities (for example, subsistence activities or dependence on specific water supplies) that could result in disproportionate impacts from plant construction and site operations.

The following information should be included in the EIS:

- a statement (qualitative or quantitative, as appropriate) about the degree to which minority or low-income populations would disproportionately experience adverse human health or environmental

impacts during construction as compared with the general population, together with the significance of these impacts

- a discussion of the reasoning (e.g., based on locations of minority and low-income populations and the environmental pathways described in ESRP 2.5.4) behind the estimated degree of impact
- a discussion of any mitigative measures for which credit is being taken to reduce environmental justice concerns.

The reviewer should verify that sufficient information is available to meet the relevant requirements and that the evaluation supports statements of the following type to be included in the staff's EIS:

Based on its review of the information provided by the applicant, the staff finds that no minority or low-income group will experience disproportionately high and adverse environmental impacts as a result of activities during construction.

If the reviewer determines that there will be a disproportionately high and adverse environmental impact on some minority or low-income population as a result of activities during construction, an input to the EIS should be prepared that describes the impact(s) and the staff evaluation of alternatives that would mitigate or avoid the impact(s).

## V. IMPLEMENTATION

The method described in this ESRP will be used by the staff in evaluating conformance with NRC requirements, except in those cases in which the applicant proposes an acceptable alternative for complying with specified portions of the requirements.

## VI. REFERENCES

10 CFR 51.45, "Environmental reports."

69 FR 52040. August 24, 2004. "Policy Statement on the Treatment of Environmental Justice Matters in NRC Regulatory and Licensing Actions." Federal Register.

Council on Environmental Quality (CEQ). 1997. *Environmental Justice: Guidance Under the National Environmental Policy Act*. CEQ Guidance, December 10, 1997, Washington, D.C.

Executive Order 12898, "Federal Actions to Address Environmental Justice in Minority and Low-Income Populations." 59 *Federal Register* 7629-7633 (1994).

U.S. Nuclear Regulatory Commission (NRC). 1998a. *General Site Suitability Criteria for Nuclear Power Stations*. Second Proposal. Regulatory Guide 4.7, Rev. 2, Washington, D.C.

U.S. Nuclear Regulatory Commission (NRC). 1998b. In the Matter of Louisiana Energy Service Claiborne Enrichment Center. Docket 70-3070-ML. CLI-98-3. Washington, D.C. April 3, 1998.

U.S. Nuclear Regulatory Commission (NRC). 2004. *Procedural Guidance for Preparing Environmental Assessments and Considering Environmental Issues*. Office of Nuclear Reactor Regulation Instruction Change Notice, LIC-203, Revision 1, May 24, 2004, Appendix D – Environmental Justice Guidance and Flow Chart. Washington D.C.

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**PAPERWORK REDUCTION ACT STATEMENT**

The information collections contained in the Environmental Standard Review Plan are covered by the requirements of 10 CFR Part 51, and were approved by the Office of Management and Budget, approval number 3150-0021.

**PUBLIC PROTECTION NOTIFICATION**

The NRC may not conduct or sponsor, and a person is not required to respond to, a request for information or an information collection requirement unless the requesting document displays a currently valid OMB control number.

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