

Guidelines for Assessing Impacts of Proposed Electric Transmission Lines and Associated Facilities on Historic Resources in the Commonwealth of Virginia

This guidance has been developed by the Department of Historic Resources (DHR) to assist the State Corporation Commission (SCC) and their applicants in developing transmission line projects that minimize impacts to historic resources. The goals of this analysis are to (1) develop project alternatives that are sensitive to historic resources, (2) generate meaningful data on the potential effects of proposed alternatives on known historic resources, (3) determine the impact of selected alternatives on all resources eligible for listing in the Virginia Landmarks Register and National Register of Historic Places (National Register), and (4) develop recommendations on ways to minimize effects to historic resources.

This guidance is intended as technical assistance to the SCC and their applicants. Completion of these studies may not fully satisfy the requirements set forth by any Federal agency with responsibilities under Section 106 of the National Historic Preservation Act (NHPA) or other Federal law or regulation. It is critical that the project proponent consult directly with all relevant Federal agencies as necessary in the completion of these studies.

I. Pre-Application Analysis

Analysis conducted by the project proponent during the preparation of an application to the SCC is intended to guide the design of the project and aid in the selection of a preferred alternative. By determining the potential impact of the project on recorded historic resources during the application process, the applicant and the SCC may make informed decisions regarding the relative impacts of project alternatives. This pre-application analysis is not intended as a substitute for comprehensive historic resources survey. Full archaeological and architectural surveys are recommended for all approved alternatives. See Section II of this document for more information on recommended comprehensive surveys.

A. Establish a study area for each alternative under consideration. Study areas are tiered to ensure consideration of the Commonwealth's most important resources. The table below shows the four tiers of the study area and the resources that should be considered in each tier.

Radial Buffer (in miles)	Considered Resources
1.5	<i>National Historic Landmarks</i>
1.0	Above resources, and: <i>National Register Properties</i> (listed) <i>Battlefields</i> <i>Historic Landscapes</i> (e.g. Rural HD)
0.5	Above resources, and: <i>National Register-eligible</i> (as determined by DHR)
0.0 (within ROW)	Above resources, and: <i>Archaeological Sites</i>

If the proposed new right-of-way (ROW) exceeds 500 feet in width, the radial buffer should be drawn from the edges of the ROW and not the center line. The study area may be refined through the use of GIS-based spatial analysis of topography and vegetation to exclude areas that would not have a line-of-sight to proposed facilities. Any areas excluded from analysis need to be fully documented and justified in the resulting report. Since vegetative cover is dynamic, meta-data to include date of origin should be provided as part of a discussion of methodology. Areas containing National Historic Landmarks cannot be excluded from analysis.

B. Gather information on known resources. Once appropriate study areas have been established, data on recorded historic resources should be obtained from DHR. Data must be current to within six months of analysis. Affected cities, counties, and localities should be consulted during this stage of the process to ensure consideration of those resources significant at a local level. DHR also recommends gathering information and comments from other agencies and organizations, such as the National Park Service and local historical societies.

C. Assess impacts on known resources. A qualified cultural resources consultant in the appropriate discipline should perform an assessment of impact for each historic resource present within the appropriate tier of the study area provided it is not otherwise excluded from analysis. The analysis and report should include the following:

1. Executive Summary of impacts assessment. Narrative should be accompanied by a data table showing the resource number, name, and potential impact.
2. Statement of scope, methodology, fieldwork (dates, staff).
3. Project maps showing all center lines, radial buffers, and recorded resources subject to analysis. Any spatial analysis conducted that results in excluded areas should be shown on separate project maps. All submitted mapping should be at a legible scale.
4. Discussion of any recorded archaeological sites located within the proposed right of way, to include statements on previous investigations, National Register-eligibility determinations, and potential impacts.
5. Ground photography for each property including, at a minimum, photographs of the main elevation of the primary resource and from the resource towards the project. Be sure to consider the views from the entire property, including secondary resources and historic landscape features, not just the primary resource. The National Register nomination and/or other archival material should be consulted to determine if specific viewsheds are noted as significant. All efforts should be made to accurately represent the viewshed. Panoramic photos are most useful in this analysis.
6. Aerial photograph for each property showing the boundaries of the property, location of primary and secondary resources, a key to the ground photography, and depiction of the proposed line and distance from the resource. The date of the aerial photograph should be included.

7. Photosimulation of the proposed transmission line and towers from significant points on the property. If there are existing towers in or adjacent to the proposed ROW and the proposed towers are the same or lesser height than the existing, no photosimulation is necessary. If new towers will be substantially taller than the existing towers (>10% or 20' increase, whichever is greater), photosimulation is warranted. The means of producing accurate photosimulations is left to the discretion of the consultant, but should be thoroughly discussed as part of the methodology. If a property is not excluded from analysis, but after field assessment, is determined not to have a view of the proposed project, the estimated location and height of the proposed towers should be represented on ground photography.

8. Elevation drawing of proposed and existing (if applicable) tower designs and ROW configuration corresponding to the viewshed of each property.

9. Narrative description of the resource, environmental conditions, and any potential effects from the proposed line. This analysis should consider whether the historic setting is a character defining feature of the resource. The qualified professional conducting the analysis of impact should develop a meaningful hierarchy to characterize the effects to each property.

II. Survey of Approved Alternatives

Once an alternative is approved by the SCC, DHR recommends that full archaeological and architectural surveys be performed to determine the effect of the project on all historic resources listed in or eligible for listing in the National Register. This process involves the recordation of all archaeological sites and structures greater than 50 years of age, the evaluation of those resources for listing in the National Register, determining the degree of impact of the project on eligible resources, and developing a plan to avoid, minimize, or mitigate any negative impacts. Comments received from the public or other stakeholder regarding impacts to specific historic resources should be addressed as part of this survey and assessment process.

A. Defining the survey area and scope of the survey. The survey area for any approved alternative should take into consideration the types of resources that may be affected and the nature of expected impacts. Of special concern are effects to the historic setting and viewshed of significant historic resources. A difference can be drawn between the potential impact of a new line built on raw land and a new line constructed within existing ROW. This guidance takes into consideration these differences. For approved projects, the survey area and scope are defined as following:

1. Archaeological survey should be performed on all areas that will be directly impacted by construction, including proposed ROW, tower and associated facility locations, staging areas, and access roads. If the ROW can be cleared without ground disturbance, such as stump grubbing, comprehensive archaeological survey of the entire ROW will not be necessary. A ROW clearing plan must be submitted for review prior to DHR approval of this methodology. Survey of tower locations would still need to be performed.

2. For all portions of the proposed line to be constructed within existing ROW, where no new areas of vegetation will be cleared outside of the existing maintained ROW and

there will be no substantial increase in tower height (<10% or 20' increase, whichever is greater), the architectural survey will consist of all resources that are adjacent to the existing ROW.

3. For all portions of the proposed line to be constructed within existing ROW and where new areas of vegetation will be cleared outside the existing maintained ROW, the architectural survey will consist of all resources that are within 0.5 miles on either side of the existing ROW.

4. For all portions of the proposed line to be constructed within new ROW, the architectural survey will consist of all resources that are within 0.5 miles on either side of the existing ROW.

B. Evaluating resources. Following the survey, certain resources may be found to be potentially eligible for listing in the National Register. These resources should be evaluated through Phase II archaeological investigations or intensive level architectural inventory. These evaluations should conform to DHR's *Survey Guidelines* (rev. 2003) and result in a recommendation on eligibility of the resources.

C. Assessing impacts to eligible resources. For those resources identified in the survey that are found to be eligible for listing in the National Register, the impact of the proposed project should be assessed using the procedure presented in Section I.C of this document.

D. Minimizing and mitigating negative impacts. If it is determined by the project proponent in consultation with DHR that the proposed project will significantly and negatively impact a historic resource listed in or eligible for listing in the National Register, the project proponent should propose a means for avoiding or minimizing the effect. If the impact can not be reduced to such a degree as to not cause a significant impact to historic resources, a means to otherwise mitigate the effect must be developed. Minimization and mitigation plans should be developed in consultation with DHR, the affected property owner, and any other interested party. If the project is subject to Section 106 of the NHPA, a Memorandum of Agreement must be executed between the Federal agency, DHR, the project proponent, and any consulting parties to address the adverse effects of the project.

E. Survey personnel and reporting. All survey, evaluation, and assessment must be conducted by or under the direct supervision of a qualified professional in the appropriate field meeting the Secretary of the Interior's *Professional Qualification Standards* (36 CFR 61) in accordance with the Secretary of the Interior's *Archeology and Historic Preservation: Secretary of the Interior's Standards and Guidelines* (48 FR 44716-42) and DHR's *Survey Guidelines* (rev. 2003). Two copies any report should be submitted to DHR for review and approval prior to any ground disturbance.