



STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS

Department of Administration
STATEWIDE PLANNING PROGRAM
One Capitol Hill
Providence, RI 02908 - 5872

February 7, 2013

Nick Ucci
Coordinator, RI Energy Facility Siting Board
89 Jefferson Boulevard
Warwick, Rhode Island 02888

Dear Mr. Ucci:

Please be advised that earlier today the State Planning Council formally adopted the attached Advisory Opinion regarding the socioeconomic impact and State Guide Plan consistency of the proposed Interstate Reliability Project (EFSB Docket No. SB-2012-01).

Please do not hesitate to contact me should you or the members of the Energy Facilities Siting Board have any questions relative to the pertinent findings or recommendation.

Sincerely,

A handwritten signature in black ink, appearing to read "Jared L. Rhodes II".

Jared L. Rhodes II
Chief

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Socioeconomic Impact and State Guide Plan Consistency Opinion

on the:

Interstate Reliability Project

Prepared for the:

Energy Facility Siting Board
Docket No. SB-2012-01
Project No. 4360

By the:

Statewide Planning Program
Rhode Island Department of Administration
One Capitol Hill
Providence, RI, 02908

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PART ONE: INTRODUCTION

This report was prepared by the Statewide Planning Program (the Program) in response to an Energy Facilities Siting Board (the Board) request for an advisory opinion on the socioeconomic impact and State Guide Plan consistency of Narragansett Electric / National Grid's proposed Interstate Reliability Project (EFSB Docket No. SB-2012-01). It first provides background on the Energy Facilities Siting Act and the roles of the Board and the Program. Next it provides an overview of the project including purpose and need, proposed improvements, estimated costs, and alternatives considered. Part Two presents the results of the Program's socioeconomic impact assessment. Part Three presents State Guide Plan consistency assessments and Part Four concludes with findings and recommendations that constitute the Program's advisory opinion.

The Board has also requested advisory opinions on this matter from the Public Utilities Commission regarding the need and cost justification of the project and from the affected municipalities regarding its impact on their respective communities. A series of Public Hearings will also be conducted by the Board to ensure significant opportunity for others to comment.

A. Energy Facility Siting Act

The Energy Facility Siting Act (Act), enacted in 1986 (Rhode Island General Laws § 42-98-1 *et seq.*), establishes the Energy Facility Siting Board. All state and local governmental regulatory authority for the siting, construction, alteration, operation, and licensing of major energy facilities are consolidated within the Board. Exceptions to the Board's authority include permits or licenses issued by the Rhode Island Department of Environmental Management and Coastal Resources Management Council. In the course of making its decision on an application, the Board is entitled to assistance from "agencies of state government and political subdivisions of the state".

The Board consists of three members, the Chair of the Public Utilities Commission, the Director of the Department of Environmental Management, and the Associate Director of the Department of Administration's Division of Planning.

B. Statewide Planning Program Responsibilities

Section 42-98-9(e) of the Act assigns the Statewide Planning Program the responsibility to:

"[C]onduct an investigation and render an advisory opinion as to the socioeconomic impact of the proposed facility and its construction and consistency with the state guide plan."

In its Preliminary Decision and Order for this project, the Board has instructed the Program to include in its socioeconomic impact analysis how the project would benefit:

- the economy
- employment
- tax revenues
- reliability

Although not specified in this project request, the Board has in previous project reviews requested that socioeconomic impact consider land use.

C. Project Summary

Purpose and Need

The Interstate Reliability Project (the Project) is one of four interrelated projects to improve the reliability of the existing electric transmission system throughout Southern New England. Two of these projects, the Rhode Island Reliability Project and the Southern Rhode Island Transmission Project, were previously reviewed by the Statewide Planning Program. Both were found to have positive socioeconomic benefits and to be consistent with the State Guide Plan. The purpose of these interrelated projects is to expand and reinforce the interconnected transmission systems in Rhode Island, Massachusetts, and Connecticut so as to improve the system's reliability under adverse conditions.

In 2008, ISO-New England (ISO-NE), National Grid, and Northeast Utilities undertook an extensive review of the transmission system in New England. The resulting studies, "Southern New England Transmission Reliability, Report 1, Needs Analysis" (January 2008) and "New England East-West Solutions, Report 2, Options Analysis" (June 2008) determined that the transmission system supplying large portions of Rhode Island was reaching the limits of its ability to serve the load. This assessment was reconfirmed in the "Interstate Reliability Project Updated Solutions Study Report" (April 2011). Improvements to the transmission system are needed to comply with the national and regional reliability standards and criteria required by the North American Electric Reliability Corporation (NERC), the Northeast Power Coordinating Council, Inc. (NPCC) and ISO-NE. All National Grid transmission facilities in New England are designed in accordance with the NERC Reliability standards, NPCC criteria, and ISO-NE planning procedures.

In essence, these studies found that under certain conditions for which the system must be planned, power generated in the west and needed in the east - or vice versa - cannot be reliably delivered. Only three 345 kV paths connect eastern and western New England power grids. Depending on system conditions, the loss of one of these paths can have a significant impact on the loading of some of the other lines of the transmission system. If two out of the three paths are lost, the remaining 345 kV path and the underlying 115 kV network can experience large power flows resulting in numerous thermal overloads and voltage issues. Rhode Island in particular showed severe overloads on its 115 kV system during certain events.

The purpose of this project therefore, is to improve the reliability of east-west electrical transmission through Massachusetts, Rhode Island, and Connecticut by 1) increasing the loading capability of this transmission corridor by adding a new 345 kV line; 2) improving an existing 115kV line; and 3) rebuilding an existing switching station to higher standards. This would result in increasing the system's ability to maintain acceptable voltages under a variety of conditions.

In summary, the Project is a regional reliability project that:

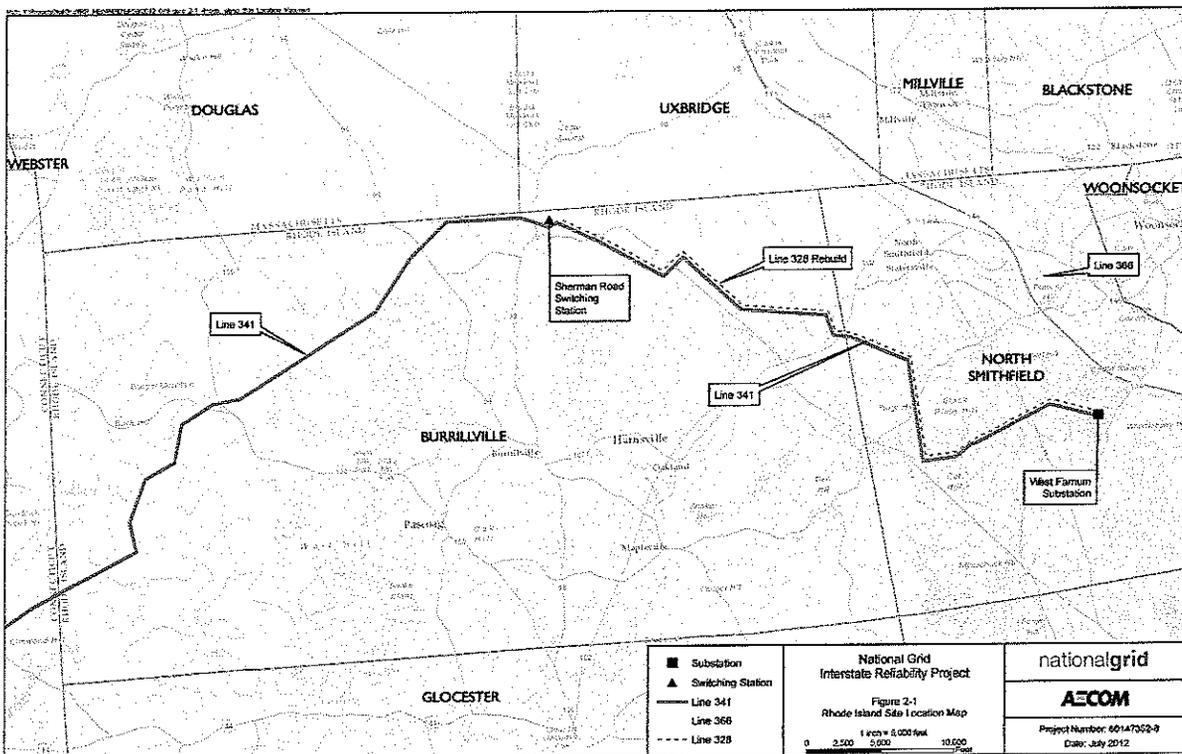
- Addresses overloads and voltage performance issues on the regional 345 kV and 115 kV transmission systems;
- Provides Rhode Island with critical additional interconnections to the 345 kV transmission system;

- Increases New England East-West and West-East power transfer capabilities; and
- Increases Connecticut's power import capabilities.

Project Improvements and Costs

National Grid is proposing a number of electric transmission system improvements to expand and significantly reinforce the existing transmission system in Rhode Island, Massachusetts, and Connecticut. The Rhode Island portion of the Project runs through North Smithfield and Burrillville (see Figure 1).

Figure 1 – Project Overview Map



The estimated cost of the Rhode Island portion of the Project is \$180,800,000; estimated costs for individual segments are also provided below.

- The construction of approximately 4.8 miles of a new 345 kV transmission line (the 366 Line) on existing rights-of-way from the Massachusetts/Rhode Island border in North Smithfield to the West Farnum Substation in North Smithfield (\$26.8M). This will also involve removing existing 69 kV towers to accommodate the construction of the 366 Line (\$0.9M);
- The construction of approximately 17.7 miles of a new 345 kV transmission line (the 341 Line) on existing rights-of-way from the West Farnum Substation, past the Sherman Road Switching Station, to the Rhode Island/Connecticut border in Burrillville. This will also involve replacing and/or modifying a number of existing structures on the 115

kV transmission line (B-23 Line) to accommodate the construction of the 341 Line. (\$74.9M);

In addition to new construction, the Project will:

- Reconstruct and reconductor approximately 9.2 miles of an existing 345 kV transmission line (the 328 Line) from the West Farnum Substation in North Smithfield to the Sherman Road Switching Station in Burrillville (\$41.6M);
- Retire the existing Sherman Road Switching Station and construct a new 345 kV switching station with Air Insulated Switchgear, a new control building (45 feet wide and 90 feet long), and the construction of the two new 345 kV bays on the same site (\$27.6M);
- Reconstruct and realign approximately 0.25 miles of the existing 345 kV transmission line (3361 Line) from the Sherman Road Switching Station in Burrillville to the NSTAR Electric Co. segment of the 3361 Line at the Massachusetts / Rhode Island border (\$3.4M);
- Reconstruct and realign approximately 0.25 miles of the existing 345 kV transmission line (333 Line) from the Sherman Road Switching Station to the Ocean State Power Generating Plant in Burrillville (\$2.9M); and
- Reconstruct and realign approximately 0.25 miles of the existing 345 kV transmission line (347 Line) outside of the Sherman Road Switching Station, and replace and/or modify other 347 Line structures to accommodate the construction of the 341 Line (\$2.7M).

Alternative Options

The Project as described above was selected from a number alternatives. National Grid, Northeast Utilities, and ISO-NE formed a "Working Group" to perform a detailed assessment of alternative transmission solutions. In its assessment, the Working Group considered how well the alternative would fulfill the identified need, how it would impact the natural and human environment, and its cost. Although the following assessment reflects the Working Group's conclusions, we could not find any reason not to accept those conclusions as valid.

No Action Alternative

Under this alternative, no improvements would be made to the existing electric supply and the region would continue to rely upon the existing system configuration. The No Action Alternative was rejected because it would not resolve the regional electric reliability problems that were identified in the 2008 and 2011 ISO-NE studies.

Non-transmission Alternatives

Several non-transmission alternatives were evaluated. Based on the findings of a consultant study by ICF International, National Grid concluded that: 1) the construction of new ISO-NE queued generation would not meet the identified need; 2) aggressive implementation of demand-side management, including energy efficiency, distributed generation, and demand response programs would not meet the identified need; and 3) a combination of central generation and demand-side management would not meet the identified need. Moreover, even if a combination of ISO-NE queued generation and demand-side management could be

developed that was able to meet the identified need, it would be substantially more costly than the Interstate Reliability Project. Therefore, non-transmission alternatives were rejected.

Alternative Interstate Overhead Transmission Options Using Existing National Grid ROWs

In addition to the option that is the subject of this licensing request (Option A-1), four other overhead transmission options were evaluated based on their electrical performance, cost, and impact on the natural and human environment. The "A" series of options (Options A-1 through A-4) are essentially similar but vary in details. For example, Option A-2 would use Gas Insulated Switchgear instead of Air Insulated Switchgear at the Sherman Road Switching Station. Option A-3 would build a new switching station in Uxbridge, MA and Option A-4 would rely on the construction of all new 345kV lines instead of reconductoring/rebuilding of any of the existing 345kV lines. In contrast, Option C-2.1 primarily involves Connecticut and Massachusetts. The only part of this option that pertains to Rhode Island would be a new 345 kV connection between the West Farnum Substation and the Sherman Road Switching Station.

Several of the options ranked closely in terms of electrical performance; however, Option A-1 offers greater opportunities in terms of future system expandability and flexibility. All of the other options were more costly than Option A-1 although three of the other options were within five percent. All of the other options would result in greater detrimental impacts on the natural and human environment than Option A-1.

Alternative Overhead Transmission Options Using Other Existing Developed ROWs

In addition to considering existing National Grid ROWs, other ROWs were considered for their potential to accommodate the project. Examined was the use of public streets and highways, interstate pipeline ROWs, and a Massachusetts "Noticed Alternative" Route. The conclusion was that use of any of the alternative ROWs would result in increased cost and have more significant environmental impacts.

Overhead Configurations within the Existing ROW

Separate from the selection of a transmission line route is selecting the types of structures used to support the transmission line conductors. Considered were H-frame structures, davit arm structures, and double circuit davit arm structures. Each option offers different combinations of advantages and disadvantages but overall, single-circuit H-frame structures for the Project is considered to offer more advantages, create fewer impacts, and is the most cost-effective.

Underground Transmission Alternatives

As with overhead transmission options, underground alternatives were considered in terms of performance (meeting needs and reliability), cost, and impacts on the natural and human environment. POWER Engineers evaluated alternatives to constructing some or all of the proposed Project underground. Underground route alternatives were examined using the existing overhead ROW and the public roadway network. In addition, two different cable technologies were evaluated. The following conclusion was offered:

Both the overhead and underground alternatives would meet the identified needs of the Project and would be expected to have high levels of reliability. The underground alternative has significant operational issues, longer restoration times, and voltage control issues that make it technically inferior to the proposed Project.

Generally, the underground alternative on the public roadway network would have fewer environmental impacts than the preferred overhead alternative. There would, however, be greater temporary impacts to the public during construction. The significantly higher cost (\$105 million) and the operational issues make the underground alternative much less preferred than the overhead alternative.

Sherman Road Switching Station Alternatives

In addition to transmission lines, part of the Project involves improving the existing Sherman Road Switching Station. In addition to the preferred option of removal of the existing switching station and the construction of a new air-insulated switchgear (AIS) switching station to the northwest of the existing yard, two other options were considered. One was to rebuild the existing station in place; the other was to build a new gas-insulated station (GIS). Given considerations of reliability, costs, opportunities for future expansion, and the need to minimize construction time and outage difficulties during construction, the new AIS station was the preferred option.

PART TWO: SOCIOECONOMIC IMPACT ASSESSMENT

A. Reliability

The primary purpose of the Project is to enhance the reliability of the electric power transmission system in the southern New England region. As seen in the Alternatives Options discussion above, the analyses of project alternatives used reliability as one of the key considerations. Overall, the selected option (this Project) was found to provide a level of reliability consistent with NERC Reliability standards, NPCC criteria, and ISO-NE planning procedures.

B. Employment

The exact number of workers by category that are to be employed in the construction of this project are not available at this time. As such, a detailed assessment could not be conducted. However, based on estimates provided by New Energy Alliance, the Project is estimated to create approximately 200 full-time equivalent jobs during the construction period. No new permanent jobs are anticipated as a direct result of the project.

C. Tax Revenues

It can be assumed that the Project will have small positive revenue impact to the State given the number of workers that will be needed to construct the project and the likelihood that a portion of them will pay Rhode Island income taxes and sales taxes. In addition, sales tax would be paid on any equipment and materials purchased in the State. The project will not alter population demographics or existing building stock and therefore will not directly impact public education or safety provision costs. There are no significant anticipated costs to the State involving this project.

The Project will result in a net revenue gain for North Smithfield and Burrillville although the exact amount is not certain. The Project represents a capital investment of approximately \$110 million in Burrillville and \$75 million in North Smithfield. Figures provided by National Grid estimate first year tax revenue to be:

Burrillville	\$1,460,000
North Smithfield	\$2,300,000

In contrast, the Department of Revenue, Division of Municipal Finance consulted with the tax assessors of the two towns and reported a somewhat higher estimate.

Burrillville	\$1,778,700
North Smithfield	\$2,785,250

These estimates are based on the local tangible tax rates as of December 31, 2011 and assume the full value of the investments to be taxable.

Given that all facilities will be constructed in existing ROWs, no property acquisitions are proposed and therefore the existing tax base will not be altered. Municipal tax revenues will commence after the facilities are placed in service, and are anticipated to continue at decreasing

levels throughout the book-life of the facilities. There are no significant anticipated costs to either North Smithfield or Burrillville involving this project.

D. The Economy

In terms of local effects, both positive and negative impacts of the Project must be considered in order to assess the net benefits and costs to the local economy. Positive effects for local business (e.g. restaurants, convenience stores, gas stations, etc.) would occur during the construction period due to the influx of construction workers. In addition, the Project will likely have a positive spin-off effect over a larger region through the purchase of equipment and supplies. However, staff was unable to quantify what the exact value of these spin-offs would be.

A potential negative impact could occur to ratepayers as the project costs are incorporated into utility rates. However, this potential impact is not assessed here because it was not requested of the Program and is within the purview of the Public Utilities Commission's review. There are two additional potential negative impacts that were considered in attempting to determine the net economic costs to the local economy. First is whether the Project will result in the displacement of businesses; it will not. Second is whether the Project will cause local enterprises to lose business due to construction activity, primarily caused by disruption in traffic patterns. This is not anticipated to be the case however due to the temporary nature of the lane restrictions and detours. To address this issue, National Grid and its contractor will coordinate closely with RIDOT, employ local police to direct traffic as needed, and erect appropriate traffic signs in work areas to minimize the impact of the Project. Our assessment is that with the exception of agricultural operations, the proposed route will cross few business areas and normal business operations should not be adversely affected by the Project. Traffic management plans will be developed and implemented to minimize construction disturbances on existing business operations. For non-agricultural businesses, temporary construction impacts, primarily related to construction traffic and equipment operation are expected to be minor and should not disrupt local businesses.

The interaction of the Project with local agricultural operations is somewhat different than with other types of businesses because the Project crosses a number of areas which are presently in agricultural use. While the impact will be slightly greater than on other types of businesses, the impacts are limited to the National Grid ROW. Temporary displacement of some farming activities may occur during the active construction period within the ROW but overall, the impact on agriculture is expected to be minimal.

E. Land Use

The Project is located in one of the most rural areas of the state. The most predominate land use in the Project area is residential. Also of importance is the many recreational areas touched by, or in the vicinity of, the Project. In addition, we consider the visual impact of the Project because of the potential impacts that this factor could have on nearby land uses.

Residential

The most common and sensitive land use surrounding the Project is residential. Given that the Project will occur entirely within an existing ROW, it will not displace any existing residential uses. The Project's impact on residential land uses will be temporary and quite small,

primarily as a result of an increase in noise during construction. The new 345 Kv transmission line in particular can be expected to produce operational noise under certain conditions. These sound levels are projected by National Grid to be consistent with those of other 345 Kv transmission lines already existing within the project area and elsewhere in the State however. In addition and although new transformers are proposed to be installed at the Sherman Road Switching Station, the sound levels to be produced by the new equipment are projected by National Grid to be no louder than the existing equipment.

Recreational

The Project is located in an area of the state that contains a concentration of recreational and conservation lands. Although all work will take place within existing rights-of-way, those ROWs pass through a significant number of recreational and conservation lands. However, no existing recreational uses will be displaced by the Project. Temporary negative impacts relating to construction will occur within existing parks and recreational areas but are expected to be minimal and short-term.

Visual Impacts

The most significant impact of the Project is its visual effect on the landscape. There simply is no way to effectively conceal a 22 mile long string of transmissions lines supported by hundreds of structures and ranging in typical heights from 60 to 125 feet. In evaluating this effect one must first consider the fact that there is an array of electric transmission infrastructure already in place in the Project ROW. Therefore, the assessment should not consider the impact as if the project is for new construction in a virgin area but for the impact of the *increase* in three visual aspects of the Project; namely:

- the height of the transmission lines
- the number of support towers
- the width of the cleared area within the ROW

Height of the transmission lines – The Project will result in an overall increase in the height of the transmission lines, from an existing range of 34 to 105 feet tall to a new range of 60 to 125 feet tall. The typical structure height will be 85 to 90 feet.

Number of support towers – The Project involves both the construction of new support towers and the removal of a small number of older, obsolete towers. The net result will be an increase of approximately 270 in the number of support towers.

Width of the cleared area within the ROW – The Project involves the construction of significant new transmission lines. In order to accommodate these new lines, the cleared portion of the ROW will need to be increased by 75 to 125 feet.

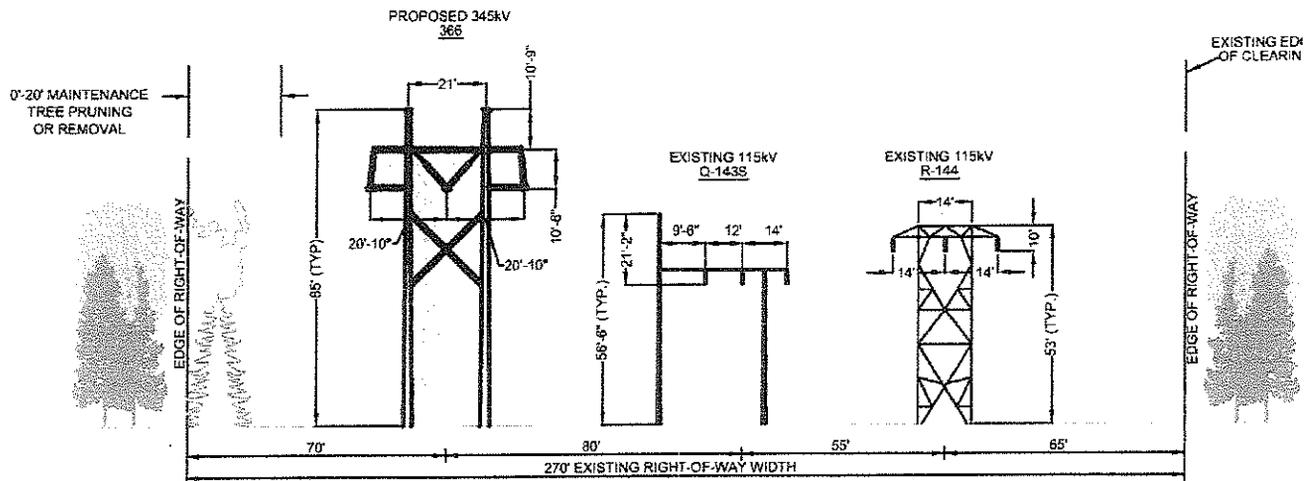
In addition to the new transmission lines, the Project involves the reconstruction of the Sherman Road Switching Station. Although the Switching Station is located on approximately 40.7 acres of National Grid property, its reconstruction will involve the realignment of several existing transmission lines and necessitate tree removal outside the existing cleared width of the ROW.

National Grid had a Visibility and Visual Impact Assessment conducted as part of the environmental analysis. In summary, this analysis found that, “the Project’s visual impact from all viewpoints was mitigated by the presence of the existing transmission line(s) and cleared ROW. [There is] an insignificant to minimal increase in visual contrast for six of the seven selected viewpoints [that were analyzed]. A moderate to appreciable level of contrast was noted for the remaining viewpoint. The most important contributor to contrast for the selected viewpoints was a perceived incompatibility with adjacent land use. Contrast with existing vegetation was also noted due to the proposed structures’ increased contrast in scale, or the removal of trees to accommodate a wider ROW. The bolder appearance of the new structures also contributed to the increase in visual contrast. However, taken together with other existing landscape components, the overall additional contrast created by the new structures was never deemed to be appreciable”.

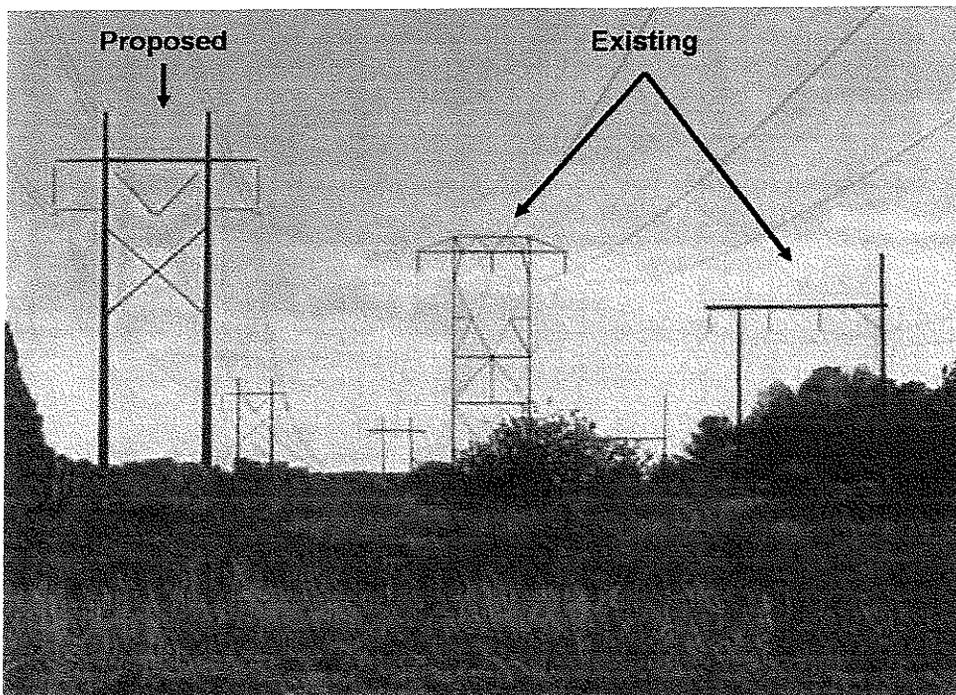
While the overall visual impact of the Project will be relatively small, certain locations will be more noticeably affected than others. Therefore, it is important to note that the Visibility and Visual Impact Assessment included a recommendation that National Grid evaluate the feasibility of screen plantings to mitigate the visual impact of the Project.

Figures 2 through 4 illustrate several examples of before and after visual impacts.

FIGURE 2 - Visual Simulations
Wright's Dairy Farm, North Smithfield (Line 366)

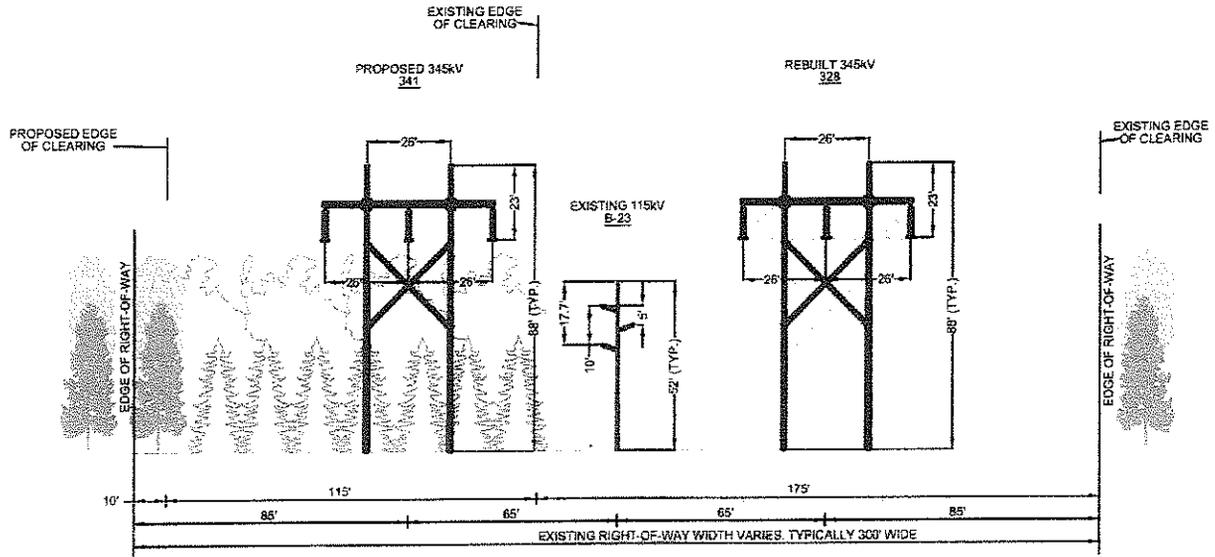


Proposed View



Note: The Statewide Planning Program suspects that the mismatch in alignment, of existing and proposed structures between the two graphics, is due to the perspective from which the photograph was taken. Regardless, the Program feels that the photographic representation provides a valuable comparison between existing and proposed conditions.

FIGURE 3 - Visual Simulations
Intersection of Oxford Road & Pound Hill Road, North Smithfield (Line 341 with Line 328 Rebuild)



Proposed View

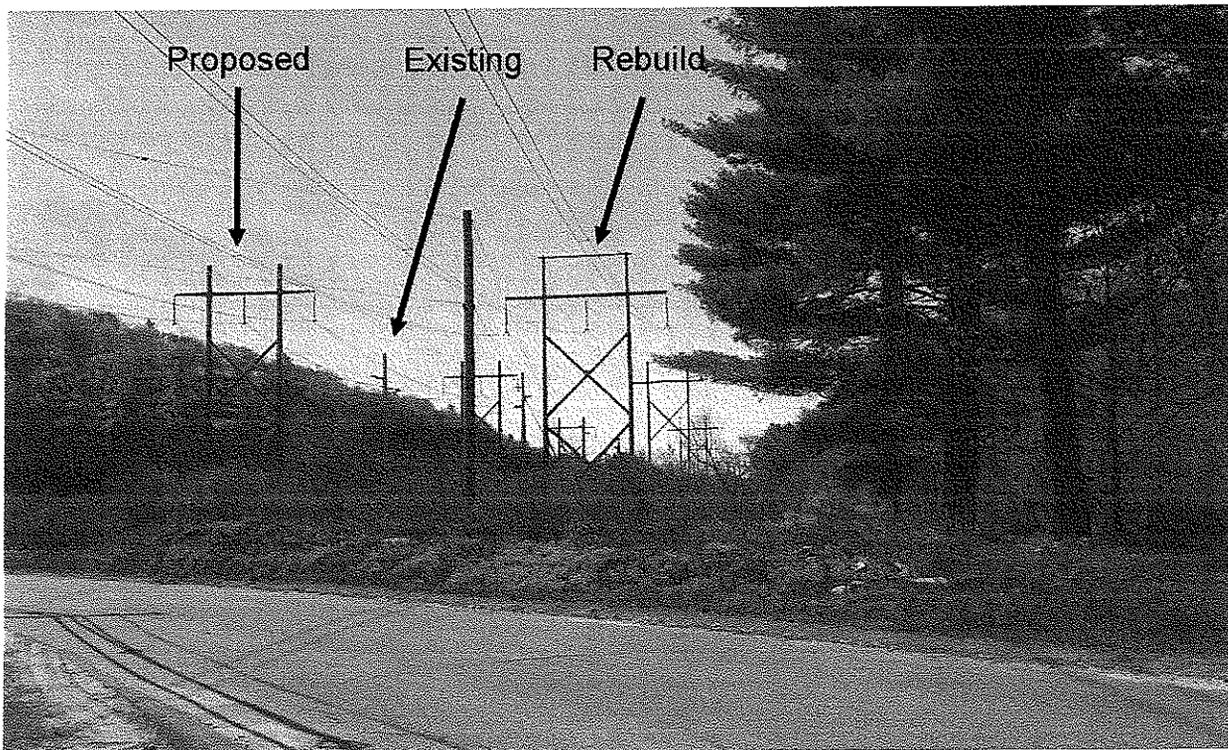
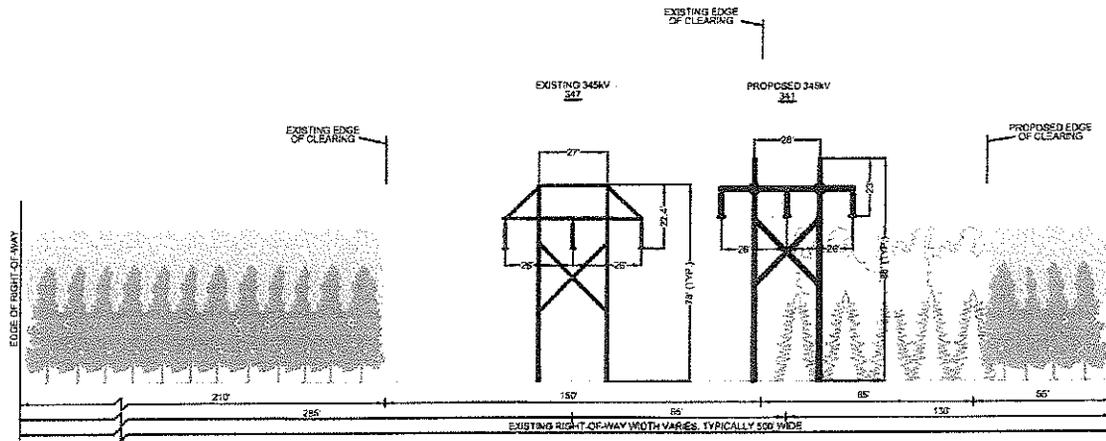
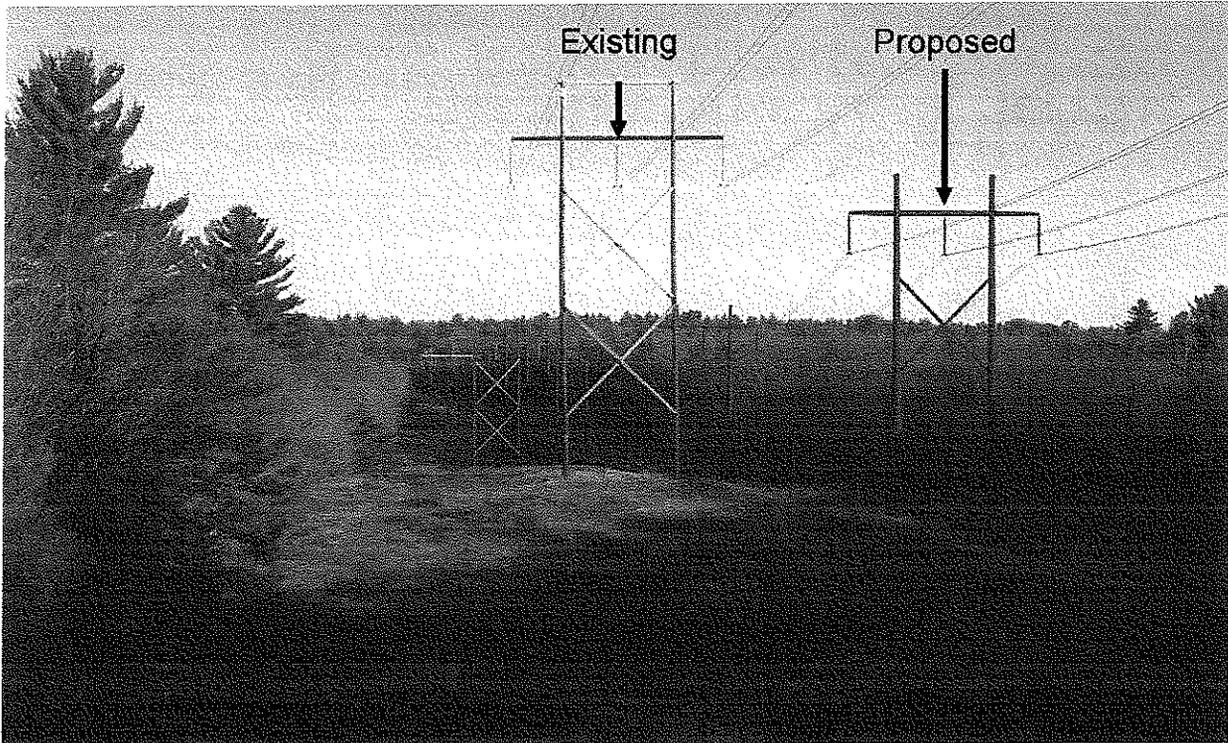


FIGURE 4 - Visual Simulations
Round Top Management Area, Burrillville (Line 341)



Proposed View



Electromagnetic Fields

There is relatively little development in close proximity to the Project's ROW although it does pass over some commercial development along Victory Highway in North Smithfield. In addition, there is a small amount of scattered residential development in various areas that are relatively close to the ROW. National Grid plans to optimize the phasing of the new and relocated transmission lines in order to minimize electromagnetic fields (EMFs) at the edge of the ROW. Magnetic field levels were calculated for annual average load and annual peak load, before (pre-construction 2015), immediately after construction (2015), and five years after construction (2020). Because of the variations in the physical arrangement of lines in the ROW, some edge of ROW EMF levels will increase after the Project is completed and some will decrease. Overall, the EMF levels resulting from the Project will be somewhat higher than current levels. There are no national recommendations, guidelines, or standards, in the United States to regulate EMF or reduce public exposures but given the relatively small increase in EMF levels, the fact that those increases are limited only to certain sections of the Project, and the relatively light amount of development in the Project area, the Program believes that the Project should not adversely affect surrounding land uses.

PART THREE: STATE GUIDE PLAN CONSISTENCY

The State Guide Plan currently consists of twenty-five functional plans, known as “elements”. The following presents an element by element assessment of the Project’s consistency with the goals and policies of the State Guide Plan. In addition to our assessment of consistency, we also include a recommendation that supports certain goals and policies found in the State Guide Plan. This recommendation will also be reiterated in Part Four: Advisory Opinion.

Element 110: Goals and Policies

Of particular relevance to this project is Policy C.3. “Minimize the adverse impact of power generation and transmission facilities on the environment by careful planning and capitalizing on potential compatible uses to the greatest extent possible.”

Minimizing environmental impacts depends on several factors, including 1) the selection of an appropriate alternative, 2) the obtaining of, and adherence to, environmental permits, and 3) project design, including the employment of Best Management Practices in areas such as erosion and sediment control, stream crossings, and post-construction clean-up.

The Project has selected an alternative utilizing an existing right-of-way on land that is already occupied by electric facilities; this in itself helps minimize environmental impacts. The Project will require permits from the Rhode Island Department of Environmental Management and the Army Corps of Engineers regarding impacts to wetlands and water quality. Additionally, National Grid has stated that it will incorporate both North Smithfield’s and Burrillville’s soil erosion and sediment control requirements into the overall Project plan. Finally, National Grid has stated that it is committed to employing Best Management Practices and other mitigation measures as described in the Interstate Reliability Project Environmental Report. Of particular importance to this assessment is Appendix I, *Right-of-Way Access, Maintenance, and Construction Best Management Practices (EG-303)* and the recommendations found in Appendix M, *Visibility and Visual Impact Assessment*. With these considerations in mind, we find that the Project is consistent with this State Guide Plan element.

Element 112: Resource Management in the Reuse of Former Navy Lands

The Project does not involve former Navy lands; therefore this State Guide Plan element is not applicable.

Element 121: Land Use 2025: Rhode Island’s State Land Use Policies & Plan

By utilizing an existing ROW, obtaining all required permits, and employing Best Management Practices and other mitigation measures as described in the Interstate Reliability Project Environmental Report mentioned above, we find that the Project is consistent with this State Guide Plan element. The Project specifically helps the State to attain Goal 4, “First class supporting infrastructure that protects the public’s health, safety and welfare, fosters economic well-being, preserves and enhances environmental quality, and reinforces the distinction between urban and rural areas.”

Element 131: Cultural Heritage and Land Management Plan for the Blackstone Valley National Heritage Corridor

North Smithfield and Burrillville are included in the Blackstone Valley National Heritage Corridor. The first goal this State Guide Plan element is to, "Protect the Valley's historic, cultural, and natural resources". The Project's main effect on natural resources will be disturbance of wetlands; however, such disturbances are subject to Department of Environmental Management permitting which will require Best Management Practices and mitigation measures.

Extensive studies were conducted on historical and cultural resources in the Project area. The result was the identification or verification of a significant number of archaeological sites and historic features. Accordingly, National Grid's consultant, The Public Archaeology Laboratory, Inc. recommended a number of actions to avoid harming any of the resources identified. However, the excavation required for pole structure construction has the potential to unearth previously unknown archeological resources. In the event additional archaeological materials or potential historic properties are discovered, National Grid has committed to conduct additional evaluation investigations. When possible, National Grid will relocate or redesign the structure, access road, or work/storage area to avoid the resource. In the event that the resource cannot be avoided, National Grid has committed to work closely with the RI Historical Preservation and Heritage Commission to develop a strategy to minimize or mitigate any impacts.

Given these considerations, the Project is found to be consistent with this State Guide Plan element.

Element 140: State Historical Preservation Plan

As noted, above, the Project does have a small potential to negatively affect previously undiscovered historical, archeological, or cultural sites. However, oversight protocols and mitigative measures have been established to minimize any unforeseen adverse impact. Therefore, the Project is found to be consistent with this State Guide Plan element.

Element 152: Ocean State Outdoors: Rhode Island's Comprehensive Outdoor Recreation Plan
Element 155: A Greener Path: Greenspace & Greenways for Rhode Island's Future
(These two Elements are considered together because the finding and recommendation pertain to both).

The Project is consistent with these Elements. However, the project crosses several existing trails, greenway corridors and private and public recreation/conservation lands; therefore, in accordance with

Element 152, Goal 2 - Rhode Island will improve its system of outdoor recreation facilities and conservation areas to meet the needs of its residents and visitors.

Policy - Maintain and expand the state's network of trails and pedestrian paths, in natural and built areas; and,

Element 155, Policy T-10 - Manage utility corridors to enhance their value as greenspace and to capture their potential, wherever possible, for linear recreational opportunities.

Recommendation 34 - Encourage public utilities to manage right-of-way corridors as greenways, including public trails and bikeways, where practical;

we wish to offer the following recommendation.

Recommendation – The applicant should assess and consider permitting public access for limited recreational activities along suitable sections of the right-of-way where it could offer a connection between trails (e.g. Border Trail and Munyon Trail) or between recreation/conservation areas, such as the Black Hut Management Area and the Round Top Management Area, consistent with the applicant’s safety and security policies. The RI Department of Environmental Management, the Audubon Society of Rhode Island, and other non-profit land owners adjacent to the ROW could be used as resources to establish such sections along with municipal officials from the affected communities.

Element 156: Urban & Community Forestry Plan

By utilizing an existing ROW and employing best management practices and other mitigation measures as described in the Interstate Reliability Project Environmental Report, we find that the Project is consistent with this State Guide Plan element.

Element 161: Forest Resources Management Plan

One goal of this Plan is to minimize the fragmentation of forests. Although the Project involves the clearing of many acres of trees, its impact is minimized by using the existing right-of-way; therefore, the Project is consistent with this State Guide Plan element.

Element 162: Rivers Policy and Classification Plan

Although the Project is designed to minimize the impact of wetlands, the right-of-way passes through many wetland areas and over 100 acres of wetlands will be unavoidably disturbed. However, such disturbances are subject to Department of Environmental Management and Army Corps of Engineers permitting; Best Management Practices and mitigation measures will be required. Given these considerations, the Project is consistent with this State Guide Plan element.

Element 171: Solid Waste Management Plan

The Project demonstrates a commitment to the recycling of construction and demolition materials and is consistent with this State Guide Plan element.

Element 211: Economic Development Policies & Plan

The Project will improve the reliability of the electric transmission system in the area thereby enhancing efforts to stimulate growth and economic activity in the region. The Project is consistent with this State Guide Plan element.

Element 212: Industrial Land Use Plan

The Project is not located on land designated for industrial uses; therefore, the Project is consistent with this State Guide Plan element.

Element 421: State Housing Plan

Element 423: Rhode Island Strategic Housing Plan

No housing resources would appear to be adversely affected, nor is any acquisition of land required; therefore, the Project is consistent with this State Guide Plan element.

Element 611: Transportation 2030

The Project will cause some temporary disruption of local traffic but by employing Best Management Practices and other mitigation measures as described in the Interstate Reliability Project Environmental Report, the disturbances will be minor. Accordingly, we find that the Project is consistent with this State Guide Plan element.

Element 621: Policy Statement: Proposals for New or Restructured Public Transit Facilities / Services

The Project does not involve public transit facilities; therefore, this State Guide Plan element is not applicable.

Element 640: State Airport Systems Plan

The Project will not affect any airport system facilities; therefore, the Project is consistent with this State Guide Plan element.

Element 651: Waterborne Transportation Plan

The Project will not affect any waterborne transportation facilities; therefore, the Project is consistent with this State Guide Plan element.

Element 661: Rhode Island Freight Rail Plan

The Project will not affect any freight rail facilities; therefore, the Project is consistent with this State Guide Plan element.

Element 715: Comprehensive Conservation & Management Plan for Narragansett Bay

Although the Project is located within the Narragansett Bay watershed, it is not near the coast or any major waterways that empty into the Bay. In addition, the Project must conform to any conditions required by the Department of Environmental Management in securing wetland and other permits. With the employment of Best Management Practices and mitigation measures, the Project is consistent with this State Guide Plan element.

Element 721: Rhode Island Water 2030

The Project should have no impact on drinking water supplies and is consistent with this State Guide Plan element.

Element 731: Nonpoint Source Pollution Management Plan

While some nonpoint source pollution, primarily from erosion and sedimentation caused by clearing and construction activities is inevitable, the applicant proposes a number of control practices to minimize and mitigate any adverse impacts. Provided that Best Management Practices are employed, the Project is consistent with this State Guide Plan element.

Element 781: Rhode Island Energy Plan

The Project supports Goal 2, "A strengthened competitive posture for Rhode Island commerce and industry through access to adequate, affordable and reliable supplies of energy..." and is consistent with this State Guide Plan element.

Element 912: Howard Center Master Plan, Phase I

The project is not located at the Howard (now Pastore Center) center in Cranston; therefore, this State Guide Plan element is not applicable.

PART FOUR: ADVISORY OPINION

Findings

Reliability

We find that the preferred alternative (i.e. this Project) will result in a positive benefit to the reliability of the New England electric transmission system.

Employment

We find that the Project will provide a temporary but direct benefit in employment during the construction of the Project.

Tax Revenues

We find that the Project will benefit tax revenues for North Smithfield and Burrillville through the increase of the tangible tax base. Furthermore, the Project may have small positive revenue benefit for the State through increases in income tax and sales tax.

Economy

We find that the Project will result in a net economic benefit to both the local economy in the short-term, resulting from the influx of construction workers, and to the regional economy over the long-term by providing increased electrical capacity and reliability.

Land Use

We find that the Project minimizes potential land use conflicts by placing improvements within an existing right-of-way corridor that already contains significant transmission facilities. The Project is not anticipated to have any long-term negative impacts on adjacent land uses.

State Guide Plan Consistency

We find that the proposed Interstate Reliability Project is consistent with the relevant goals, objectives, and policies of the State Guide Plan. However, this finding of consistency is contingent upon National Grid's commitment to utilizing the mitigative measures and best management practices recommended in the Interstate Reliability Project Environmental Report, Volume 1, Volume 2, Appendix I, *Right-of-Way Access, Maintenance, and Construction Best Management Practices (EG-303)*, and Appendix M, the *Visibility and Visual Impact Assessment*.

Recommendations

The applicant should consider assessing public access opportunities for limited recreational activities along suitable sections of the right-of-way where it could offer a connection between trails or between recreation/conservation areas.

This report and advisory opinion was prepared by the staff of the Statewide Planning Program and approved by the State Planning Council on February 7, 2013.