APPLICATION GUIDE¹ ELECTRIC GENERATING FACILITY

While not specifically required for this facility modification proposal, Dominion Nuclear Connecticut, Inc. offers this Application Guide to assist the Council in its review of this proposal. In a number of respects, the information described in the Council's "Application Guide for Electric Generating Facilities" is not applicable to the ISFSI project. Where applicable, references have been made to corresponding sections and reports included in this submission.

App. pp. 1-2	(A)	A brief description and the location of the proposed facility, including an artist's rendering and/or narrative describing its appearance.
App. p. 1	(B)	A statement of the purpose for which the application is being made.
App. p. 1	(C)	A statement describing the statutory authority for such application.
App. p. 3	(D)	The exact legal name of each person seeking the authorization or relief and the address or principal place of business of each such person. If any applicant is a corporation, trust association, or other organized group, it shall also give the state under the laws of which it was created or organized.
App. p. 3	(E)	The name, title, address, and telephone number of the attorney or other person to whom correspondence or communications in regard to the application are to be addressed. Notice, orders, and other papers may be served upon the person so named, and such service shall be deemed to be service to the applicant.
N/A	(F)	Statement and full explanation of why the proposed facility is necessary for the reliability of the electric power supply of the state or for a competitive market for electricity.
App. p. 4	(G)	Information on the extent to which the proposed facility has been identified in, and is consistent with life-cycle cost analysis required by General Statutes § 16-50r and other

¹ This Application Guide is copied directly from the "Connecticut Siting Council Application Guide," Section VI, as amended September 19, 2000. References to the Regulations of Connecticut State Agencies ("RCSA") contained in the Guide have been omitted.

advance planning that has been carried out, including an explanation for any failure of the facility to conform with such information.

N/A

- (H) Estimate of the overall reliability of the facility based on:
 - (1) Historic and expected availability of all facility components;
 - (2) Availability of off-site resources such as water and fuel supply with resource plans documenting supply and capacity;
 - (3) All mechanisms for contingency in the event of fuel curtailment, water curtailment, facility flame-out, and electrical component failure; and
 - (4) The historic and expected availability of all necessary electric and fuel transmission infrastructure.

App. pp. 6-14

(I) Description of the proposed facility, including:

N/A

- (1) Technical Specifications:
 - a. Service life and capacity factor;
 - b. Fuel type and supply;
 - c. Combustion technology;
 - d. Control systems, including pollution control technology;
 - e. Water use and effluent discharge;
 - f. Air emissions;
 - g. Waste disposal;
 - h. Noise abatement;
 - Provisions for emergency operations and shutdowns;
 - j. Fire suppression technology;
 - k. Safety warning system;

Proximity to municipal fire stations;
 Protective gear and control systems;

n.

o. Traffic safety and fuel spill risk assessment for access routes to the site;

Traffic flow and potential evacuation routes:

- p. Provisions for leak detection of fuel and chemicals from storage areas; and
- q. Hazardous materials management and fuel spill prevention and control.
- (2) A demonstration of how the proposed facility would comply with Prevention of Significant Deterioration and Non-Attainment New Source Review requirements, identification of potential maximum emissions from proposed and alternative fuel combustion, and a summary of air pollution control technologies.
- (3) Alternative technologies, including:
 - a. Efficiency comparisons; and
 - b. Environmental comparisons.
- (4) An emergency management/evacuation plan.
- (5) A Federal Aviation Administration determination for obstruction or hazard to air navigation.
- (6) Itemized estimated costs
- (7) Information regarding the forecast of available fuel and backup fuel supply proposed for the facility, the State of Connecticut, New England, and the United States.
- (8) The location of existing and proposed pipelines or other infrastructure necessary to provide fuel and water to the proposed project including any upgrades necessary for the delivery of fuel and water to the facility during operation.

N/A

N/A

App. pp. 13-14

N/A

App. p. 32

N/A

N/A

N/A

(9) The source of fuel, water, and interconnections necessary for facility operation, the location of all infrastructure and pipelines with a map, the service area of the proposed infrastructure, other large users that may compete for the supply of fuel and water to the proposed facility, and under what circumstances fuel and water could be curtailed to the facility.

N/A

(10) Details of alternative fuel supply including fuel compatibility, schedule and mechanism necessary for fuel switching, equipment requirements, and analysis of alternatives with a comparison of facility reliability with and without alternative fuel supplies.

N/A

(11) A comparison, with a narrative and tabular reporting, of wet and dry cooling technologies, noncontact cooling, and use of gray water if applicable, including the estimated capital and operating costs, effects on air emissions, water use, water discharge, water recycling, effects on water resources and water diversions, noise, and spacial requirements of each technology under all operations scenarios.

N/A

(12) An explanation of consistency with regional water supply and watershed protection plans and permit application or executed permit, if applicable, for the use of diverted water for cooling and other facility uses.

App. pp. 16-17 Attachment 8 (13) A storm water management plan with modeling to predict the quality and quantity of anticipated runoff and discharge.

N/A

(14) The construction type of the transmission interconnection (overhead, underground, single circuit, double circuit) and the existing and expected transmission line loadings, substation interconnection plan, and the anticipated range of dispatch based on transmission grid constraints. Also, provide a final copy of, or a status report on, the independent system operator transmission grid interconnection study.

App. p. 14 Attachment 6

Attachment 6

App. pp. 14-25 Attachments 5, 7, 9, 10, 11 and 12

- (15) A justification for selection of the proposed site selected including a comparison with alternative sites which are environmentally, technically, and economically practicable. Include enough information for a complete comparison between the proposed site and any alternative site contemplated.
- (16) Justification that the location of the proposed facility would not pose an undue safety or health hazard to persons or property along the area traversed by the proposed facility including:
 - Measurements of existing electric and magnetic fields (EMF) at the boundaries of the facility site with extrapolated calculations of exposure levels during expected normal and peak line loading;
 - b. Calculations of expected EMF levels at the boundaries of the facility site that would occur during normal and peak operation of the facility; and
 - c. A statement describing consistency with the Council's "Best Management Practices for Electric and Magnetic Fields", as amended.
- (17) A description of the effect that the proposed facility would have on the environment, ecology, and scenic, historic, and recreational values at and around the proposed site, and along new or expanded utility corridors, including effects on:
 - a. Public health and safety;
 - b. Local, state, and federal land use, conservation, and development plans;
 - c. Existing and future development;
 - d. Adjacent land use;
 - e. Ecological integrity;
 - f. Noise with baseline testing and modeling consistent with State regulations;

- g. Consistency with plans for development and protection of recreational areas and areas of natural history including areas of geologic, ecological, and archaeological interest;
- h. Visibility based on photographic simulation, artist renditions, and sight line profiles;
- i. Roads;
- j. Wetlands and watercourses;
- k. Wildlife and vegetation, including rare and endangered species, critical habitats, and species of special concern, with documentation by the Department of Environmental Protection Natural Diversity Data Base;
- 1. Public water supply watershed and aquifer areas, consistent with state and local conservation and development plans;
- m. Archaeological and historic resources, with documentation by the State Historic Preservation Officer; and
- n. Other environmental concerns identified by the applicant, the Council, or any public agency.

Attachment 5

- (J) A proposed site map(s) at a scale no smaller than 1 inch = 40 feet, a location map at a scale 1 inch = 2000 feet, and aerial photos of suitable scale showing the site, access, and abutting properties including proximity of the following:
 - (1) Settled areas;
 - (2) Schools and daycare centers;
 - (3) Hospitals;
 - (4) Group homes;
 - (5) Forests and parks;
 - (6) Recreational areas;

- (7) Seismic areas;
- (8) Scenic areas;
- (9) Historic areas;
- (10) Areas of geologic, ecological or archaeological interest;
- (11) Areas regulated under the Inland Wetlands and Watercourses Act (to be delineated by a Connecticut Certified Soil Scientist on large scale 1 inch = 40 feet maps);
- (12) Areas regulated under the Tidal Wetlands Act and Coastal Zone Management Act (to be delineated by a Connecticut Certified Soil Scientist on large scale 1 inch = 40 feet maps);
- (13) Public water supply sources including wells, reservoirs, watersheds, and aquifers;
- (14) Hunting or wildlife management areas; and
- (15) Existing transmission lines within one mile of the site.

App. pp. 24-25

- (K) A statement explaining mitigation measures for the proposed facility including:
 - (1) Construction techniques designed specifically to minimize adverse effects on natural areas and sensitive areas;
 - (2) Special design features made specifically to avoid or minimize adverse effects on natural areas and sensitive areas, or to restore degraded areas;
 - (3) Establishment of vegetation proposed near residential, recreational, and scenic areas;
 - (4) Methods for preservation of vegetation for wildlife habitat and screening, and
 - (5) Methods to replace any lost functions or reduced value of wetland areas affected by the proposed facility.

(L) Identification of federal, state, regional, district, and App. pp. 25-32 municipal agencies from which approvals have been Attachment 13 obtained or will be sought, copies of approvals received, and a schedule for obtaining approvals not yet received. (M) Bulk-filing of municipal zoning, planning, planning and Bulk File 1 zoning, conservation, and inland wetland regulations and by-laws. Such information any department or agency of the state App. p. 26 (N) exercising environmental controls may, by regulation, Attachments 10 and 12 require.