

Site Selection Summary

Section 16-50(a) of the Connecticut General Statutes requires the submission of a statement that describes the justification for adoption of the site selected, including a comparison of alternative sites considered. This summary describes the site selection process associated with the Dominion Nuclear Connecticut, Inc. ("DNC") proposal to establish an Independent Spent Fuel Storage Installation ("ISFSI") at Millstone Power Station ("Millstone"). The project focused exclusively on alternative sites within the 520-acre Millstone parcel. Each of the sites evaluated were approximately two to three acres in size, the minimum parcel size necessary to accommodate the Millstone ISFSI.

Alternatives Considered Inside Existing Protected Area

Initially, DNC explored the possibility of siting the proposed ISFSI within the limits of Millstone's existing 49.3-acre area encompassed by physical barriers and to which access is controlled, known as the Protected Area. Much of the land area within the Protected Area is presently occupied by buildings and other structures directly associated with Millstone Units 1, 2 and 3. There are currently no vacant, contiguous two to three acre areas within the existing Protected Area that could accommodate the proposed ISFSI. Large scale demolition of active buildings would be necessary to make space available inside the Protected Area.

Following several preliminary meetings with the Town of Waterford, DNC also explored the possibility of locating a smaller ISFSI within the existing Protected Area. This smaller ISFSI would be designed to accommodate DNC's more immediate operational spent fuel storage needs. DNC determined that this approach is not feasible for a number of reasons including the lack of a contiguous area without demolition of existing occupied structures, as well as the difficulties it would present for security, spent fuel storage management and the ability to satisfy the requirements of the U.S. Nuclear Regulatory Commission ("NRC") for siting of an ISFSI.

Alternatives Considered Outside Existing Protected Area

DNC selected four alternative site locations within the Millstone property for further investigation. Once selected, each site was evaluated to determine which was most suitable in terms of meeting the requirements of the ISFSI system design and DNC's operational objectives. Attached to this Site Selection Summary is a map that identifies the location of the four sites evaluated.

Site No. 1 - North Access Point Contractor Parking Lot - Site No. 1 is located in an area of the Millstone parcel immediately south of the railroad right-of-way and west of the main access road. This site lies approximately 1,125 feet north of the Millstone Protected Area, and is currently used for overflow and employee parking.

Site No. 2 - North Material Storage Area - Site No. 2 is located in an open field north of the railroad right-of-way and east of the main access area road. This site is approximately 1,425 feet north of the Millstone Protected Area and is available to DNC as necessary for the temporary storage of equipment and materials.

Site No. 3 - South Access Point Parking Lot - Site No. 3 is an area located immediately east of the generating facility and adjacent to the Millstone Protected Area. This area is currently used as an employee parking lot.

Site No. 4 - Material Storage Area - Site No. 4 is an area located on a plateau immediately west of the main switch yard and south of the railroad right-of-way. This site is located approximately 900 feet north of the Millstone Protected Area and is currently occupied by material storage buildings.

Evaluation Criteria

The site evaluation criteria utilized can be summarized into four (4) general categories:

Radiological Compliance

The NRC has established radiological dose limits (occupational and general public) for nuclear power generating facilities nationwide. Millstone must, as a part of its operating license, demonstrate compliance with these limits. Any modification to the Millstone facility, including development of an ISFSI, must likewise comply with the NRC's occupational and general public dose limits. In its ISFSI site evaluation, DNC calculated radiological dose levels for the proposed ISFSI. Estimated dose limits were evaluated under both the occupational and general public criteria.

For each site evaluated, the occupational and general public dose limits could be satisfied.

Physical Site Suitability

Each of the four sites investigated were also evaluated to determine if the site location would be capable of physically supporting the ISFSI. DNC evaluated factors such as subsurface geology, site topography, soil suitability, location of underground utilities, flooding potential, and several person-induced hazards. In addition to these factors, the evaluation included a review of the potential haul path that would or could be used when transporting spent fuel from the spent fuel storage pools to the ISFSI. Of particular note, Site No. 2 presented a challenge for the haul path due to the fact that the path to this site crosses an existing railroad bridge. The bridge was evaluated and determined not to be capable of supporting the haul vehicle and its load without further modification.

Each of the four sites evaluated were comparable with respect to physical site characteristics. However, due to its proximity to the existing Millstone Protected Area, and the short distance between the spent fuel pools and the ISFSI location, Site No. 3 is preferred.

Environmental Effects

Each of the alternative sites was investigated for potential impacts on wetlands, watercourses, flora and fauna, aquatic and coastal resources, and historic and archeological resources. DNC also evaluated each site's visual impact on surrounding areas both within and

outside the 520-acre Millstone property. The evaluation also included a review of potential construction and operational impacts associated with noise, traffic and fugitive dust.

At the end of the evaluation process, it was determined that the environmental effects associated with each of the four alternative site locations would be comparable and more importantly, minimal.

Security

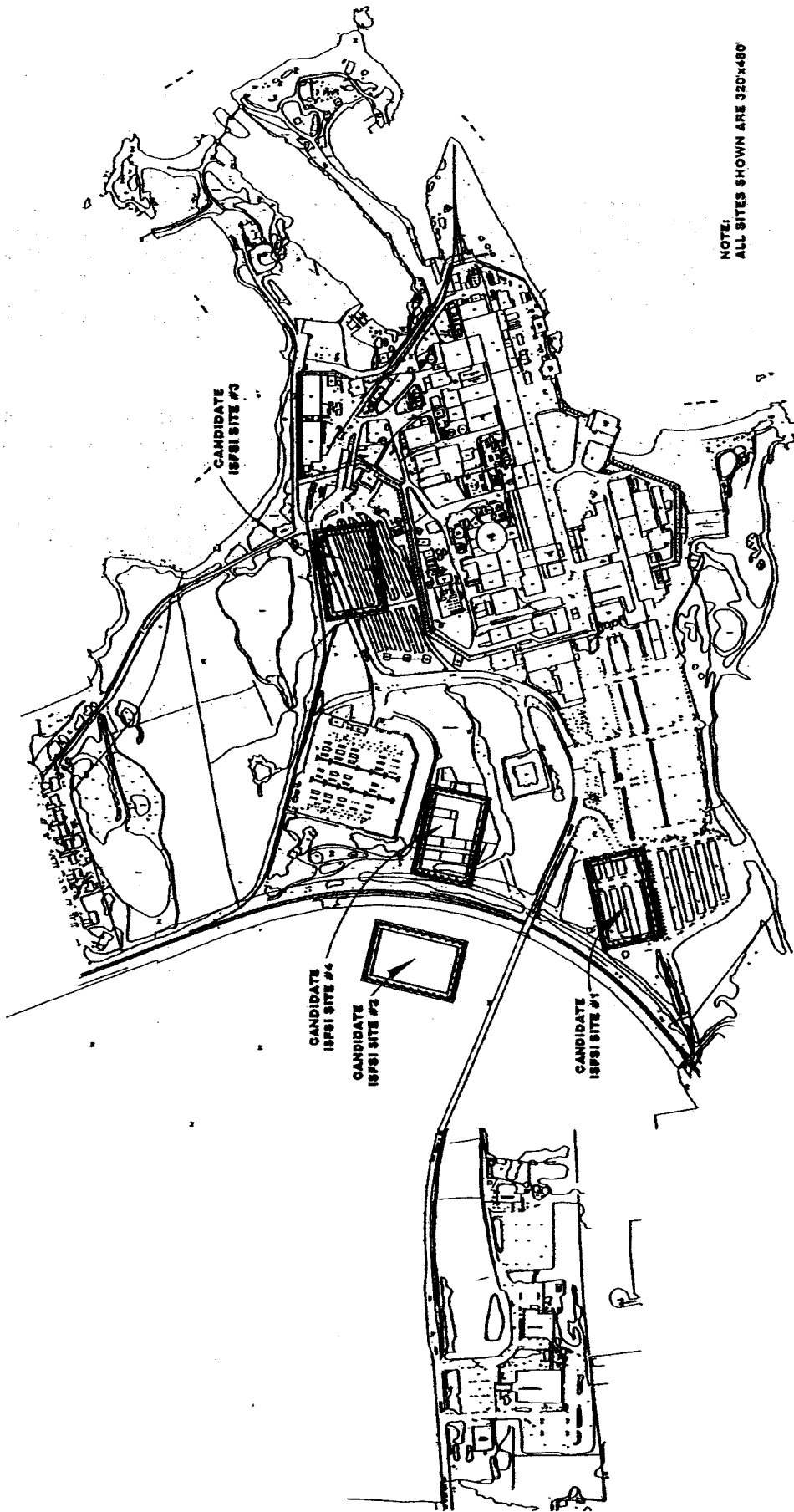
NRC regulations require that an ISFSI facility be physically protected with measures similar to that which exist at Millstone today. An ISFSI must be located within a "Protected Area" but not necessarily the Protected Area associated with the power generating facility. Regulations allow for existing protected areas to be expanded to accommodate an ISFSI.

Each of the alternative sites evaluated could satisfy the safety and security requirements established by DNC and the NRC. Proximity of the ISFSI to the existing Protected Area and the proposed haul route from the existing spent fuel pools to the ISFSI was also a factor considered in this evaluation.

Site Comparison

Each of the four sites selected as possible alternative locations for the ISFSI were evaluated based on the criteria described above. Individually, each of the four locations was deemed to be suitable for the ISFSI. None of the associated impacts were considered so significant as to eliminate that alternative site from further consideration. When compared to each other, however, Site No. 3 was ultimately preferred for three important reasons:

- (1) Site No. 3 is located closest to the existing Millstone Protected Area. Use of Site No. 3 will simply require an expansion of the Protected Area fence to surround the ISFSI. Each of the alternative sites (Sites 1, 2 and 4) would require a separate and distinct security area outside the limits of the existing Millstone Protected Area;
- (2) Site No. 3 is located approximately 1,300 feet south of the Amtrak rail line, thereby eliminating potential security issues associated with the active use of the line. The railway spur located east of Site No. 3 is owned by DNC and has been deactivated and secured; and
- (3) Site No. 3 offers the shortest haul path between the Unit 2 and Unit 3 spent fuel pools and the proposed ISFSI. The entire haul path to Site No. 3 is planned to be completely within the facility's expanded Protected Area.



NOTE:
ALL SITES SHOWN ARE 320x480'

Candidate ISFSI Sites

Demolition, Nuclear, Connecticut
Millions Power Station
ISFSI Site Selection Study

