[7590-01-P]

NUCLEAR REGULATORY COMMISSION

[Docket Nos. 50-237 and 50-249; NRC-2015-0232]

Exelon Generation Co., LLC

Dresden Nuclear Power Station, Units 2 and 3

AGENCY: Nuclear Regulatory Commission.

ACTION: Environmental assessment and finding of no significant impact; issuance.

SUMMARY: The U.S. Nuclear Regulatory Commission (NRC) is considering a request by Exelon Generation Company, LLC (Exelon, the licensee) dated March 18, 2014, as supplemented by letters dated May 20 and June 8, 2015, for onsite disposal of slightly contaminated soil at the Dresden Nuclear Power Station (DNPS), Units 2 and 3.

DATES: [INSERT DATE OF PUBLICATION IN THE *FEDERAL REGISTER*].

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FOR FURTHER INFORMATION CONTACT: Russell Haskell, Office of Nuclear Reactor Regulation, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001; telephone: 301-415-1129, e-mail: Russell.Haskell@nrc.gov.

SUPPLEMENTARY INFORMATION:

I. Introduction.

The NRC is considering approval of a request dated March 18, 2014 (ADAMS Accession No. ML14077A140), as supplemented by letters dated May 20 (ADAMS Accession No. ML15140A728) and June 8, 2015 (ADAMS Accession No. ML15163A304), from Exelon

Generation Company, LLC (Exelon, the licensee) for onsite disposal of slightly contaminated soil at the Dresden Nuclear Power Station (DNPS), Units 2 and 3, located in Grundy County, Illinois. The site consists of three units. Units 2 and 3 are operating nuclear reactors and Unit 1 was shut-down in 1978 and is currently in SAFSTOR[1]. Units 2 and 3 are boiling-water reactors (BWRs) and the cooling system includes cooling towers, cooling canals, and a cooling pond. The licensee is requesting approval in accordance with section 20.2002 of Title 10 of the *Code of Federal Regulations* (10 CFR), "Method for obtaining approval of proposed disposal procedures," to land-spread a current accumulated inventory of approximately 6,000 cubic meters (m^3) (211,888 cubic feet [ft^3]) of soil. Additionally, the licensee has requested the NRC's approval to conduct future disposal operations onsite, not to exceed a total disposed volume of 20,000 m^3 (706,293 ft^3) of soil and sludge containing trace quantities of residual radioactive material in a designated area on the DNPS site. Based on the results of the Environmental Assessment (EA) that follows, the NRC has determined not to prepare an Environmental Impact Statement for the proposed action, and is issuing a Finding of No Significant Impact.

Under 10 CFR 20.2002, a licensee may seek NRC authorization to dispose of licensed material using procedures not otherwise authorized by the NRC's regulations. A licensee's supporting analysis must show that the radiological doses arising from the proposed disposal will be within the 10 CFR part 20, "Standards for Protection Against Radiation," dose limits and will be as low as is reasonably achievable.

[1] SAFSTOR is a decommissioning strategy under which a nuclear facility is placed in a safe, stable condition and maintained in that state (safe storage) until it is subsequently decontaminated and dismantled to levels that permit license termination.

II. Environmental Assessment.

Description of Proposed Action

The proposed action would permit the disposal of up to 20,000 m^3 (706,293 ft^3) of soil and sludge containing trace quantities of residual radioactive material in a 100 m (328 ft.) by 100 m (328 ft.) plot located on the owner-controlled area on the north side of the DNPS site.

The DNPS has accumulated a current inventory of approximately 6,000 m^3 (211,888 ft^3) of soil containing trace quantities of radionuclides as part of multiple pipe repair and replacement projects conducted onsite over the past several years. The soil is currently located within the DNPS site's protected area portion of the restricted area and is contained within a concrete berm. Tarps and spray-on sealants are employed to limit erosion and migration of the soil (Exelon 2015a). The submittal requests approval for disposal of the initial 6,000 m^3 (211,888 ft^3) of soil and a total disposal of up to 20,000 m^3 (706,293 ft^3) of soil and sludge that may be generated from future projects. Contaminated soil generated as a result of future projects at DNPS (up to a total of 20,000 m^3 (706,293 ft^3)) will be temporarily stored in the protected area until analyses for release is completed and will then be transferred and emplaced to the proposed disposal area. The soils will be transferred to the proposed disposal area in campaigns (6,000 m^3 (211,888 ft^3) of soil or less per campaign). The first campaign will include site preparation activities (land clearing, excavation, and grading) of the 100 m (328 ft.) by 100 m (328 ft.) proposed disposal area and immediate transfer and emplacement of the current 6,000 m^3 (211,888 ft^3) of soil to the disposal area. Transportation of the soil (via dump trucks) from its current location to the proposed disposal area will be maintained within the boundaries of the DNPS property at all times. Once transferred and emplaced, Exelon will grade and over-seed the soil with native grass (Exelon 2015a). Exelon plans to maintain the

proposed disposal area in accordance with the Illinois Urban Manual for Erosion and Sediment Control Best Management Practices (AISWCD 2013).

The proposed action is in accordance with the licensee's application dated March 18, 2014 (ADAMS Accession No. ML14077A140), as supplemented by letters dated May 20, 2015 (ADAMS Accession No. ML15140A728), and June 8, 2015 (ADAMS Accession No. ML15163A304).

Need for the Proposed Action

The proposed action is requesting the NRC's approval for the onsite disposal of a current inventory of 6000 m^3 (211,888 ft^3) of soil. The request also includes an NRC's approval for an upper disposal limit not to exceed 20,000 m^3 (706,293 ft^3) of soil and sludge to account for future onsite excavation projects requiring disposal.

Benefits to the licensee's proposed action include significantly reduced transportation distances and costs incurred as a result of offsite disposal, while maintaining protection of public health and safety and the environment. This request provides the licensee with an alternative to the usage of offsite shallow land burial waste repositories consistent with a previously released NRC Information Notice 83-05, "Obtaining Approval for Disposal of Very Low-Level Radioactive Waste."

Environmental Impacts of the Proposed Action

Radiological Impacts and Human Health

Occupational Dose

The proposed DNPS request for onsite disposal of slightly contaminated soil will not require any physical changes to the plant or plant operations; therefore, there will be no change to any in-plant radiation sources. Approximately 6,000 m^3 (211,888 ft^3) of soil is currently

located within the DNPS site's protected area portion of the restricted area. The soil is contained within a concrete berm area; tarps and spray-on sealants are employed to limit erosion and migration of the soil (Exelon 2015a).

The DNPS radiation protection program establishes appropriate work controls, training, temporary shielding, and protective equipment requirements so that worker doses will remain within the dose limits of 10 CFR part 20. The main pathway of concern for worker exposure to radiation would be from fugitive dust emissions during the transport and emplacement of the slightly contaminated soil to the proposed onsite disposal area. To minimize those fugitive dust emissions, Exelon will use best management practices (BMPs) such as using equipment with enclosures during the transport of the soil and dampening the soil. Once the soil is transferred and emplaced to the proposed disposal area, Exelon will over-seed the soil with native grass and monitor to minimize fugitive dust emissions. To limit access to the proposed disposal area, DNPS plans to implement institutional controls such as sign postings and DNPS Security monitoring (Exelon 2015a).

Slightly contaminated soil generated as a result of future projects at DNPS (up to a total of 20,000 m^3 (706,293 ft^3) will be temporarily stored in the protected area until an analysis is completed documenting that the material meets radiological criteria for disposal per 10 CFR 20.2002 and will then be transferred to the proposed disposal area.

The proposed DNPS onsite disposal of slightly contaminated soil will not affect radiation levels within the plant restricted area and will be performed in accordance with the proper oversight of their radiation protection program, and therefore will have no significant radiological impact to the workers.

Offsite Dose

The primary sources of offsite dose to members of the public from the DNPS are radioactive gaseous and liquid effluents. As discussed above, the request for onsite disposal of slightly contaminated soil will be on the DNPS site. As such, members of the public will not have access to the disposal area. Therefore, there is no direct radiation exposure to the public. In addition, the proposed action does not require any physical changes to the plant or plant operations; therefore, there will be no change to the types and quantities of radioactive effluents and the operation of the radioactive gaseous and liquid waste management systems to perform their intended functions. As stated above, the soil will be over-seeded with native grass and monitored to minimize fugitive dust emissions once the soil is transferred to the proposed disposal area. To manage any soil runoff, Exelon will use the BMPs outlined in the Illinois Urban Manual for Erosion and Sediment Control Best Management Practices. The licensee plans to install three surficial groundwater monitoring wells, one up-gradient and two down-gradient of the proposed disposal area. These new wells will be added to the DNPS Radiological Ground Protection Program (RGPP) to monitor for any migration of contamination (Exelon 2015a). Based on the above, the offsite radiation dose to members of the public would not change and would continue to be within regulatory limits and therefore would not be significant.

Radiological Impacts Summary

Based on the radiological evaluations discussed above, the NRC staff has determined the proposed action would not result in significant radiological impacts.

Land Use

Current land uses would be unaffected by the proposed onsite disposal of the contaminated soil at the DNPS. The proposed disposal area is currently part of an industrial power plant site and would remain so if the proposed action is approved. Therefore, the NRC staff has determined that there would be no significant land use impacts associated with the proposed action.

Water Resources

The disposal location is an elevated plot of land that has been heavily disturbed by previous soil stockpiling and grading activities and which generally slopes to the west. Site preparation activities, transfer, and emplacement of slightly contaminated soil under the proposed action would have no direct impact on natural surface-water drainages as none exist on or immediately adjacent to the disposal area. The closest surface-water feature to the center point of the disposal area is a shallow drainage depression adjacent to the south bank of the Illinois River and located approximately 600 ft. (183 m) to the northwest. The Units 2 and 3 discharge canal to the Illinois River lies approximately 700 to 800 ft. (213 to 244 m) to the south and east of the disposal area.

Precipitation and associated storm-water runoff from the disposal area have the potential to erode soils and transport suspended sediments away from the site and toward nearby surface water features. This is most likely to occur during the course of each disposal campaign, as the surface of disposal area is reworked and graded with each disposal operation. However, disposal site operations would be subject to the DNPS Storm Water Pollution Prevention Plan (SWPPP), which the licensee is required to implement and maintain in accordance with Special Condition 10 of DNPS's National Pollutant Discharge Elimination System (NPDES) permit (No. IL0002224). The SWPPP prescribes BMPs for soil erosion and

sediment control, storm-water pollution prevention, waste management, and spill response. During operations, the licensee will use BMPs as prescribed in the SWPPP in combination with those outlined in the Illinois Urban Manual for Erosion and Sediment Control Best Management Practices. For instance, soils would be graded and seeded with native grasses to minimize surface drainage and runoff and associated erosion of the site (Exelon 2015a). Adherence to these measures would prevent or minimize any surface water quality or groundwater quality impacts during disposal operations.

Over the longer term, management and monitoring activities would ensure that there are no inadvertent offsite impacts to surface water or groundwater quality as a result of disposal site operations. The licensee proposes to install three surficial groundwater monitoring wells in order to characterize baseline groundwater quality as well as any changes over time. The wells will be installed at depths of 15 to 35 feet (4.5 to 10.6 m) below ground surface. Two wells will be installed up-gradient of the disposal area relative to groundwater flow, and one will be installed down-gradient. Upon installation, baseline groundwater sampling and analysis would be performed including for gamma, tritium, gross alpha, gross beta, strontium-89, and strontium-90. The completed wells would be included in the DNPS RGPP with routine monitoring for radiological constituents and other parameters as prescribed by RGPP protocols (Exelon 2015a). Based on the above information, the NRC staff has determined the impacts to water resources would not be significant.

Air Resources

With regards to the National Ambient Air Quality Standards (NAAQS) criteria for pollutants (ozone, carbon monoxide, lead, particulate matter, nitrogen oxides, and sulfur dioxide), Grundy County is designated as a non-attainment area for the 8-hr ozone (2008)

standard and 1-hr ozone (1979) standard and a maintenance area for particulate matter less than 2.5 microns (1997) standard and 8-hr ozone (1997) standard (40 CFR 81.314). Air emissions would be predominantly from the transfer of the soil to the proposed site, equipment used in transporting the soil (dump trucks and front end loaders), and site preparation related activities (land clearing, excavation, and grading). The loading and off-loading of the soil and excavation of the proposed site can result in fugitive dust emissions; fugitive dust is particulate matter suspended in the air. Equipment exhaust emits criteria pollutants.

Site preparation activities of the 100 m (328 ft.) by 100 m (328 ft.) proposed disposal area and transfer and emplacement of the 6,000 m^3 (211,888 ft^3) of soil are estimated to be completed within two weeks (Exelon 2015a). Air emission estimates as a result of site preparation activities and transfer and disposal the 6,000 m^3 (211,888 ft^3) of soil are presented in Table 1. To minimize fugitive dust emissions, Exelon will use best management practices to include using equipment with enclosures during the transport of the soil and watering the soil (Exelon 2015a). Once the soil is transferred to the proposed disposal area, Exelon will over-seed the soil with native grass and monitor to minimize fugitive dust emissions.

Table 1: Air emissions from site preparation activities and soil disposal

	Emissions (tons/yr)					
Source	**CO**	**NO_x**	**SO_2**	**PM_{10}**	**$PM_{2.5}$**	**VOC**
Equipment Exhaust[(a)]	0.28	1.32	0.08	0.09	<0.09	0.11
Fugitive Dust[(b)]	-	-	-	0.8	0.08	-
Total	0.28	1.32	0.08	0.89	0.17	0.11

[(a)] Emissions were estimated by NRC staff based on emission factors from EPA 1996, use of dump trucks and loaders, and an 80-hour run time for each piece of equipment.
[(b)] Fugitive dust emissions were estimated by NRC staff based on emission factors from EPA 1995 and EPA 2006.

Key: CO= carbon monoxide, NO_x= nitrogen oxides, SO_2= sulfur dioxide, PM_{10}= particulate matter less than 10 microns, $PM_{2.5}$= particulate matter less than 2.5 microns, and VOC= volatile organic compounds.

The Environmental Protection Agency (EPA) regulations (40 CFR part 93, subpart B) require Federal agencies to conduct an applicability analysis if a proposed action occurs in a NAAQS non-attainment area or maintenance area to determine if emissions of criteria pollutants would exceed threshold emissions levels (40 CFR 93.153(b)). If threshold levels are exceeded, a conformity determination may need to be performed. The regulatory conformity thresholds for ozone precursors (volatile organic compounds and nitrogen oxides) is 25 tons for each precursor (40 CFR 51.853(b)). The regulatory conformity thresholds for particulate matter less than 2.5 microns, carbon monoxide, and particulate matter and its precursors (nitrogen oxides and sulfur dioxide) is 100 tons for each pollutant (40 CFR 51.853(b)). As exhibited in Table 1, nitrogen oxides, sulfur dioxide, particulate matter, and volatile organic compounds will not exceed the regulatory conformity thresholds. Therefore, the NRC staff concludes that there would be no significant air quality impacts associated with the proposed action.

Contaminated soil and sludge generated as a result of future projects at DNPS will be transferred in future campaigns, as previously discussed. Emissions from future campaigns are expected to be bounded by those estimated above since each campaign will transfer up to 6,000 m^3 (211,888 ft^3) of soil and sludge. Based on the above information, the NRC staff has determined that there would be no significant air quality impacts associated with the proposed action.

Terrestrial and Aquatic Resources

The 100 m (328 ft.) by 100 m (328 ft.) proposed disposal area is previously disturbed due to past activities such as grading the site and the addition of clean soils. The majority of the site (approximately 90 percent) is covered by early successional grasses and forbs that are typical of highly disturbed areas. The approximate percent cover of the most common species

included the following: yellow sweet clover (*Melilotus officinalis*, 20 percent), perennial rye (*Lolium perrene*, 20 percent), white clover (*Trifolium repens*, 10 percent), crown vetch (*Coronilla varia*, 10 percent), and Canada thistle (*Cirsium canadensis*, 10 percent). The remaining portion of the site is either recently disturbed soil-covered areas or areas containing seedling trees and bushes, such as autumn olive (*Elaeagnus umbellata*). The disposal site is surrounded by developed areas, open space, and forested areas that include mature cottonwood trees (*Populus* section *Aigeiros*), autumn olive, honey locust (*Gleditsia triacanthos*), mulberry (*Morus* spp.), and various grasses. No aquatic resources, such as wetlands, streams, or ponds occur within the disposal site. (Exelon 2015a, 2015b)

A variety of wildlife and birds occur on or near the proposed site. Common terrestrial mammals include white-tailed deer (*Odocoileus virginianus*), coyote (*Canis latrans*), red fox (*Vulpes fuva*), eastern cottontail (*Sylvilagus flondanus*), muskrat (*Ondatra zibethicus*), and beaver (*Castor canadensis*) (NRC 2004, Exelon 2015b). Common birds include Canada goose (*Branta canadensis*), mallard (*Anas platyrhynchos*), great blue heron (*Ardea herodias*), killdeer (*Charadrius vociferus*), red-tailed hawk (*Buteo jamaicensis*), American kestrel (*Falco sparverius*), northern harrier (*Circus cyaneus*), northern cardinal (*Cardinalis cardinalis*), American robin (*Turdus migratorius*), and red-winged blackbird (*Agelaius phoeniceus*) (NRC 2004, Exelon 2015b). These species are generally tolerant to human activity and modified landscapes, such as the proposed disposal area and the nearby power plant.

Some migratory birds, bald eagles (*Haliaeetus leucocephalus*), and State-listed species could temporarily rest on or near the proposed disposal area (FWS 2015). However, the area does not provide substantial or preferred habitat for migratory birds, bald eagles, or State-listed species due to the lack of mature trees or forested areas, native prairie grasses, wetlands, aquatic features, or other non-disturbed, complex habitat features. The licensee and its contractor did not observe any evidence of migratory birds, bald eagles, and State-listed

species during an informal site investigation of the proposed disposal area in June 2015 (Exelon 2015b). Migratory birds, bald eagles, and State-listed species may occur in areas surrounding the proposed disposal site, especially in undisturbed forested or riparian areas (NRC 2004, Exelon 2015b).

During disposal activities, no tree cutting, other than tree seedlings, would be required (Exelon 2015b). Disposal activities would directly affect some grasses, bushes, and immature tree seedlings. However, these species are typical of a highly disturbed environment, very common within the area, and provide low-quality habitat to wildlife and birds. In addition, the licensee plans to seed over the disposal area with native grasses (Exelon 2015a), which would help to reduce erosion and provide a grassy habitat for wildlife once disposal activities are complete. Seeding the disposal site will also help prevent runoff to nearby aquatic features. Further, the licensee plans to use the best management practices outlined in the Illinois Urban Manual for Erosion and Sediment Control Best Management Practices to further minimize erosion and runoff (Exelon 2014b).

Noise associated with grading, transportation, or other disposal-related activities may temporarily disturb wildlife and birds. However, most wildlife and birds on or near the proposed disposal area are likely relatively tolerant of human activity given that the proposed disposal area is part of a larger operating power plant site. For example, the proposed disposal area is located close to existing warning sirens, which are extremely loud and periodically tested (Exelon 2015b). In addition, grading or other related activities would be temporary (Exelon 2015a) and wildlife and birds could return to the area once disposal activities were complete.

Given that disposal activities would not involve tree cutting, the affected vegetation is very common within the area, temporarily disturbed wildlife and birds could find similar habitat in the surrounding area, and no aquatic features occur onsite. Therefore, the NRC staff determined that impacts to aquatic and terrestrial resources would not be significant.

Threatened and Endangered Species

The NRC staff searched the U.S. Fish and Wildlife Service (FWS) Information Planning and Conservation online database for Federally threatened, endangered, proposed, or candidate species or designated critical habitat that could occur on or near the proposed disposal area (FWS 2015). The following four species have the potential to occur near the site: eastern prairie fringed orchid (*Platanthera leucophaea*), the rattlesnake-master borer moth (*Papaipema eryngii*), the Indiana bat (*Myotis sodalist*), and northern long-eared bat (*Myotis septentrionalis*). No designated critical habitat occurs near the site.

The eastern prairie fringed orchid is a perennial herb that grows 8 to 40 inches (in.) (20 to 102 centimeters [cm]) tall and produces long clusters of up to 40 white flowers in early July (NatureServe 2013). This plant grows in emergent wetlands, wet meadow, sedge meadow, fen, wet to mesic prairie, or marsh edges (FWS 2015). The proposed disposal area does not provide suitable habitat for this species because the soils are extremely dry, none of the habitats listed above occur on the site, and the land is highly disturbed. In addition, the licensee and its contractor did not observe any eastern prairie fringed orchid during its informal investigation of the site in June 2015 (Exelon 2015b). Therefore, the NRC staff determined that the proposed action would have no effect on eastern prairie fringed orchids.

The rattlesnake-master borer moth is an insect that relies on the rattlesnake-master, a prairie plant, as its only food source. The proposed site does not provide suitable habitat for rattlesnake-master borer moths because this species is an obligate resident of undisturbed prairie and woodland openings, and rattlesnake-master is not known to occur within the proposed site. In addition, the licensee and its contractor did not observe this species during its informal investigation of the site in June 2015 (Exelon 2015b). Therefore, the NRC staff determined that the proposed action would have no effect on the rattlesnake-master borer.

The Indiana bat and northern long-eared bat are insectivorous, migratory bats that inhabit the central portion of the eastern United States and hibernate colonially in caves and mines. During summer months, female Indiana bats tend to roost in colonies under slabs of peeling tree bark or cracks within trees in forest fragments (Pruitt and TeWinkel 2007). Northern long-eared bats tend to roost in trees in forested areas with greater canopy and in caves, mines, or manmade structures such as barns, sheds, and other buildings (Carter and Feldhamer 2005). In the winter, northern long-eared and Indiana bats rely on caves for hibernation. The proposed disposal area does not provide suitable habitat for hibernation, roosting, or foraging due to the lack of mature trees, forested areas, caves, wetlands, prairies, and aquatic features. In addition, the licensee and its contractor did not observe this species during its informal investigation of the site in June 2015 (Exelon 2015b).

Based on the above information, the NRC staff has determined the proposed action would have no effect on federally threatened, endangered, proposed, or candidate species or designated critical habitat that could occur on or near the proposed disposal area.

Historic and Cultural Resources

As reported in the DNPS's License Renewal environmental impact statement (NUREG-1437, Supplement 17), much of the DNPS site has been disturbed by construction of the nuclear power plant facilities and related infrastructure, including roads, parking lots, and the cooling pond. No archaeological surveys were completed at the Dresden site prior to station construction. However, there is at least one archaeological site recorded within the DNPS site boundary, 11 GR2, which was only minimally disturbed during construction according to a professional archaeologist who examined the site in 1973 (Atomic Energy Commission 1973).

As previously discussed, the onsite disposal of slightly contaminated soil at DNPS would take place on highly disturbed land (Exelon 2015b). Because any disturbance would occur

within previously disturbed areas, there would be no impact to historic and cultural resources. Based on the above information, the NRC staff has determined there would be no significant impacts to any historic and cultural resources at the DNPS.

Socioeconomic

Current socioeconomic conditions would be unaffected by the proposed onsite disposal of slightly contaminated soil at the DNPS. The licensee would use existing resources including the onsite workforce or local contractors to conduct the disposal of up to 20,000 m^3 (706,293 ft^3) of soil and sludge; therefore, there would be no significant socioeconomic impacts.

Noise

Noise emissions would occur as a result of the equipment used onsite and activities involved during site disposal preparation, transportation of the soil to the disposal area, and soil off-loading. Additional noise from the proposed action would be intermittent and short-term (approximately 2 weeks). Land clearing activities and equipment can result in source noise levels in the 80-88 A-weighted decibels (dBA) range for the Federal Highway Administration (FHWA 2006). However, noise levels attenuate rapidly with distance. For instance, backhoe/loader equipment can have source noise levels of 80-85 dBA; at 50 feet (15 m) distance noise levels drop to 79 dBA, and at 200 ft. (61 m) distance from the equipment noise levels drop to 65.5 dBA (FHWA 2006). The nearest resident is approximately 0.8 miles (1,287 m) from the proposed disposal area and noise levels from equipment and activities are not expected to be noticeable at this distance. Furthermore, noise levels associated with the proposed action will need to be in accordance with Illinois noise regulations found in the Illinois Administrative Code (Title 35, Subtitle H). Based on the above information, the NRC staff

concludes that there would be no significant off-site noise impacts associated with the proposed action.

Environmental Justice

The environmental justice impact analysis evaluates the potential for disproportionately high and adverse human health and environmental effects on minority and low-income populations that could result from the proposed disposal of slightly contaminated soil at DNPS. Such effects may include human health, biological, cultural, economic, or social impacts.

According to the 2010 Census, 13 percent of the total population (approximately 25,000 individuals) residing within a 5 mile (8 km) radius of the DNPS identified themselves as minority individuals (EPA 2015). The largest minority were people of Hispanic, Latino, or Spanish origin of any race (2,323 persons or 9 percent), followed by Black or African American (450 persons or 2 percent). Minority populations within Grundy County comprise 11.1 percent of the total population with the largest minority group being Hispanic, Latino, or Spanish origin of any race, 8.2 percent.

According to the U.S. Census Bureau's 2009–2013 American Community Survey 5-Year Estimates using the University of Missouri's Circular Area Profiling System (MCDCCAPS 2015), approximately 1,850 individuals (6.2 percent) residing within a 5 mile (8 km) radius of DNPS were identified as living below the Federal poverty threshold. The 2013 Federal poverty threshold was $12,119 for an individual and $24,028 for a family of four.

According to the U.S. Census Bureau's 2011-2013 American Community Survey 3-Year Estimates (USCB 2015), the median household income for Illinois was $55,799, while 14.8 percent of the state population and 10.9 percent of families were found to be living below the Federal poverty threshold. Grundy County had a higher median household income average

($63,978) and a lower percent of individuals (9.4 percent) and families (7.2 percent) living below the poverty level, respectively.

Potential impacts to minority and low-income populations would mostly consist of radiological and environmental effects (e.g., noise and dust impacts). Radiation doses are expected to continue to remain well below regulatory limits and noise and dust impacts would be temporary and limited to onsite activities.

Based on this information and the analysis of human health and environmental impacts presented in this environmental assessment, the proposed onsite disposal of slightly contaminated soil at the DNPS would not have disproportionately high and adverse human health and environmental effects on minority and low-income populations residing near the DNPS.

Environmental Impacts of the Alternatives to the Proposed Action

As an alternative to the proposed action, the NRC staff considered denial of the disposal request (i.e., the “no action” alternative). The consequences of the denial of the application would result in no change in current environmental impacts. The contaminated material would remain in its current location on the DNPS site and future contaminated material generated as a result of plant operation would be stored onsite.

The current contaminated soil and future contaminated soil and sludge generated as a result of plant operation could also be sent to a licensed low-level radioactive waste disposal facility. Shipment of future soil to an offsite low-level radioactive waste disposal facility would not result in a compensating improvement in the environmental impacts, as there could be additional transportation-related impacts associated with transporting the soil offsite. Furthermore, as discussed in Information Notice 83-05, the NRC has recognized that onsite

disposal of low-level waste can minimize the quantity of waste shipped to a radioactive waste disposal facility and can provide a reasonable alternative to the high costs associated with disposals at radioactive waste disposal facilities. Therefore, the only alternative the staff considered is the no-action alternative, under which the current soil inventory would remain in its current location on the DNPS site and future contaminated soil generated would also be stored onsite.

If the 6,000 m^3 (211,888 ft^3) of soil were to remain in its current location on the DNPS site and future contaminated soil would also be disposed of in the protected area of the DNPS site, there would be no change in current environmental impacts. The soils would be contained within a concrete berm. To limit erosion and migration of the soil, tarps and spray-on sealants would continue to be used. Potential leaching from this area would be identified through the DNPS RGPP monitoring program. The material would continue to be controlled in accordance with the requirements in 10 CFR part 20 and is not expected to result in a significant environmental impact.

Alternative Use of Resources

This action does not involve the use of any resources (water, air, land) not previously considered in the Generic Environmental Impact Statement for License Renewal of Nuclear Plants: Regarding Dresden Nuclear Power Station, Units 2 and 3 (NUREG-1437, Supplement 17, dated June 2004).

Agencies and Persons Consulted

In accordance with its stated policy, on February 26, 2015, the NRC staff consulted with the State official of Illinois, Ms. Kelly Horn, Section Head, Environmental Management Bureau

of Radiation Safety of the Illinois Emergency Management Agency, regarding the environmental impact of the proposed action. Ms. Horn had no comments.

Additionally, the NRC staff determined that the proposed action would have no effect on federally listed threatened and endangered species that could occur on or near the proposed disposal area. As well, the proposed action would have no significant impact to historic and cultural resources. Therefore, consultation was not required under Section 7 of the Endangered Species Act or under Section 106 of the National Historic Preservation Act.

III. Significant Impact.

Exelon Generation Company, LLC (Exelon, the licensee) has requested onsite disposal of up to 20,000 m^3 (706,293 ft^3) of contaminated soil and sludge at the DNPS, Units 2 and 3, in accordance with 10 CFR 20.2002. Based on the environmental assessment included in section II. above, the NRC staff has concluded that the proposed action will not have a significant impact on the quality of the human environment. Accordingly, the NRC has determined not to prepare an environmental impact statement for the proposed action.

IV. Availability of Documents.

The documents identified in the following table are available to interested persons through one or more of the following methods, as indicated.

DOCUMENT	ADAMS ACCESSION NO. / WEB LINK / *FEDERAL REGISTER* CITATION
"Designation of areas for air quality planning purposes."	40 CFR Part 81. Code of Federal Regulations, Title 40,

"Determining Conformity of Federal Actions to State or Federal Implementation Plans."	40 CFR Part 93. Code of Federal Regulations, Title 40
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