

**Monette, Frederick A.**

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**From:** Moret, Ellen N.  
**Sent:** Thursday, October 05, 2006 1:49 PM  
**To:** Monette, Frederick A.  
**Subject:** Category 1 and 2 Issues

**Attachments:** Susquehanna CAT 1 &2.xls



Susquehanna CAT  
1 &2.xls (60 K...

Forgot to send this to you earlier...

Category 1 and 2 Issues Identified in 10 CFR Part 51, Subpart A, Appendix B, Table B-1 and Their Applicability to Susquehanna Steam Electric Station

Category 1 issues applicable to SSES license renewal are highlighted in green

Category 2 and NA issues applicable to SSES license renewal are highlighted in yellow

Issue Number	Topic	Cooling System	Issue	Category	GEIS Findings	Applicability to SSES Relicensing	Rationale
1	Surface Water Quality, Hydrology, and Use	All	Impacts of refurbishment on surface-water quality	1	SMALL. Impacts are expected to be negligible during refurbishment because best management practices are expected to be employed to control soil erosion and spills.	N	No refurbishment is planned at SSES
2	Surface Water Quality, Hydrology, and Use	All	Impacts of refurbishment on surface-water use	1	SMALL. Water use during refurbishment will not increase appreciatively or will be reduced during plant outage.	N	No refurbishment is planned at SSES
3	Surface Water Quality, Hydrology, and Use	All	Altered current patterns at intake and discharge structures	1	SMALL. Altered current patterns have not been found to be a problem at operating nuclear power plants and are not expected to be a problem during the license renewal term.	Y	Applicable to all plants
4	Surface Water Quality, Hydrology, and Use	All	Altered salinity gradients	1	SMALL. Salinity gradients have not been found to be a problem at operating nuclear power plants and are not expected to be a problem during the license renewal term.	N	SSES is located on a freshwater body.
5	Surface Water Quality, Hydrology, and Use	All	Altered thermal stratification of lakes	1	SMALL. Generally, lake stratification has not been found to be a problem at operating nuclear power plants and is not expected to be a problem during the license renewal term.	N	SSES does not use surface water from lakes
6	Surface Water Quality, Hydrology, and Use	All	Temperature effects on sediment transport capacity	1	SMALL. These effects have not been found to be a problem at operating nuclear power plants and are not expected to be a problem during the license renewal term.	Y	Applicable to all plants
7	Surface Water Quality, Hydrology, and Use	All	Scouring caused by discharged cooling water	1	SMALL. Scouring has not been found to be a problem at most operating nuclear power plants and has caused only localized effects at a few plants. It is not expected to be a problem during the license renewal term.	Y	Applicable to all plants
8	Surface Water Quality, Hydrology, and Use	All	Eutrophication	1	SMALL. Eutrophication has not been found to be a problem at operating nuclear power plants and is not expected to be a problem during the license renewal term.	Y	Applicable to all plants
9	Surface Water Quality, Hydrology, and Use	All	Discharge of chlorine or other biocides	1	SMALL. Effects are not a concern among regulatory and resource agencies and are not expected to be a problem during the license renewal term.	Y	SSES uses chlorine or other biocides in its cooling system
10	Surface Water Quality, Hydrology, and Use	All	Discharge of sanitary wastes and minor chemical spills	1	SMALL. Effects are readily controlled through NPDES permit and periodic modifications, if needed, and are not expected to be a problem during the license renewal term.	Y	Applicable to all plants
11	Surface Water Quality, Hydrology, and Use	All	Discharge of other metals in waste water	1	SMALL. These discharges have not been found to be a problem at operating nuclear power plants with cooling-tower-based heat dissipation systems and have been satisfactorily mitigated at other plants. They are not expected to be a problem during the license renewal term.	Y	Applicable to all plants

12	Surface Water Quality, Hydrology, and Use	All	Water use conflicts (plants with once-through cooling systems)	1	SMALL. These conflicts have not been found to be a problem at operating nuclear power plants with once-through heat dissipation systems.	N	SSES does not have a once-through cooling system
13	Surface Water Quality, Hydrology and Use	All	Water use conflicts (plants with cooling ponds or cooling towers using make-up water from a small river with low flow)	2	SMALL OR MODERATE. The issue has been a concern at nuclear power plants with cooling ponds and at plants with cooling towers. Impacts on instream and riparian communities near these plants could be of moderate significance in some situations. See §51.53	Y	SSES has cooling towers, using make-up water from a river with low flow
14	Aquatic Ecology	All	Refurbishment	1	SMALL. During plant shutdown and refurbishment there will be negligible effects on aquatic biota because of a reduction of entrainment and impingement of organisms or a reduced release of chemicals.	N	No refurbishment is planned at SSES
15	Aquatic Ecology	All	Accumulation of contaminants in sediments or biota	1	SMALL. Accumulation of contaminants has been a concern at a few nuclear power plants but has been satisfactorily mitigated by replacing copper alloy condenser tubes with those of another metal. It is not expected to be a problem during the license renewal term.	Y	Applicable to all plants
16	Aquatic Ecology	All	Entrainment of phytoplankton and zooplankton	1	SMALL. Entrainment of phytoplankton and zooplankton has not been found to be a problem at operating nuclear power plants and is not expected to be a problem during the license renewal term.	Y	Applicable to all plants
17	Aquatic Ecology	All	Cold shock	1	SMALL. Cold shock has been satisfactorily mitigated at operating nuclear plants with once-through cooling systems, has not endangered fish populations or been found to be a problem at operating nuclear power plants with cooling towers or cooling ponds, and is not expected to be a problem during the license renewal term.	Y	Applicable to all plants
18	Aquatic Ecology	All	Thermal plume barrier to migrating fish	1	SMALL. Thermal plumes have not been found to be a problem at operating nuclear power plants and are not expected to be a problem during the license renewal term.	Y	Applicable to all plants
19	Aquatic Ecology	All	Distribution of aquatic organisms	1	SMALL. Thermal discharge may have localized effects but is not expected to affect the larger geographical distribution of aquatic organisms.	Y	Applicable to all plants
20	Aquatic Ecology	All	Premature emergence of aquatic insects	1	SMALL. Premature emergence has been found to be a localized effect at some operating nuclear power plants but has not been a problem and is not expected to be a problem during the license renewal term.	Y	Applicable to all plants
21	Aquatic Ecology	All	Gas supersaturation (gas bubble disease)	1	SMALL. Gas supersaturation was a concern at a small number of operating nuclear power plants with once-through cooling systems but has been satisfactorily mitigated. It has not been found to be a problem at operating nuclear power plants with cooling towers or cooling ponds and is not expected to be a problem during the license renewal term.	Y	Applicable to all plants
22	Aquatic Ecology	All	Low dissolved oxygen in the discharge	1	SMALL. Low dissolved oxygen has been a concern at one nuclear power plant with a once-through cooling system but has been effectively mitigated. It has not been found to be a problem at operating nuclear power plants with cooling towers or cooling ponds and is not expected to be a problem during the license renewal term.	Y	Applicable to all plants
23	Aquatic Ecology	All	Losses from predation, parasitism, and disease among organisms exposed to sublethal stresses	1	SMALL. These types of losses have not been found to be a problem at operating nuclear power plants and are not expected to be a problem during the license renewal term.	Y	Applicable to all plants
24	Aquatic Ecology	All	Stimulation of nuisance organisms (e.g., shipworms)	1	SMALL. Stimulation of nuisance organisms has been satisfactorily mitigated at the single nuclear power plant with a once-through cooling system where previously it was a problem. It has not been found to be a problem at operating nuclear power plants with cooling towers or cooling ponds and is not	Y	Applicable to all plants

25	Aquatic Ecology	Once-through and cooling ponds	Entrainment of fish and shellfish in early life stages	2	SMALL, MODERATE, OR LARGE. The impacts of entrainment are small at many plants but may be moderate or even large at a few plants with once-through and cooling-pond cooling systems. Further, ongoing efforts in the vicinity of these plants to restore fish populations may increase the numbers	N	SSES does not have a once-through cooling system
26	Aquatic Ecology	Once-through and cooling ponds	Impingement of fish and shellfish	2	SMALL, MODERATE, OR LARGE. The impacts of impingement are small at many plants but may be moderate or even large at a few plants with once-through and cooling-pond cooling systems. See §51.53(c)(3)(ii)(B).	N	SSES does not have a once-through cooling system
27	Aquatic Ecology	Once-through and cooling ponds	Heat shock	2	SMALL, MODERATE, OR LARGE. Because of continuing concerns about heat shock and the possible need to modify thermal discharges in response to changing environmental conditions, the impacts may be of moderate or large significance at some plants. See §51.53(c)(3)(ii)(B).	N	SSES does not have a once-through cooling system
28	Aquatic Ecology	Cooling towers	Entrainment of fish and shellfish in early life stages	1	SMALL. Entrainment of fish has not been found to be a problem at operating nuclear power plants with this type of cooling system and is not expected to be a problem during the license renewal term.	Y	SSES has a cooling tower based heat dissipation system
29	Aquatic Ecology	Cooling towers	Impingement of fish and shellfish	1	SMALL. Impingement has not been found to be a problem at operating nuclear power plants with this type of cooling system and is not expected to be a problem during the license renewal term.	Y	SSES has a cooling tower based heat dissipation system
30	Aquatic Ecology	Cooling towers	Heat shock	1	SMALL. Heat shock has not been found to be a problem at operating nuclear power plants with this type of cooling system and is not expected to be a problem during the license renewal term.	Y	SSES has a cooling tower based heat dissipation system
31	Groundwater Use and Quality	All	Impacts of refurbishment on ground-water use and quality	1	SMALL. Extensive dewatering during the original construction on some sites will not be repeated during refurbishment on any sites. Any plant wastes produced during refurbishment will be handled in the same manner as in current operating practices and are not expected to be a problem during the	N	No refurbishment is planned at SSES
32	Groundwater Use and Quality	All	Ground-water use conflicts (potable and service water, plants that use <100 gpm)	1	SMALL. Plants using less than 100 gpm are not expected to cause any ground-water use conflicts.	Y	SSES uses less than 100 GPM ground-water
33	Groundwater Use and Quality	All	Ground-water use conflicts (potable and service water, and dewatering; plants that use >100 gpm)	2	SMALL, MODERATE, OR LARGE. Plants that use more than 100 gpm may cause ground-water use conflicts with nearby ground-water users. See §51.53(c)(3)(ii)(C).	N	SSES does not use more than 100 GPM groundwater
34	Groundwater Use and Quality	Cooling towers	Ground-water use conflicts (plants using cooling towers withdrawing make-up water from a small river)	2	SMALL, MODERATE, OR LARGE. Water use conflicts may result from surface water withdrawals from small water bodies during low flow conditions which may affect aquifer recharge, especially if other ground-water or upstream surface water users come on line before the time of license	Y	SSES uses cooling towers that withdraw make-up water from a small river
35	Groundwater Use and Quality	All	Ground-water use conflicts (Ranney wells)	2	SMALL, MODERATE, OR LARGE. Ranney wells can result in potential ground-water depression beyond the site boundary. Impacts of large ground-water withdrawal for cooling tower makeup at nuclear power plants using Ranney wells must be evaluated at the time of application for license renewal.	N	SSES does not use Ranney wells
36	Groundwater Use and Quality	All	Ground-water quality degradation (Ranney wells)	1	SMALL. Ground-water quality at river sites may be degraded by induced infiltration of poor-quality river water into an aquifer that supplies large quantities of reactor cooling water. However, the lower quality infiltrating water would not preclude the current uses of ground water and is not expected to be	N	SSES does not use Ranney wells
37	Groundwater Use and Quality	All	Ground-water quality degradation (saltwater intrusion)	1	SMALL. Nuclear power plants do not contribute significantly to saltwater intrusion.	N	SSES is located on a freshwater body.

38	Groundwater Use and Quality	Cooling ponds in salt marshes	Ground-water quality degradation	1	SMALL. Sites with closed-cycle cooling ponds may degrade ground-water quality. Because water in salt marshes is brackish, this is not a concern for plants located in salt marshes.	N	SSES is located on a freshwater body.
39	Groundwater Use and Quality	Cooling ponds at inland sites	Ground-water quality degradation	2	SMALL, MODERATE, OR LARGE. Sites with closed-cycle cooling ponds may degrade ground-water quality. For plants located inland, the quality of the ground water in the vicinity of the ponds must be shown to be adequate to allow continuation of current uses. See §51.53(c)(3)(ii)(D).	N	This issue is related to heat-dissipation systems that are not installed at SSES
40	Terrestrial Resources	All	Refurbishment impacts	2	SMALL, MODERATE, OR LARGE. Refurbishment impacts are insignificant if no loss of important plant and animal habitat occurs. However, it cannot be known whether important plant and animal communities may be affected until the specific proposal is presented with the license renewal application. See	N	No refurbishment is planned at SSES
41	Terrestrial Resources	Cooling towers	Cooling tower impacts on crops and ornamental vegetation	1	SMALL. Impacts from salt drift, icing, fogging, or increased humidity associated with cooling tower operation have not been found to be a problem at operating nuclear power plants and are not expected to be a problem during the license renewal term.	Y	SSES has a cooling tower based heat dissipation system.
42	Terrestrial Resources	Cooling towers	Cooling tower impacts on native plants	1	SMALL. Impacts from salt drift, icing, fogging, or increased humidity associated with cooling tower operation have not been found to be a problem at operating nuclear power plants and are not expected to be a problem during the license renewal term.	Y	SSES has a cooling tower based heat dissipation system.
43	Terrestrial Resources	Cooling towers	Bird collisions with cooling towers	1	SMALL. These collisions have not been found to be a problem at operating nuclear power plants and are not expected to be a problem during the license renewal term.	Y	SSES has natural draft towers.
44	Terrestrial Resources	Cooling ponds	Cooling pond impacts on terrestrial resources	1	SMALL. Impacts of cooling ponds on terrestrial ecological resources are considered to be of small significance at all sites.	N	SSES does not use cooling ponds
45	Terrestrial Resources	All	Power line right-of-way management (cutting and herbicide application)	1	SMALL. The impacts of right-of-way maintenance on wildlife are expected to be of small significance at all sites.	Y	Applicable to all plants
46	Terrestrial Resources	All	Bird collision with power lines	1	SMALL. Impacts are expected to be of small significance at all sites.	Y	Applicable to all plants
47	Terrestrial Resources	All	Impacts of electromagnetic fields on flora and fauna (plants, agricultural crops, honeybees, wildlife, livestock)	1	SMALL. No significant impacts of electromagnetic fields on terrestrial flora and fauna have been identified. Such effects are not expected to be a problem during the license renewal term.	Y	Applicable to all plants
48	Terrestrial Resources	All	Floodplains and wetland on power line right of way	1	SMALL. Periodic vegetation control is necessary in forested wetlands underneath power lines and can be achieved with minimal damage to the wetland. No significant impact is expected at any nuclear power plant during the license renewal term.	Y	Applicable to all plants.
49	Threatened and Endangered Species	All	Threatened or endangered species	2	SMALL, MODERATE, OR LARGE. Generally, plant refurbishment and continued operation are not expected to adversely affect threatened or endangered species. However, consultation with appropriate agencies would be needed at the time of license renewal to determine whether threatened or	Y	Applicable to all plants
50	Air Quality	All	Air quality during refurbishment (nonattainment and maintenance areas)	2	SMALL, MODERATE, OR LARGE. Air quality impacts from plant refurbishment associated with license renewal are expected to be small. However, vehicle exhaust emissions could be cause for concern at locations in or near nonattainment or maintenance areas. The significance of the	N	No refurbishment is planned at SSES

51	Air Quality	All	Air quality effects of transmission lines	1	SMALL. Production of ozone and oxides of nitrogen is insignificant and does not contribute measurably to ambient levels of these gases.	Y	Applicable to all plants
52	Land Use	All	Onsite land use	1	SMALL. Projected onsite land use changes required during refurbishment and the renewal period would be a small fraction of any nuclear power plant site and would involve land that is controlled by the applicant.	Y	Applicable to all plants
53	Land Use	All	Power line right of way	1	SMALL. Ongoing use of power line right of ways would continue with no change in restrictions. The effects of these restrictions are of small significance.	Y	Applicable to all plants
54	Human Health	All	Radiation exposures to the public during refurbishment	1	SMALL. During refurbishment, the gaseous effluents would result in doses that are similar to those from current operation. Applicable regulatory dose limits to the public are not expected to be exceeded.	N	No refurbishment is planned at SSES
55	Human Health	All	Occupational radiation exposures during refurbishment	1	SMALL. Occupational doses from refurbishment are expected to be within the range of annual average collective doses experienced for pressurized-water reactors and boiling-water reactors. Occupational mortality risk from all causes including radiation is in the mid-range for industrial settings.	N	No refurbishment is planned at SSES
56	Human Health	Cooling towers	Microbiological organisms (occupational health)	1	SMALL. Occupational health impacts are expected to be controlled by continued application of accepted industrial hygiene practices to minimize worker exposures.	Y	SSES has a cooling tower based heat dissipation system.
57	Human Health	Cooling lakes or canals, or cooling towers or cooling ponds that discharge to a small river	Microbiological organisms (public health)	2	SMALL, MODERATE, OR LARGE. These organisms are not expected to be a problem at most operating plants except possibly at plants using cooling ponds, lakes, or canals that discharge to small rivers. Without site-specific data, it is not possible to predict the effects generically. See	Y	SSES has a cooling tower based heat dissipation system.
58	Human Health	All	Noise	1	Noise has not been found to be a problem at operating plants and is not expected to be a problem at any plant during the license renewal term.	Y	Applicable to all plants
59	Human Health	All	Electromagnetic fields, acute effects (electric shock)	2	SMALL, MODERATE, OR LARGE. Electrical shock resulting from direct access to energized conductors or from induced charges in metallic structures have not been found to be a problem at most operating plants and generally are not expected to be a problem during the license renewal term.	Y	Applicable to all plants
60	Human Health	All	Electromagnetic fields, chronic effects	NA	UNCERTAIN. Biological and physical studies of 60-Hz electromagnetic fields have not found consistent evidence linking harmful effects with field exposures. However, because the state of the science is currently inadequate, no generic conclusion on human health impacts is possible.	Y	Applicable to all plants
61	Human Health	All	Radiation exposures to public (license renewal term)	1	SMALL. Radiation doses to the public will continue at current levels associated with normal operations.	Y	Applicable to all plants
62	Human Health	All	Occupational radiation exposures (license renewal term)	1	SMALL. Projected maximum occupational doses during the license renewal term are within the range of doses experienced during normal operations and normal maintenance outages, and would be well below regulatory limits.	Y	Applicable to all plants
63	Socioeconomics	All	Housing impacts	2	SMALL, MODERATE, OR LARGE. Housing impacts are expected to be of small significance at plants located in a medium or high population area and not in an area where growth control measures that limit housing development are in effect. Moderate or large housing impacts of the workforce associated	Y	Applicable to all plants

64	Socioeconomics	All	Public services: public safety, social services, and tourism and recreation	1	SMALL. Impacts to public safety, social services, and tourism and recreation are expected to be of small significance at all sites.	Y	Applicable to all plants
65	Socioeconomics	All	Public services: public utilities	2	SMALL OR MODERATE. An increased problem with water shortages at some sites may lead to impacts of moderate significance on public water supply availability. See §51.53(c)(3)(ii)(I).	Y	Applicable to all plants
66	Socioeconomics	All	Public services, education (refurbishment)	2	SMALL, MODERATE, OR LARGE. Most sites would experience impacts of small significance but larger impacts are possible depending on site- and project-specific factors. See §51.53(c)(3)(ii)(I).	N	No refurbishment is planned at SSES
67	Socioeconomics	All	Public services, education (license renewal term)	1	SMALL. Only impacts of small significance are expected.	Y	Applicable to all plants
68	Socioeconomics	All	Offsite land use (refurbishment)	2	SMALL OR MODERATE. Impacts may be of moderate significance at plants in low population areas. See §51.53(c)(3)(ii)(I).	N	No refurbishment is planned at SSES
69	Socioeconomics	All	Offsite land use (license renewal term)	2	SMALL, MODERATE, OR LARGE. Significant changes in land use may be associated with population and tax revenue changes resulting from license renewal. See §51.53(c)(3)(ii)(I).	Y	Applicable to all plants
70	Socioeconomics	All	Public services, transportation	2	SMALL, MODERATE, OR LARGE. Transportation impacts are generally expected to be of small significance. However, the increase in traffic associated with the additional workers and the local road and traffic control conditions may lead to impacts of moderate or large significance at some	Y	Applicable to all plants
71	Socioeconomics	All	Historic and archaeological resources	2	SMALL, MODERATE, OR LARGE. Generally, plant refurbishment and continued operation are expected to have no more than small adverse impacts on historic and archaeological resources. However, the National Historic Preservation Act requires the Federal agency to consult with the State.	Y	Applicable to all plants
72	Socioeconomics	All	Aesthetic impacts (refurbishment)	1	SMALL. No significant impacts are expected during refurbishment.	N	No refurbishment is planned at SSES
73	Socioeconomics	All	Aesthetic impacts (license renewal term)	1	SMALL. No significant impacts are expected during the license renewal term.	Y	Applicable to all plants
74	Socioeconomics	All	Aesthetic impacts of transmission lines (license renewal term)	1	SMALL. No significant impacts are expected during the license renewal term.	Y	Applicable to all plants
75	Postulated Accidents	All	Design-basis accidents	1	SMALL. The NRC staff has concluded that the environmental impacts of design-basis accidents are of small significance for all plants.	Y	Applicable to all plants
76	Postulated Accidents	All	Severe accidents	2	SMALL. The probability weighted consequences of atmospheric releases, fallout onto open bodies of water, releases to ground water, and societal and economic impacts from severe accidents are small for all plants. However, alternatives to mitigate severe accidents must be considered for all plants that	Y	Applicable to all plants

77	Uranium Fuel Cycle and Waste Management	All	Offsite radiological impacts (individual effects from other than the disposal of spent fuel and high level waste)	1	SMALL. Off-site impacts of the uranium fuel cycle have been considered by the Commission in Table S - 3 of this part. Based on information in the GEIS, impacts on individuals from radioactive gaseous and liquid releases including radon-222 and technetium-99 are small.	Y	Applicable to all plants
78	Uranium Fuel Cycle and Waste Management	All	Offsite radiological impacts (collective effects)	1	The 100 year environmental dose commitment to the U.S. population from the fuel cycle, high level waste and spent fuel disposal excepted is calculated to be about 14,800 person rem, or 12 cancer fatalities, for each additional 20-year power reactor operating term.	Y	Applicable to all plants
79	Uranium Fuel Cycle and Waste Management	All	Offsite radiological impacts (spent fuel and high level waste disposal)	1	For the high level waste and spent fuel disposal component of the fuel cycle, there are no current regulatory limits for offsite releases of radionuclides for the current candidate repository site. However, if we assume that limits are developed along the lines of the 1995 National Academy of Sciences (NAS)	Y	Applicable to all plants
80	Uranium Fuel Cycle and Waste Management	All	Non-radiological impacts of the uranium fuel cycle	1	SMALL. The nonradiological impacts of the uranium fuel cycle resulting from the renewal of an operating license for any plant are found to be small.	Y	Applicable to all plants
81	Uranium Fuel Cycle and Waste Management	All	Low-level waste storage and disposal	1	SMALL. The comprehensive regulatory controls that are in place and the low public doses being achieved at reactors ensure that the radiological impacts to the environment will remain small during the term of a renewed license.	Y	Applicable to all plants
82	Uranium Fuel Cycle and Waste Management	All	Mixed waste storage and disposal	1	SMALL. The comprehensive regulatory controls and the facilities and procedures that are in place ensure proper handling and storage, as well as negligible doses and exposure to toxic materials for the public and the environment at all plants. License renewal will not increase the small.	Y	Applicable to all plants
83	Uranium Fuel Cycle and Waste Management	All	On-site spent fuel	1	SMALL. The expected increase in the volume of spent fuel from an additional 20 years of operation can be safely accommodated on site with small environmental effects through dry or pool storage at all plants if a permanent repository or monitored retrievable storage is not available.	Y	Applicable to all plants
84	Uranium Fuel Cycle and Waste Management	All	Nonradiological waste	1	SMALL. No changes to generating systems are anticipated for license renewal. Facilities and procedures are in place to ensure continued proper handling and disposal at all plants.	Y	Applicable to all plants
85	Uranium Fuel Cycle and Waste Management	All	Transportation	1	Table S - 4 of this part contains an assessment of impact parameters to be used in evaluating transportation effects in each case.	Y	Applicable to all plants
86	Decommissioning	All	Radiation doses	1	SMALL. Doses to the public will be well below applicable regulatory standards regardless of which decommissioning method is used. Occupational doses would increase no more than 1 man-rem caused by buildup of long-lived radionuclides during the license renewal term.	Y	Applicable to all plants
87	Decommissioning	All	Waste management	1	SMALL. Decommissioning at the end of a 20-year license renewal period would generate no more solid wastes than at the end of the current license term. No increase in the quantities of Class C or greater than Class C wastes would be expected.	Y	Applicable to all plants
88	Decommissioning	All	Air quality	1	SMALL. Air quality impacts of decommissioning are expected to be negligible, either at the end of the current operating term or at the end of the license renewal term.	Y	Applicable to all plants
89	Decommissioning	All	Water quality	1	SMALL. The potential for significant water quality impacts from erosion or spills is no greater whether decommissioning occurs after a 20-year license renewal period or after the original 40-year operation period, and measures are readily available to avoid such impacts.	Y	Applicable to all plants

90	Decommissioning	All	Ecological resources	1	SMALL. Decommissioning after either the initial operating period or after a 20-year license renewal period is not expected to have any direct ecological impacts.	Y	Applicable to all plants
91	Decommissioning	All	Socioeconomic impacts	1	SMALL. Decommissioning would have some short-term socioeconomic impacts. The impacts would not be increased by delaying decommissioning until the end of a 20-year relicensing period; but they might be decreased by population and economic growth.	Y	Applicable to all plants
92	Environmental justice	All	Environmental justice	NA	NONE. The need for and the content of an analysis of environmental justice will be addressed in plant-specific reviews.	Y	Applicable to all plants