July 7, 2000

MEMORANDUM TO: Those on the Attached List

FROM: William C. Huffman, Jr., Project Manager ***/RA/***
Decommissioning Section
Project Directorate IV & Decommissioning
Office of Nuclear Reactor Regulation

SUBJECT: TRANSMITTAL OF REPORT ON DETERMINATION OF APPLICABILITY OF TITLE 10 OF THE CODE OF FEDERAL REGULATIONS TO DECOMMISSIONING NUCLEAR POWER PLANTS

Attached is a report prepared by Brookhaven National Laboratory that will be used to help determine the applicability of regulations contained in Title 10 of the Code of Federal Regulations to decommissioning nuclear power plants. The report will facilitate discussions concerning decommissioning regulatory improvements and is being provided for your information. The staff plans to meet with industry and public stakeholders in the near future to obtain additional input on decommissioning regulatory improvement initiatives being pursued by the staff.

Attachment: Report

CONTACT: William Huffman, DLPM/NRR
301-415-1141

July 7, 2000

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Attachment: Report

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Addressees - Memorandum dated July 7, 2000

SUBJECT: TRANSMITTAL OF REPORT ON DETERMINATION OF APPLICABILITY OF TITLE 10 OF THE CODE OF FEDERAL REGULATIONS TO DECOMMISSIONING NUCLEAR POWER PLANTS

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DETERMINATION OF THE APPLICABILITY OF TITLE 10 OF THE CODE OF FEDERAL REGULATIONS TO DECOMMISSIONING NUCLEAR POWER PLANTS

Attachment

BACKGROUND

The U. S. Nuclear Regulatory Commission's (NRC) Office of Nuclear Reactor Regulation (NRR) is a major program office in the NRC that is responsible for the licensing and regulatory oversight of nuclear power reactors in the civilian sector.

The Decommissioning Section of Project Directorate IV, Division of Licensing Project Management, is responsible for project management activities associated with permanently shutdown and decommissioned nuclear power plants. These include regulatory activities, such as development or modifications of the NRC rules and regulations associated with decommissioning, including the development of associated guidance (i.e., Regulatory Guides and Standard Review Plans).

One area of focus for the Decommissioning Section is to update the regulations pertaining to decommissioning. When a nuclear power plant licensee certifies permanent cessation of operation and removal of fuel from the reactor, its authority to operate is withdrawn. Despite this withdrawal of authority to operate, a decommissioned nuclear power plant still retains a Part 50 "operating license." As such, the decommissioning plant is subject to many of the requirements that apply to operating plant Part 50 licensees. Under the current regulations, it is often difficult to discern whether or not certain operating plant requirements apply to decommissioning plants. Only if a requirement specifically excludes decommissioning plants, or limits applicability to nuclear plants authorized to operate, is there a legal basis for excluding the requirements from the purview of decommissioning regulations. In addition, implementation of operating plant regulations determined to apply to decommissioning plants can be inconsistent and unpredictable. Therefore, a need was identified by NRR to provide assistance in clarifying which requirements from Part 50, as well as other parts of Title 10 of the Code of Federal Regulations (CFR), are applicable to nuclear power plants undergoing decommissioning. This information will be used to assist the NRC staff in developing regulatory improvements for decommissioning nuclear power plants.

It should be noted that the interpretations of the regulatory applicability in the attached report are for facilitating discussions on nuclear power plant decommissioning regulatory improvement and does not represent any official position of the Commission and has not been reviewed by the Office of General Counsel.

This report is based on the results of Brookhaven National Laboratory's (BNL) review of Chapter 10 of the Code of Federal Regulations and the binning of each regulation as to the applicability to decommissioning nuclear power plants. The report has been modified by the staff for consistency, clarification, and correctness, and is therefore, not identical to the Technical Letter Report provided by the BNL contract. Information on the BNL contract is provided on the following page.

JCN J-2650, Task 2

E. Grove, J. Taylor, H. Todosow, and P. Bezler

Nuclear and Infrastructure System Divsion
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Prepared for the U.S. Nuclear Regulatory Commission
Office of Nuclear Reactor Regulation
Contract No. DE-AC02-98CH10886

DETERMINATION OF THE APPLICABILITY OF TITLE 10 OF THE CODE OF FEDERAL REGULATIONS TO DECOMMISSIONING NUCLEAR POWER PLANTS

TABLE OF CONTENTS

1. INTRODUCTION

This report was prepared with the assistance of Brookhaven National Laboratory (BNL) in an effort to identify and categorize the regulations in Title 10 of the Code of Federal Regulations (CFR) that have applicability to decommissioning nuclear power plants. This report includes the review of 10 CFR, Parts 1 through 199.

For each part reviewed, the information is presented in the following format:

- **Citation** (10 CFR Part 1-199),
- **Retrieval Keyword Phrase** (keywords or phrases which identify applicability to decommissioning nuclear power plants),
- **Background** (provides brief overview of citation),
- **Applicability Analysis** (analysis of part and specific sections upon which applicability determination is based. Includes citations from applicable sections of Federal Register, Rulemaking Plans, and Regulatory Guides which were referenced), and
- **Applicability Binning**

    1. Regulations are directly applicable to decommissioning nuclear power plants,
    2. Regulations are potentially applicable to decommissioning nuclear power plants,
    3. Regulations are indirectly applicable to decommissioning nuclear power plants,
    4. Regulations are not applicable to decommissioning nuclear power plants, or
    5. Regulations have an indeterminate applicability to decommissioning nuclear power plants.

    The explanation for each of the binning categories are:

    1. **Regulations directly applicable to decommissioning nuclear power plants**: This subsection, in its current written form, is applicable to a decommissioning plant. No changes in wording are required (although some may be recommended by BNL). The criteria for this bin are that specific words or phrases appear. Examples include (1) permanent cessation of operations, (2) decommissioning, (3) all licenses, and (4) Part 50 licenses.

    2. **Regulations potentially applicable to decommissioning nuclear power plants**: The subsection should be applicable but does not meet the directly applicable criteria. In other words, when the intent of the section is considered, it appears to be applicable; however, some modification of the text is necessary. Examples may include (1) an operating license is mentioned in the scope, and a determination needs to be made if applicability to a decommissioning plant is warranted or (2) no reference is made to an operating or decommissioning plant. Typically, other reference material (i.e., Federal Register) will be used to make this determination.

3. **Regulations indirectly applicable to decommissioning nuclear power plants**: The subsection, as written, does not meet the criteria for Directly Applicable or Potentially Applicable. However, references are made to other subsections which can be binned as Directly or Potentially Applicable.

4. **Regulations not applicable to decommissioning nuclear power plants**: This subsection, as written, does not satisfy the criteria for Directly/Potentially/Indirectly binning. This subsection does not apply to a decommissioning plant.

5. **Regulations have indeterminate applicability to decommissioning nuclear power plants**: A determination could not be made by BNL. Typically, this categorization will be re-binned following discussions between BNL and the NRC.

The categorization presented in this report will assist the NRC in quickly identifying the regulations applicable to decommissioning. In addition, BNL has highlighted specific areas which need additional clarification.

Table 1 presents a summary of the results of this program. This table also identifies the specific sections which may need additional NRC review to clarify the applicability to decommissioning nuclear power plants.

Table 1 Summary Table - Applicability Binning

Part 10 Code Of Federal Regulations Citation	Review Needed to Clarify Applicability to Decommissioning Plants	Applicability Binning				
		Directly	Potentially	Indirectly	Not Applicable	Indeterminate
Part 1 Statement of Organization and General Information		✔				
Part 2 Rules of Practice for Domestic Licensing Proceedings and Issuance of Orders						
Subpart A-Procedure for Issuance, Amendment, Transfer, or Renewal of License		✔				
Subpart B-Procedure for Imposing Requirements by Order, or for Modification, Suspension, or Revocation of a License, or for Imposing Civil Penalties		✔				
Subpart D-Additional Procedures Applicable to Proceedings for the Issuance of Licenses to Construct or Operate Nuclear Power Plants of Duplicate Design at Multiple Sites	✔		✔			
Subpart E-Additional Procedures Applicable to Proceedings for the Issuance of Licenses to Manufacture Nuclear Power Reactors To be Operated At Sites Not Identified in The License Application and Related Licensing Proceedings	✔			✔		
Subpart F-Additional Procedures Applicable to Early Partial Decisions of Site Suitability Issues in Connection With An Application for a Permit to Construct Certain Utilization Facilities	✔			✔		
Subpart G-Rules of General Applicability		✔				
Subpart H-Rulemaking		✔				

Part 10 Code Of Federal Regulations Citation	Review Needed to Clarify Applicability to Decommissioning Plants	Applicability Binning				
		Directly	Potentially	Indirectly	Not Applicable	Indeterminate
Subpart I-Special Procedures Applicable to Adjudicatory Proceedings Involving Restricted Data and/or National Security Information		✔				
Subpart J-Procedures Applicable to Proceedings for the Issuance of Licenses for the Receipt of High-Level Radioactive Waste at a Geologic Repository					✔	
Subpart K-Hybrid Hearing Procedures for Expansion of Spent Nuclear Fuel Storage Capacity at Civilian Nuclear Power Reactors		✔				
Subpart L-Informal Hearing Procedures for Adjudications in Materials and Operator Licensing Proceedings		✔				
Subpart M-Public Notification, Availability of Documents and records, Hearing Requests and Procedures for Hearings on License Transfer Applications		✔				
Part 4 Nondiscrimination in Federally Assisted Commission Programs		✔				
Part 7 Advisory Committees		✔				
Part 8 Interpretations	✔	✔				
Part 9 Public Records		✔				
Part 10 Criteria And Procedures For Determining Eligibility For Access To Restricted Data or National Security Information or an Employment Clearance		✔				
Part 11 Criteria and Procedures For Determining Eligibility For Access To or Control Over Special Nuclear Material				✔		

Part 10 Code Of Federal Regulations Citation	Review Needed to Clarify Applicability to Decommissioning Plants	Applicability Binning				
		Directly	Potentially	Indirectly	Not Applicable	Indeterminate
Part 12 Implementation Of the Equal Access to Justice Act In Agency Proceedings	✔		✔			
Part 13 Program Fraud Civil Remedies		✔				
Part 14 Administrative Claims Under Federal Tort Claims Act		✔				
Part 15 Debt Collection Procedures		✔				
Part 16 Salary Offset Procedures For Collecting Debts Owed By Federal Employees To the Federal Government					✔	
Part 19 Notices, Instructions, and Reports To Workers: Inspection and Investigations	✔		✔			
Part 20 Standards For Protection Against Radiation						
Subpart A-General Provisions	✔	✔				
Subpart B-Radiation Protection Programs		✔				
Subpart C-Occupational Dose Limits		✔				
Subpart D-Radiation Dose Limits for Individual Members of the Public		✔				
Subpart E-Radiological Criteria for License Termination		✔				
Subpart F-Surveys and Monitoring		✔				
Subpart G-Control of Exposure From External Sources in Restricted Areas		✔				
Subpart H-Respiratory Protection and Controls to Restrict Internal Exposure in Restricted Areas		✔				

Part 10 Code Of Federal Regulations Citation	Review Needed to Clarify Applicability to Decommissioning Plants	Applicability Binning				
		Directly	Potentially	Indirectly	Not Applicable	Indeterminate
Subpart I-Storage and Control of Licensed Material		✔				
Subpart J-Precautionary Procedures		✔				
Subpart K-Waste Disposal		✔				
Subpart L-Records		✔				
Subpart M-Reports	✔	✔				
Subpart N-Exemptions and Additional Requirements		✔				
Subpart O-Enforcement		✔				
Part 21 Reporting of Defects and Noncompliance	✔	✔				
Part 25 Access Authorization For Licensee Personnel		✔				
Part 26 Fitness For Duty	✔		✔			
Part 30 Rules of General Applicability to Domestic Licensing of Byproduct Material	✔	✔				
Part 31 General Domestic Licenses For Byproduct Material					✔	
Part 32 Specific Domestic Licenses To Manufacture Or Transfer Certain Items Containing Byproduct Material					✔	
Part 33 Specific Domestic Licenses of Broad Scope For Byproduct Material					✔	
Part 34 Licenses for Industrial Radiography and Radiation Safety Requirements For Industrial Radiographic Operations					✔	
Part 35 Medical Use of Byproduct Material					✔	

Part 10 Code Of Federal Regulations Citation	Review Needed to Clarify Applicability to Decommissioning Plants	Applicability Binning				
		Directly	Potentially	Indirectly	Not Applicable	Indeterminate
Part 36 Licenses and Radiation Safety Requirements For Irradiators					✔	
Part 39 Licenses and Radiation Safety Requirements For Well Logging					✔	
Part 40 Domestic Licensing of Source Material	✔	✔				
Part 50 Domestic Licensing of Production and Utilization Facilities						
50.3 Interpretations		✔				
50.4 Written Communications		✔				
50.5 Deliberate Misconduct		✔				
50.7 Employee Protection		✔				
50.8 Information Collection Requirements: OMB Approval		✔				
50.9 Completeness and Accuracy of Information		✔				
50.10 License Required		✔				
50.11 Exceptions and Exemptions From Licensing Requirements					✔	
50.12 Specific Exemptions		✔				
50.13 Attacks and Destructive Acts By Enemies of the United States; and Defense Activities		✔				
50.20 Two Classes of Licenses		✔				
50.21 Class 104 Licenses; For Medical Therapy and Research and Development Facilities		✔				

Part 10 Code Of Federal Regulations Citation	Review Needed to Clarify Applicability to Decommissioning Plants	Applicability Binning				
		Directly	Potentially	Indirectly	Not Applicable	Indeterminate
50.22 Class 103 Licenses; For Commercial and Industrial Facilities		✔				
50.23 Construction Permits	✔				✔	
50.30 Filing An Application For Licenses; Oath or Affirmation	✔		✔			
50.31 Combining Applications		✔				
50.32 Elimination Of Repetition		✔				
50.33 Contents of Applications; General Information	✔	✔				
50.33a Information Requested by The Attorney General For Antitrust Review					✔	
50.34 Contents of Applications; Technical Information	✔		✔			
50.34a Design Objectives For Equipment To Control Releases of Radioactive Material In Effluents-Nuclear Power Reactors	✔		✔			
50.35 Issuance Of Construction Permits					✔	
50.36 Technical Specifications	✔	✔				
50.36a Technical Specifications On Effluents From Nuclear Power Reactors		✔				
50.36b Environmental Conditions		✔				
50.37 Agreement Limiting Access to Classified Information		✔				
50.38 Ineligibility Of Certain Applicants		✔				

Part 10 Code Of Federal Regulations Citation	Review Needed to Clarify Applicability to Decommissioning Plants	Applicability Binning				
		Directly	Potentially	Indirectly	Not Applicable	Indeterminate
50.39 Public Inspection Of Applications		✔				
50.40 Common Standards					✔	
50.41 Additional Standards For Class 104 Licenses					✔	
50.42 Additional Standards For Class 103 Licenses					✔	
50.43 Additional Standards And Provisions Affecting Class 103 Licenses For Commercial Power					✔	
50.44 Standards For Combustible Gas Control System In Light-Water-Cooled Power Reactors					✔	
50.45 Standards For Construction Permits	✔				✔	
50.46 Acceptance Criteria For Emergency Core Cooling Systems For Light-Water Nuclear Power Reactors					✔	
50.47 Emergency Plans	✔	✔				
50.48 Fire Protection	✔	✔				
50.49 Environmental Qualification Of Electric Equipment Important To Safety For Nuclear Power Plants	✔				✔	
50.50 Issuance of Licenses and Construction Permits	✔				✔	
50.51 Continuation Of License		✔				
50.52 Combining Licenses		✔				
50.53 Jurisdictional Limitations		✔				
50.54 Conditions of Licenses						

Part 10 Code Of Federal Regulations Citation	Review Needed to Clarify Applicability to Decommissioning Plants	Applicability Binning				
		Directly	Potentially	Indirectly	Not Applicable	Indeterminate
(a)	✔	✔				
(b) thru (h)		✔				
(i) thru (m)	✔	✔				
(n)		✔				
(o)					✔	
(p)	✔	✔				
(q)	✔	✔				
(r)					✔	
(s), (t), and (u)	✔	✔				
(v)		✔				
(w)	✔	✔				
(x) thru (z)		✔				
(aa)		✔				
(bb)	✔	✔				
(cc) thru (ee)		✔				
50.54(ff)	✔		✔			
50.55 Conditions Of Construction Permits	✔				✔	
50.55a Codes and Standards	✔		✔			

Part 10 Code Of Federal Regulations Citation	Review Needed to Clarify Applicability to Decommissioning Plants	Applicability Binning				
		Directly	Potentially	Indirectly	Not Applicable	Indeterminate
50.56 Conversion Of Construction Permit To License; Or Amendment Of License					✔	
50.57 Issuance Of Operating License					✔	
50.58 Hearings and Reports of the Advisory Committee On Reactor Safeguards		✔				
50.59 Changes, Tests, and Experiments	✔	✔				
50.60 Acceptance Criteria For Fracture Prevention Measures For Lightwater Nuclear Power Reactors For Normal Operation					✔	
50.61 Fracture Toughness Requirements For Protection Against Pressurized Thermal Shock Events					✔	
50.62 Requirements For Reduction Of Risk From Anticipated Transients Without Scram (ATWS) Events For Light-Water-Cooled Nuclear Power Plants					✔	
50.63 Loss of All Alternating Current Power	✔		✔			
50.64 Limitations On The Use Of Highly Enriched Uranium (HEU) In Domestic Non-Power Reactors					✔	
50.65 Requirements For Monitoring The Effectiveness Of Maintenance At Nuclear Power Plants	✔	✔				
50.66 Requirements For Thermal Annealing Of The Reactor Pressure Vessel					✔	
50.68 Criticality Accident Requirements	✔		✔			
50.70 Inspections	✔	✔				

Part 10 Code Of Federal Regulations Citation	Review Needed to Clarify Applicability to Decommissioning Plants	Applicability Binning				
		Directly	Potentially	Indirectly	Not Applicable	Indeterminate
50.71 Maintenance Of Records, Making Reports		✔				
50.72 Immediate Notification Requirements For Operating Nuclear Power Reactors	✔	✔				
50.73 Licensee Event Report System	✔	✔				
50.74 Notification Of Change In Operator Or Senior Operator Status		✔				
50.75 Reporting and Recordkeeping For Decommissioning Planning		✔				
50.78 Installation Information and Verification	✔			✔		
50.80 Transfer Of Licenses		✔				
50.81 Creditor Regulations		✔				
50.82 Termination Of License		✔				
50.90 Application For Amendment Of License Or Construction Permit		✔				
50.91 Notice For Public Comment; State Consultation		✔				
50.92 Issuance Of Amendment	✔	✔				
50.100 Revocation, Suspension, Modification Of Licenses and Construction Permits For Cause		✔				
50.101 Retaking Possession Of Special Nuclear Material		✔				
50.102 Commission Order For Operation Following Revocation	✔		✔			

Part 10 Code Of Federal Regulations Citation	Review Needed to Clarify Applicability to Decommissioning Plants	Applicability Binning				
		Directly	Potentially	Indirectly	Not Applicable	Indeterminate
50.103 Suspension And Operation In War Or National Emergency		✔				
50.109 Backfitting	✔	✔				
50.110 Violations		✔				
50.111 Criminal Penalties		✔				
50.120 Training and Qualification Of Nuclear Power Plant Personnel	✔	✔				
Appendix A-General Design Criteria For Nuclear Power Plants	✔	✔				
Appendix B-Quality Assurance Criteria For Nuclear Power Plants and Reprocessing Plants	✔	✔				
Appendix C-A Guide For the Financial Data And Related Information Required To Establish Financial Qualifications For Facility Construction Permits	✔		✔			
Appendix E-Emergency Planning and Preparedness For Production and Utilization Facilities	✔	✔				
Appendix F-Policy Relating To The Siting Of Fuel Reprocessing Plants and Related Waste Management Facilities					✔	
Appendix G- Fracture Toughness Requirements					✔	
Appendix H-Reactor Vessel, Material Surveillance Program Requirements					✔	

Part 10 Code Of Federal Regulations Citation	Review Needed to Clarify Applicability to Decommissioning Plants	Applicability Binning				
		Directly	Potentially	Indirectly	Not Applicable	Indeterminate
Appendix I-Numerical Guides For Design Objectives and Limiting Conditions For Operation To Meet The Criterion "As Low As Is Reasonably Achievable" For Radioactive Material In Light-Water-Cooled Nuclear Power Reactor Effluents		✔				
Appendix J-Primary Reactor Containment Leakage Testing For Water-Cooled Power Reactors					✔	
Appendix K-ECCS Evaluation Methods					✔	
Appendix L-Information Requested By The Attorney General For Antitrust Review Facility License Applications			✔			
Appendix M-Standardization Of design; Manufacture Of Nuclear power Reactors; Construction and Operation Of Nuclear Power Reactors Manufactured Pursuant To Commission License					✔	
Appendix N-Standardization Of Nuclear Power Plant Designs: Licenses To Construct And Operate Nuclear Power Reactors Of Duplicate Designs At Multiple Sites					✔	
Appendix O-Standardization Of Design: Staff Review Of Standard Designs					✔	
Appendix Q-Pre-Application Early Review Of Site Suitability Issues					✔	
Appendix R-Fire Protection Program For Nuclear Power Facilities Operating Prior to January 1, 1979	✔	✔				
Appendix S-Earthquake Engineering Criteria For Nuclear Power Plants	✔		✔			

Part 10 Code Of Federal Regulations Citation	Review Needed to Clarify Applicability to Decommissioning Plants	Applicability Binning				
		Directly	Potentially	Indirectly	Not Applicable	Indeterminate
Part 51 Environmental Protection Regulations For Domestic Licensing and Related Regulatory Functions	✔	✔				
Part 52 Early Site Permits; Standard Design Certifications; and Combined Licenses for Nuclear Power Plants	✔				✔	
Part 54 Requirements For Renewal Of Operating Licenses For Nuclear Power Plants					✔	
Part 55 Operator's Licenses	✔	✔				
Part 60 Disposal Of High-Level Radioactive Wastes In Geologic Repositories					✔	
Part 61 Licensing Requirements For Land Disposal Of Radioactive Waste					✔	
Part 62 Criteria and Procedures For Emergency Access To Non-Federal and Regional Low-Level Waste Disposal Facilities			✔			
Part 70 Domestic Licensing Of Special Nuclear Material	✔	✔				
Part 71 Packaging and Transportation of Radioactive Material		✔				
Part 72 Licensing Requirements For The Independent Storage Of Spent Nuclear Fuel and High-Level Waste	✔	✔				
Part 73 Physical Protection Of Plants and Materials	✔	✔				
Part 74 Material Control and Accounting Of Special Nuclear Material		✔			✔	
Part 75 Safeguards On Nuclear Material-Implementation Of US/IAEA Agreement		✔				
Part 76 Certification Of Gaseous Diffusion Plants					✔	
Part 81 Standard Specifications For the Granting Of Patent Licenses		✔				

Part 10 Code Of Federal Regulations Citation	Review Needed to Clarify Applicability to Decommissioning Plants	Applicability Binning				
		Directly	Potentially	Indirectly	Not Applicable	Indeterminate
Part 95 Security Facility Approval and Safeguarding Of National Security Information and Restricted Data		✔				
Part 100 Reactor Site Criteria					✔	
Part 110 Export and Import Of Nuclear Equipment and Material		✔				
Part 140 Financial Protection Requirements and Indemnity Agreements	✔	✔				
Part 150 Exemptions and Continued Regulatory Authority In Agreement States and In Offshore Waters Under Section 274					✔	
Part 160 Trespassing On Commission Property					✔	
Part 170 Fees For Facilities, Materials, Import and Export Licenses, and Other Regulatory Services Under The Atomic Energy Act Of 1954, As Amended	✔	✔				
Part 171 Annual Fees For Reactor Operating Licenses, and Fuel Cycle Licenses and Materials Licenses, Including Holders Of Certificates Of Compliance, Registrations and Quality Assurance Program Approvals and Government Agencies Licensed By NRC	✔	✔				

2. DETERMINATION OF THE APPLICABILITY OF TITLE 10 OF THE CODE OF FEDERAL REGULATIONS (CFR) TO DECOMMISSIONING PLANTS , TASK 2.C

Citation:	**Part 1, Statement of Organization and General Information**
Retrieval Keyword Phrase: none	
Background: Describes the organization of the NRC, and defines the responsibilities of each major commission staff and staff offices, including panels, boards, and committees.	
Applicability Analysis: Part contains information applicable to all licensees.	
Applicability Binning: Regulations are directly applicable to decommissioning nuclear power plants.	
Citation:	**Part 2, Rules of Practice for Domestic Licensing Proceedings and Issuance of Orders**
Retrieval Keyword Phrase: all proceedings; amending..a license; licensees; utilization facility	
Background: **§2.1 Scope** states that this part governs all proceedings, other than export and import licensing proceedings, under the Atomic Energy Act of 1954, as amended, and the Energy Reorganization Act of 1974, for • granting, suspending, revoking, amending, or taking other action with respect to any license, • issuing orders and demands for information to persons subject to the NRC's jurisdiction, including licensees, • imposing civil penalties, and • public rulemaking. This part is applicable to any licensing action by the NRC. Decommissioning nuclear power plants still retain the Part 50 license; however, the license no longer authorizes operation of the reactor or emplacement or retention of fuel into the reactor vessel(§50.82(a)(2)). The Part 50 license is not terminated until the release criteria are met in accordance with §50.82 (a)(11). This part is comprised of 13 subparts (Subpart C is reserved), each which contain an individual scope statement for the subpart. The applicability of each section to a decommissioning plant will be assessed.	
Citation:	**Subpart A-Procedure for Issuance, Amendment, Transfer, or Renewal of License**
Retrieval Keyword Phrase: amendment..license; operating license; utilization facility	
Applicability Analysis: As described in the scope statement (§2.100), this subpart prescribes the procedures for issuance of, or an amendment to, a license at the request of the licensee. A permanently shutdown facility still maintains a Part 50 license, though not for operating the plant. The primary focus of this subpart is to define the steps taken by the NRC in reviewing these applications. However, this subpart also contains specific references to licensee requirements as well. Licensing actions for a decommissioning nuclear power plant will be conducted under this subpart. As per §50.91(a) and §50.92, the NRC will inform the public regarding disposition and issuance of	

amendments to licenses per the provisions of this subpart. However, once fuel is permanently removed from the fuel pool and transferred to another facility, licensing hearings may be conducted in accordance with Subpart L.
Applicability Binning: Regulations are directly applicable to decommissioning nuclear power plants.
Citation: **Subpart B-Procedure for Imposing Requirements by Order, or for Modification, Suspension, or Revocation of a License, or For Imposing Civil Penalties**
Retrieval Keyword Phrase: modify...license; licensee
Applicability Analysis: As described in the scope statement (§2.200), this subpart prescribes the procedures for the NRC to impose orders, or modify, suspend, or revoke a license, or take other actions against any person subject to the jurisdiction of the NRC. A decommissioning plant still retains a Part 50 license, and, therefore, the procedures listed in this subpart are applicable.
Applicability Binning: Regulations are directly applicable to decommissioning nuclear power plants.
Citation: **Subpart D-Additional Procedures Applicable to Proceedings for the Issuance of Licenses To Construct or Operate Nuclear Power Plants of Duplicate Design at Multiple Sites**
Retrieval Keyword Phrase: operate nuclear power reactors, licenses to construct or operate nuclear power reactors
Applicability Analysis: As described in the scope statement (§2.400), this subpart describes the licensing procedures applicable to the construction and operation of equivalent reactor designs at different sites pursuant to Part 52 Appendix N. These regulations do not specifically address the decommissioning of a plant licensed under a combined license (Part 52). §2.407 states that the provisions of Subparts A and G of Part 2 also apply to operating licenses issued under this subpart as well. Subparts A and G were binned as directly applicable to decommissioning nuclear power plants. The NRC may wish to address the potential situation of decommissioning a plant licensed under this part.
Applicability Binning: Regulations are potentially applicable to decommissioning nuclear power plants.
Citation: **Subpart E-Additional Procedures Applicable to Proceedings for the Issuance of Licenses to Manufacture Nuclear Power Reactors To Be Operated At Sites Not Identified In the License Application and Related Licensing Proceedings**
Retrieval Keyword Phrase: operating licenses for nuclear power reactors
Applicability Analysis: As per the Atomic Energy Act, a license may be sought and issued authorizing facility manufacture, but not construction, and installation at sites on which the facilities are to be operated. As described in the scope statement (§2.500), this subpart is applicable to the issuance of operating licenses for nuclear power reactors which have been subject of an application under this subpart and Appendix M of Part 52. This makes this subpart applicable to an operating plant. However, the NRC has not addressed the decommissioning of a plant licensed under Part 52. The regulations do not specifically address the decommissioning of a plant licensed under a combined license (Part 52). §2.504 states that the provisions of Subparts A and G of Part 2 are applicable to

licenses issued under this subpart as well, which were determined to be directly applicable to decommissioning nuclear power plants. This meets the definition of indirect applicability.
Applicability Binning: Regulations are indirectly applicable to decommissioning nuclear power plants.
Citation: **Subpart F-Additional Procedures Applicable to Early Partial Decisions on Site Suitability Issues in Connection With An Application for a Permit to Construct Certain Utilization facilities**
Retrieval Keyword Phrase: none
Applicability Analysis: The scope of this section states that it is applicable to licensing proceedings which involve early submittals of site suitability in conjunction with a permit for the construction of a utilization facility. §2.601 states that the provisions of Subparts A and G of Part 2 are applicable to licenses issued under this subpart as well, which were determined to be directly applicable to decommissioning nuclear power plants. This meets the definition of indirect applicability. The scope (§2.600) and applicability (§2.601) limit the applicability of this subpart to construction permits and proceedings. However, a decommissioning plant should not fall under the provisions of this part since a construction permit is not issued for decommissioning. The scope of this subpart may need to be revised to preclude permanently shutdown facilities.
Applicability Binning: Regulations are indirectly applicable to decommissioning nuclear power plants.
Citation: **Subpart G-Rules of General Applicability**
Retrieval Keyword Phrase: operating license; all adjudications
Applicability Analysis: This subpart provides the rules for all adjudications initiated by an issuance of an order pursuant to several sections of Subpart B, including §2.202 (modify, suspend, or revoke a license) and §2.205(e) (violation hearings). This would appear to meet the definition of direct applicability, since the license modification upon permanent cessation would appear to fall under this broad category. In addition, Subparts A and B are referenced in the scope. Both subparts were determined to be directly applicable to decommissioning plants. Additionally, the applicability of §2.764(a) includes issuance or amendments to operating licenses. As discussed in the Supplementary Information (61FR39278), the opportunity for a less formal hearing regarding a license termination plan may be conducted under Subpart L (if the fuel has been removed from the site or stored in an ISFSI) as opposed to the formal hearings described in this subpart. In situations where the fuel has not been removed (decommissioning plant chooses to maintain pool storage), it appears that the regulations of this subpart would be applicable. Additional insight was obtained from the Supplementary Information associated with the rulemaking for Subpart M (63FR66722). This is a similar situation where a less formal hearing was deemed appropriate for license transfers. As stated in the SI, the decision to allow less formal hearings was based on past Commission experience. However, if a particular licensing issue arises, this subpart may be used if the NRC determines that it would be more appropriate to have the issue reviewed and decided on by the ASLB.
Applicability Binning: Regulations are directly applicable to decommissioning nuclear power plants.

Citation:	**Subpart H-Rulemaking**
Retrieval Keyword Phrase: none	
Applicability Analysis: This subpart pertains to the internal NRC practice for the issuance, amendment, and repeal of regulations. Though no direct reference to either an operating or decommissioning plant is apparent, §2.802(a) provides for the public petitioning of the Commission to issue, amend, or rescind regulations. Since these regulations could pertain to issues involving decommissioning and the scope has broad applicability, this appears to satisfy the definition of direct applicability.	
Applicability Binning: Regulations are directly applicable to decommissioning nuclear power plants.	
Citation:	**Subpart I-Special Procedures Applicable to Adjudicatory Proceedings Involving Restricted Data and/or National Security Information**
Retrieval Keyword Phrase: none	
Applicability Analysis: This subpart deals with the precautions necessary to prevent disclosure of restricted data or national security information. No limitations as to the applicability of this subpart are provided in the scope of this section. Therefore, it can be determined to be directly applicable to decommissioning nuclear power plants. As stated in the scope (§2.901), this subpart is applicable to proceedings conducted under Subpart G, which was judged to be applicable to decommissioning nuclear power plants. Generally, restricted or National Security data would not be involved in the decommissioning of a commercial nuclear power plant. However, recent licensing proceedings to allow for tritium production at commercial reactors raises the possibility of such data being involved in future decommissioning proceedings.	
Applicability Binning: Regulations are directly applicable to decommissioning nuclear power plants.	
Citation:	**Subpart J-Procedures Applicable to Proceedings for the Issuance of Licenses for the Receipt of High-Level Radioactive Waste at a Geologic Repository**
Retrieval Keyword Phrase: none	
Applicability Analysis: This subpart deals with the disposal of high-level waste in a permanent geologic repository. It is not applicable to a decommissioning plant.	
Applicability Binning: Regulations are not applicable to decommissioning nuclear power plants.	
Citation:	**Subpart K-Hybrid Hearing Procedures for Expansion of Spent Nuclear Fuel Storage Capacity at Civilian Nuclear Power Reactors**
Retrieval Keyword Phrase: license or license amendment under Part 50; civilian nuclear power reactor	
Applicability Analysis: The purpose of this subpart is to establish procedures for hybrid hearings in the event of contested proceedings regarding the increase spent fuel storage capacity. It is applicable to licensing proceedings which involve a request for an amendment to increase the spent fuel storage through the use of high density racks, compaction, additional pool compaction, transshipment, or dry storage. The regulations of this part are applicable to both operating and decommissioning nuclear power plants. The regulations of this part would be applicable to the fuel storage issues associated with a decommissioned plant which sought to construct a ISFSI under Part 72 as part of its	

decommissioning.
Applicability Binning: Regulations are directly applicable to decommissioning nuclear power plants.
Citation: **Subpart L-Informal Hearing Procedures for Adjudications in Materials and Operator Licensing Proceedings**
Retrieval Keyword Phrase: amendment of a Part 50 license; permanent removal of fuel; permanent cessation of operations and permanent removal of fuel from the reactor in accordance with §50.82(a)(1)
Applicability Analysis: This scope of this subpart (§2.1201(a)(3)) is applicable to any adjudication initiated by a request for a hearing for an amendment of a Part 50 license following permanent removal of fuel from a Part 50 facility to an authorized facility for licensees which have previously made declarations related to the permanent cessation of operations and permanent removal of fuel from the reactor in accordance with §50.82(a)(1). This meets the criteria for direct applicability for nuclear power plants which have removed the spent fuel. Subpart G would apply to all other decommissioning plants which have not removed the fuel. The hearings under this subpart are less formal compared to those under Subpart G. As discussed in 61FR39280, if the spent fuel is either offsite or in an ISFSI, the facility is similar to a materials facility and requires a less formal hearing under this subpart. Such amendments require a notice of receipt of the application, allowing an opportunity for a hearing to be published in the Federal Register at least 30 days prior to issuance by the NRC (§2.1205(c)). Within 30 days, the NRC must also make a determination if the amendment involves significant hazards concentration (§2.1205(d)(1)). If it does, then no amendments can be issued until completion of all hearings. Regulations are also provided detailing participation in Subpart L hearings by the public (§2.1211(b)) and what role the NRC staff may have in any hearings under this subpart (§2.1213). §2.1263 details regulations for applications requesting a stay of an NRC decision in issuing a license under this subpart.
Applicability Binning: Regulations are directly applicable to decommissioning nuclear power plants.
Citation: **Subpart M-Public Notification, Availability of Documents and Records, Hearing Requests and procedures for Hearings on License Transfer Applications**
Retrieval Keyword Phrase: NRC license; utilization facility
Applicability Analysis: This subpart (§2.1300) provides for procedures, hearings, and conduct on applications for direct or indirect transfer of NRC licenses, including 10CFR50 licenses (§2.1301(b)). In the event of a license transfer for a decommissioning plant, this section would be directly applicable because the facility still maintains a Part 50 license. The regulations for the transfer of a Part 50 license are specified in §50.80.
Applicability Binning: Regulations are directly applicable to decommissioning nuclear power plants.
Citation: **Part 4, Nondiscrimination in Federally Assisted Commission Programs**
Retrieval Keyword Phrase: §4.3 authorized by NRC
Background: This part imposes the provisions of the Civil Rights Act, the Rehabilitation Act, and the Age Discrimination Act.

Applicability Analysis: This part is applicable to any NRC administered Federal financial assistance program (§4.3). As defined in §4.4(d), this encompasses any arrangement where the NRC provides services of Federal personnel at Federal expense. NRC personnel regulate the safe operation at operating plants and decommissioning plants. Since the scope of this section has broad applicability, it appears to satisfy the definition of direct applicability.

Applicability Binning: Regulations are directly applicable to decommissioning nuclear power plants.

Citation: **Part 7, Advisory Committees**

Retrieval Keyword Phrase: none

Background: This part defines the policies and procedures used by the NRC with regard to the establishment, utilization, and termination of advisory committees.

Applicability Analysis: Advisory committees are used to provide advice and recommendations on issues of policy. It is strictly an internal function of the NRC, and the provisions of this part are not applicable to an operating or decommissioning plant. However, as stated in §7.12, any member of the public may file a written statement regarding any matter discussed by a committee. The ACRS, as discussed in §50.58, potentially may be involved in matters pertaining to the permanent cessation of operations and license termination.

Applicability Binning: Regulations are directly applicable to decommissioning nuclear power plants.

Citation: **Part 8, Interpretations**

Retrieval Keyword Phrase: licensee

Background: This part provides the interpretation of the NRC Office of General Counsel (OGC) regarding issues on NRC rights to inventions and discoveries, the Price-Anderson Act, rights of states over licensed facilities, and illumination requirements.

Applicability Analysis: §8.1 clarifies that a license issued by the NRC is not a "contract, subcontract, arrangement or other relationship with the Commission," and, therefore, the NRC has no rights to discoveries or inventions made by a licensee in the course of activities authorized by the license. However, this would not be the case if the licensee and the NRC had entered into a contractual relationship; any inventions or discoveries made under this contractual relationship would offer certain rights to the NRC. This clarification is applicable to both operating and decommissioning plants which maintain Part 50 licenses.

§8.2 clarifies ambiguous language contained in the Report of the Joint Commission on Atomic Energy on the Price-Anderson Act pertaining to liability abroad from a nuclear incident occurring within the United States. The OGC concludes that since no distinction between damage incurred in the U.S. and abroad exists, none can be inferred. The Congress has no ability to limit foreign liability. This is directly applicable to operating plants. Price-Anderson also remains applicable to decommissioning plants as well. As stated in the response to a comment regarding the applicability of Price-Anderson to the 1996 decommissioning rulemaking (61FR39288), any modifications to the Price-Anderson requirement for decommissioning plants will be considered at a later date, if at all.

The third OGC interpretation delineated in this part deals with the power of individual states to regulate nuclear facilities licensed, including nuclear power plants, under Part 50. This interpretation

is clearly applicable to both operating and decommissioning plants, since both maintain a Part 50 license. §8.4(e)(1) clearly states that the Commission shall retain authority and responsibility for the construction and operation of nuclear power plants. However, no mention of decommissioning of permanently shutdown facilities is made. While modifications to 10 CFR have been made to account for decommissioning plants to ensure the NRC continues oversight to protect public health and safety throughout the life cycle of the plant, additional review of this section is needed determine the need for additional clarification.

The fourth interpretation clarifies illumination and physical search requirements, as described in §73.55. The clarification of the OGC (§8.5) clearly states that these requirements are necessary for the exterior areas within the protected area. The scope of §73.55 states it is applicable to each licensee, which includes decommissioning plants which still maintain a license. This meets the definition of indirect applicability.

Applicability Binning: The first three interpretations of this section are directly applicable to decommissioning nuclear power plants. The fourth is indirectly applicable.

Citation: **Part 9, Public Records**

Retrieval Keyword Phrase: none

Background: This part provides the regulations for NRC pertaining to the Freedom of Information Act, Privacy Act, Sunshine Act, and the response to subpoenas or other court actions.

Applicability Analysis: As discussed in the scope statement (§9.1(a) through (d)), this part provides the provisions which detail the disclosure and availability of NRC records, holding open meetings, and the response the NRC will take in providing records, information or testimony in response to subpoenas or other court demands. The regulations contained in the subparts pertain to internal NRC regulations. However, such information pertaining to NRC proceedings under Part 50 may be deemed relevant to a licensee of a decommissioning plant, and the regulations of this section allow access to it. Therefore, the regulations of this section are directly applicable.

Applicability Binning: Regulations are directly applicable to decommissioning nuclear power plants.

Citation: **Part 10, Criteria And Procedures For Determining Eligibility For Access To Restricted Data or National Security Information or an Employment Clearance**

Retrieval Keyword Phrase: §10.1, 10.2(b), 10.5(a) licensees of the NRC

Background: This part contains the regulations and procedures used for determining eligibility to restricted or national security information.
Applicability Analysis: Subpart B contains the criteria and how it is applied to decide the eligibility of NRC licensees for access authorization. Subpart C contains the procedures used for hearings and administrative reviews regarding questions related to eligibility for access authorization. While the regulations of this subpart are mostly applicable to NRC personnel, they also contain regulations defining individual responsibilities regarding access authorization. This part makes no clear distinction between operating or decommissioning plants. However, both are considered licensed activities. As discussed previously, restricted and national security data are generally not associated with the decommissioning of a commercial nuclear power plant. However, with the approval for tritium production in certain commercial facilities, it is conceivable that eventual decommissioning activities could involve such information.
Applicability Binning: Regulations are directly applicable to decommissioning nuclear power plants.
Citation: **Part 11, Criteria and Procedures For Determining Eligibility For Access To or Control Over Special Nuclear Material**
Retrieval Keyword Phrase: §11.1 activities (licensed); §11.3(a), 11.7(a) licensees of the NRC; §11.7(b) licensee of the Commission; §11.11(a) licensee...uses, stores...special nuclear material..subject to ...§73.46; §11.11(a)(1)(I) ..licensee's security force; access authorization (numerous citations); licensee (numerous citations)
Background: This part establishes the requirements for special nuclear material access authorization for conduct of certain licensed activities.
Applicability Analysis: This part contains no specific reference to either operating or decommissioning reactors but rather states it is applicable to all aspects of special nuclear material. By definition (§73.4), special nuclear material includes U-233, U-235, etc. The nuclear fuel used at operating plants, and which may be stored at decommissioning plants, satisfies this definition. This would satisfy the criteria for indirect applicability. §11.11(a)(1) and (2) require the licensee to identify jobs which require access to SNM, direct the movement and status of SNM and vital equipment, unescorted access to vital and protected areas, and further requires that licensee personnel who work at these jobs to possess SNM access authorization. §11.13(a) also requires SNM access authorization for personnel who are involved in the arrangement of SNM shipments. These job functions are applicable to operating plants and may also be applicable to decommissioning plants depending on the status of the spent fuel storage and designation of specific plant areas (i.e., vital areas, protected areas, etc.). No access authorization requirement differences have been established between operating and decommissioning plants.
Applicability Binning: Regulations are indirectly applicable to decommissioning nuclear power plants.

Citation:	**Part 12, Implementation Of The Equal Access To Justice Act In Agency Proceedings**
Retrieval Keyword Phrase: §12.101 granting or renewing a license	
Background: This part provides for the awards of fees and expenses to certain individuals and businesses which prevail in NRC adjudicatory procedures where the NRC's position was not substantially justified.	
Applicability Analysis : §12.101 clearly states that reactor licensing proceedings for granting or renewing a license is exempt from the provisions of the Equal Access to Justice Act (EAJA). The Supplementary Information associated with this rulemaking (59FR23121) further clarifies the exclusions to any reactor licensing proceedings. However, as stated in the SI, the NRC chose not to frame the EAJA regulations such that it precluded potential applicants from raising the issue of EAJA coverage, provided they make a good faith argument that the proceeding in question falls under EAJA. This leaves room for case-by-case determinations on claims of coverage in areas which have not been addressed previously by statute, case law, or Commission interpretation. This would appear to include licensing proceedings associated with both operating and decommissioning nuclear power plants. This regulation has been binned as potentially applicable because the regulation clearly excludes licensing hearings; however, the SI associated with the rulemaking appears to allow consideration of these hearings.	
Applicability Binning: Regulations are potentially applicable to decommissioning nuclear power plants.	
Citation:	**Part 13, Program Fraud Civil Remedies**
Retrieval Keyword Phrase: license	
Background: The regulations of this part provide for civil penalties and assessments against persons who make false claims or written statements to the NRC.	
Applicability Analysis: The scope of this section appears to include all licensing activities with the NRC, which would include decommissioning power plants. By definition, many licensing-related activities for both operating and decommissioning plants require the submission of information to the NRC. This information is required to be factual and truthful and serves as the basis upon which the NRC bases licensing decisions. Based upon the broad applicability of this section, it is directly applicable to decommissioning plant.	
Applicability Binning: Regulations are directly applicable to decommissioning nuclear power plants.	
Citation:	**Part 14, Administrative Claims Under Federal Tort Claims Act**
Retrieval Keyword Phrase: none	
Background: The regulations of this part provide for damages resulting in property loss, personal injury, or death caused by negligent actions of a NRC employee during the course of his official duties.	

Applicability Analysis: The regulations of this part are applicable only so far as a licensee may seek claims resulting in personal or property damage or loss caused by negligence of a NRC employee. The regulations of this section appear to be applicable to all activities performed by the NRC. There are no specific exceptions to this rule which pertain to plant operating status. Damages sought against the NRC would not be dependant upon plant status. Based on the broad applicability of this section, these regulations are deemed to be directly applicable.
Applicability Binning: Regulations are directly applicable to decommissioning nuclear power plants.
Citation: **Part 15, Debt Collection Procedures**
Retrieval Keyword Phrase: NRC license
Background: The regulations of this part applies to claims against a licensee for fees owed the NRC with regards to a license issued by the NRC.
Applicability Analysis: By definition (§15.2), the regulations of this part pertaining to collection of debt applies to any license issued by the NRC. A decommissioning plant still maintains a Part 50 license. Claims which are specifically covered include fees which result from activities imposed under Parts 170 and 171 (§15.5(a)(1)), which provide for licensing fees associated with both operating and decommissioning plants.
Applicability Binning: Regulations are directly applicable to decommissioning nuclear power plants.
Citation: **Part 16, Salary Offset Procedures For Collecting Debts Owed By Federal Employees to The Federal Government**
Retrieval Keyword Phrase: None
Background: This part pertains to the resolution of debts of Federal employees.
Applicability Analysis: This part pertains strictly to debt resolution of Federal employees. It does not pertain to either operating of decommissioning nuclear power plants.
Applicability Binning: Regulations are not applicable to decommissioning nuclear power plants.
Citation: **Part 19, Notices, Instructions, and Reports To Workers: Inspection and Investigations**
Retrieval Keyword Phrase: licensees; licensed activities; all persons who receive, possess or use material licensed by the Nuclear Regulatory Commission; persons licensed to operate a production or utilization facility pursuant to Part 50; persons licensed to possess reactor spent fuel in an ISFSI; employee engaging in protected activities under Part 50
Background: This part contains regulations concerning radiological working conditions for both the licensee and licensee personnel.
Applicability Analysis: The scope of this section (§19.2) specifically addresses persons licensed to operate a production or utilization facility pursuant to Part 50 and persons licensed to possess spent fuel in an ISFSI pursuant to Part 72. Since a permanently shutdown facility is no longer an operating facility, this raises a question as to the applicability of this section to decommissioning plants as written. However, specific language in this part indicate that there is applicability. §19.11(a) through

(e) contain specific posting requirements for licensees regarding specific regulations and license conditions. §19.12 provides regulations applicable to persons, who during the discharge of their job functions, are likely to receive a dose greater than 100 mrem. These include knowledge of the use of radioactive materials onsite, radiological protection principles, reporting regulations, and emergency planning requirements. §19.13 states that individual exposure data (external and internal) shall be provided to individuals at prescribed intervals during the course of a person's employment. §19.14 provides the right of access to a licensed facility by the NRC for inspection purposes of the regulations of this part. This also includes the right for NRC inspectors to consult with licensee personnel (§19.15) and the right for licensee personnel to request NRC inspection (§19.16). Discrimination against any licensee personnel is prohibited by §19.20 against any employee for engaging in protected activities under Part 50. This subsection would be directly applicable to decommissioning power plants.

Even in the case where all the nuclear fuel has been transported offsite, the potential for worker exposure may remain. The licensee's responsibilities to its personnel remain in effect throughout the lifetime of the license, including decommissioning as long as the potential for radiological exposure is possible. The NRC has the right of access to any licensed facility, including decommissioning plants. The NRC should consider expressly including permanently shutdown facilities in accordance with §50.82 to the scope statement to clarify applicability.

Applicability Binning: Regulations are potentially applicable to decommissioning nuclear power plants.

Citation: **Part 20, Standards For Protection Against Radiation**

Background: The 15 subparts establish the regulations pertaining to radiological protection. Each of the individual subparts will be separately assessed for applicability to operating and decommissioning nuclear power plants.

Citation: **Subpart A-General Provisions**

Retrieval Keyword Phrase: licenses issued by the NRC; operate a production or utilization facility under Part 50; decommission, termination of the license, license under the regulations of Part 50; licensee; licensed material

Background: The sections of this subpart provide the definitions and units of radiation dose and radioactivity.

Applicability Analysis: As specified in the purpose to this subpart (§20.1001(a)), the regulations of this part were established for radiation protection for licenses issued by the NRC. Additionally, the definition of license (§20.1003) includes all licenses issued in Part 50. This would include decommissioning nuclear power plants and meet the criteria for direct applicability. However, the scope (§20.1002) specifically addresses the operation of a production or utilization facility under Part 50. The sections of this subpart do not provide specific regulations. Rather they provide the framework for the uniform use of radiologic terms. This subpart has been judged to be directly applicable to decommissioning nuclear power plants. However, a clarification may be considered for the scope to specifically include all plants licensed under this part, not just operating plants.

Applicability Binning: Regulations are directly applicable to decommissioning nuclear power plants.

Citation: **Subpart B-Radiation Protection Programs**
Retrieval Keyword Phrase: licensee; licensed activities
Background: The regulations contained in this subpart provide the framework for the radiation protection programs required at licensed facilities.
Applicability Analysis: The regulations of this subpart require each licensee to develop and implement a radiation protection program (§20.1101(a)), provide that ALARA be an integral part of the program (§20.1101(b)), and that the licensee annually review the program to ensure compliance with all regulations (§20.1101(c)). By definition, license activities includes all licenses issued under Part 50, which contains both operating and decommissioning nuclear plants. The need for a adequate radiation protection program is essential for decommissioning plants to ensure the health and welfare of the licensee personnel and the public. The annual review, while allowing the licensee to self-assess the adequacy of the program, may also provide an opportunity for modifications to account for changing plant conditions as the decommissioning process proceeds.
Applicability Binning: Regulations are directly applicable decommissioning nuclear power plants.
Citation: **Subpart C-Occupational Dose Limits**
Retrieval Keyword Phrase: licensee
Background: Subpart provides the radiological occupational dose limits for licensee personnel and the public.
Applicability Analysis: By definition, licensee as used in this subpart pertains to holders of Part 50 licenses, which includes permanent shutdown facilities under §50.82. This subpart specifies the allowed internal, external, and combined dose limits, and the methods to be used to demonstrate compliance. Methods to determine external dose from airborne material, and internal exposure, procedures for special exposures, dose limits for minors, and the embryo/fetus are also specified. Appendix A, Protection Factors For Respirators, is also referenced in this subpart. This appendix provides guidelines for the safe use of respirators for protection against airborne contaminants and is applicable to both operating and decommissioning plant.
Applicability Binning: Regulations are directly applicable to decommissioning nuclear power plants.
Citation: **Subpart D-Radiation Dose Limits for Individual Members of the Public**
Retrieval Keyword Phrase: licensee; licensed operation
Background: Subpart provides the radiation dose limits from licensed activities for members of the public.

Applicability Analysis: By definition, licensee as used in this subpart pertains to holders of Part 50 licenses, which includes permanently shutdown facilities under §50.82. The regulations of this part define the maximum dose limits which a individual member of the public may receive from a licensed operation and acceptable compliance methods. Regulations are applicable for operating and decommissioning plants until license termination and free release is obtained. Appendix B provides reference material used for determining annual limits on intake and derived air concentrations of radionuclides for occupational exposure and effluent and sewage release concentrations. These guidelines would be applicable to both operating and decommissioning plants. §20.1301 is referenced by §50.36a(a) and (b), which discuss the dose limits pertaining to radioactive materials in effluents. These effluents would be applicable to both operating and decommissioning plants.
Applicability Binning: Regulations are directly applicable to decommissioning nuclear power plants.
Citation: **Subpart E-Radiological Criteria for License Termination**
Retrieval Keyword Phrase: decommissioning of facilities under Part 50
Background: This subpart includes regulations for decommissioning nuclear facilities. The criteria apply to the decommissioning of nuclear facilities that operate through their normal lifetime and to those that may be shut down prematurely (62FR39088).
Applicability Analysis: The radiological site release criteria contained in this section apply to unrestricted and restricted use for most licensees including those licensed under Part 50. This would include decommissioning nuclear power plants. The NRC recognizes that it may not always be cost effective to return certain facilities to allow unrestricted use. While this latter scenario is thought to be more applicable to uranium tail facilities and other industrial facilities, it does not preclude nuclear power plants. Important aspects of the criteria include the opportunity for public participation and the assurance of adequate decommissioning funds to ensure sufficient oversight to protect the public health in the event of restricted use. Clearly, these criteria are applicable to decommissioning plants. However, as stated in (63FR39088), the criteria is also important for all license applicants and applicant for license renewals. The licensee is expected to be cognizant of these criteria and take all appropriate steps to ensure the facility or site is not operated in such a manner which could preclude unrestricted use upon decommissioning. The same rationale is applicable to operating plants as well.
Applicability Binning: Regulations are directly applicable to decommissioning nuclear power plants.
Citation: **Subpart F-Surveys and Monitoring**
Retrieval Keyword Phrase: licensee
Background: This subpart provides for radiological surveys and monitoring at the licensee's facility.
Applicability Analysis: The regulations of this subpart require surveys and monitoring commensurate with the conditions at each licensed facility (which would include a decommissioning nuclear facility). Because a decommissioning plant should present less of a radiological hazard than an operating plant, the regulations of this subpart allow flexibility to address this. Until a plant is certified for free release, there is a potential for radiologic exposure, which would necessitate radiologic survey and monitoring.
Applicability Binning: Regulations are directly applicable to decommissioning nuclear power plants.

Citation:	**Subpart G-Control of Exposure From External Sources in Restricted Areas**
Retrieval Keyword Phrase: licensee	
Background: This subpart requires the licensee to control access to high and very high radiation areas.	
Applicability Analysis: By definition, licensee as used in this subpart pertains to holders of Part 50 licenses, which includes permanent shutdown facilities certified under §50.82. In an operating plants, there are numerous areas which fit the definition of these areas (in-core detector areas, CRD areas, etc.). Flexibility is provided for by the regulations which allow the licensee to determine how access is to be controlled (control devices, locked entryways and exits, continuous direct or electronic monitoring). These regulations will also be applicable to a decommissioning plant, especially early in the decommissioning process. Once the radiological sources are removed, the licensee may determine that no high or very high radiation areas exist, and the regulations are no longer applicable.	
Applicability Binning: Regulations are directly applicable to decommissioning nuclear power plants.	
Citation:	**Subpart H-Respiratory Protection and Controls to Restrict Internal Exposure in Restricted Areas**
Retrieval Keyword Phrase: licensee	
Background: The regulations of this subpart require measures to control airborne radioactive materials and the use of protection equipment to limit personnel intake.	
Applicability Analysis: By definition, licensee as used in this subpart pertains to holders of Part 50 licenses, which includes permanent shutdown facilities certified under §50.82. As defined, a restricted area is an area where access is limited for the purpose of protecting individuals against undue radiological exposure. The regulations is this subpart are limited to those areas which present an airborne hazard. Many areas within both operating and decommissioning plants meet this definition. In addition, many areas of a decommissioning plant which may not have presented such a hazard during an operation may do so as a result of specific decommissioning activities (i.e., pipe cutting and removal). If such tasks cannot be done remotely, then the licensee is required to control these areas and require the use of respiratory protection.	
Applicability Binning: Regulations are directly applicable to decommissioning nuclear power plants.	
Citation:	**Subpart I-Storage and Control of Licensed Material**
Retrieval Keyword Phrase: licensee	
Background: This subpart addresses the security and control related to licensed materials.	
Applicability Analysis: By definition, licensee as used in this subpart pertains to holders of Part 50 licenses, which includes permanent shutdown facilities certified under §50.82. Licensed material (source material or byproduct material) must be stored in secured areas to prevent unauthorized access or removal. These regulations are applicable to a decommissioning plant in order to ensure that byproduct material (e.g., highly irradiated materials) are controlled in secure areas with adequate measures to prevent unauthorized access.	
Applicability Binning: Regulations are directly applicable to decommissioning nuclear power plants.	

Citation: **Subpart J-Precautionary Procedures**
Retrieval Keyword Phrase: licensees
Background: The regulations of this subpart define radiological posting requirements.
Applicability Analysis: By definition, licensee as used in this subpart pertains to holders of Part 50 licenses, which includes permanent shutdown facilities certified under §50.82. This subpart describes the requirements for posting radiation areas and labeling containers of licensed materials. Requirements pertaining to the safe handling of packages containing licensed material are also provided by this subpart. The minimum quantities which require labeling are provided in Appendix C and are applicable to both operating and decommissioning plants.
Applicability Binning: Regulations are directly applicable to decommissioning nuclear power plants.
Citation: **Subpart K-Waste Disposal**
Retrieval Keyword Phrase: licensee; licensed material
Background: The regulations of this subpart provide the requirements for the disposal of licensed material, including low-level waste.
Applicability Analysis: By definition, licensee as used in this subpart pertains to holders of Part 50 licenses, which includes permanent shutdown facilities certified under §50.82. The requirements of this subpart are applicable to the disposal of both high-level and low-level wastes. §20.2006 provide regulations for low-level waste disposal and the need for manifests and manifest tracking system. These requirements are applicable to all decommissioning power plants regardless of the status of the spent fuel storage. Additional information pertaining to this subpart is contained in Appendix G. As defined in this Appendix, a nuclear power plant (operating or decommissioning) would be defined as a waste generator and the provisions of the Appendix would be applicable.
Applicability Binning: Regulations are directly applicable to decommissioning nuclear power plants.
Citation: **Subpart L-Records**
Retrieval Keyword Phrase: licensee; termination...license
Background: This subpart provides requirements for recordkeeping of radiological control records.
Applicability Analysis: By definition, licensee as used in this subpart pertains to holders of Part 50 licenses, which includes permanent shutdown facilities certified under §50.82. The regulations of this subpart cover the recordkeeping requirements for a licensee's radiologic control program, including individual exposure records, historical recordkeeping, and any release of radioactive effluents to the environment. These requirements are pertinent to all nuclear power plants, operating or not. §20.2102(2)(b) states that licensees will maintain records required by this section until Commission termination of the license. Audit records and other reviews of program content and implementation are required to be maintained for a period of three years, which could conceivably extend beyond the decommissioning process.
Applicability Binning: Regulations are directly applicable to decommissioning nuclear power plants.

Citation: **Subpart M-Reports**
Retrieval Keyword Phrase: licensee; (§20.2201(b)(2)(I)) holders of an operating license for a nuclear power plant; pursuant to §50.72, 50.73; (§20.2203(d)) licensees other than those holding an operating license for a nuclear power plant; (§20.2206(a)(1)) operate a nuclear reactor designed to produce electrical energy
Background: This subsection provides the regulations pertaining to reporting requirements at licensed facilities.
Applicability Analysis: By definition, licensee as used in this subpart pertains to holders of Part 50 licenses, which includes permanent shutdown facilities certified under §50.82. The reporting requirements contained in this subpart pertain to theft or loss of licensed materials, incident notification, radiologic exposures which exceed limits, special exposures, individual overexposure, and individual monitoring. These requirements pertain to operating plants as well as decommissioning plants. Incidents which result in the release of radioactive material inside or outside a restricted area require NRC notification. Annual personnel monitoring reports on personnel exposure are also required to be submitted. However, as written (§20.2206), it appears that the need for individual monitoring reports may be limited to operating nuclear plants. However, as discussed above, by definition, "licensee" as used in this part pertains to any Part 50 license. This would indicate that an annual report should still be submitted on the individual monitoring at the decommissioning plant until the site is released. In the event of restricted release, reports should still be considered to ensure the conditions of the release are being met and sufficient to protect public health. The applicability of §20.2206(a)(1) should be reviewed for clarification.
Applicability Binning: Regulations are directly applicable to decommissioning nuclear power plants.
Citation: **Subpart N-Exemptions and Additional Requirements**
Retrieval Keyword Phrase: licensee
Background: Subpart allows for the NRC to exempt or impose additional regulations.
Applicability Analysis: By definition, licensee as used in this subpart pertains to holders of Part 50 licenses, which includes permanent shutdown facilities certified under §50.82. This subpart allows flexibility to the NRC in allowing exemptions to, or imposing additional regulations to, those contained in this part. The imposition of additional regulations in order to protect health or to minimize danger to life or property (§20.2302) is at the discretion of the NRC and is applicable to all licensed facilities. The exemption allowance (§20.2301) allows for licensees to petition for relief from regulations which may not apply. In the event of a decommissioning plant, this would be the mechanism to seek relief from provisions of this part which no longer may be applicable to the facility.
Applicability Binning: Regulations are directly applicable to decommissioning nuclear power plants.
Citation: **Subpart O-Enforcement**
Retrieval Keyword Phrase: licensee
Background: Regulations of this subpart allow for NRC enforcement of the provisions of this part.

Applicability Analysis: The NRC, by the regulations of this subpart, are mandated to enforce the provisions of this part. Any violations may lead to revocation of a license. In addition, civil penalties resulting from these violations may also be sought. No distinction is made between operating and decommissioning plants, so by definition, the regulations pertain to both.
Applicability Binning: Regulations are directly applicable to decommissioning nuclear power plants.
Citation: **Part 21, Reporting of Defects and Noncompliance**
Retrieval Keyword Phrase: a..firm..operating..any facility or activity which is licensed; regulations of this section apply...to possess, use, transfer..source material, byproduct material, special nuclear material, and/or spent fuel and high-level radioactive waste; utilization facility licensed to operate pursuant to Part 50; operating..means the operation of a facility
Background: This part requires that owners of licensed facilities report to the NRC any defects or noncompliance which could create a substantial safety hazard
Applicability Analysis: Based upon a review of the purpose (§21.1) and scope (§21.2(a)), this part is applicable to anyone constructing, owning, or operating any facility licensed by the NRC, which would encompass decommissioning facilities. However, §21.2(c) specifically addresses persons licensed to operate a nuclear power plant under Part 50. It states that the reporting requirements of §50.72 and §50.73 satisfy the requirements of this part. A review of these sections also indicate that they apply to decommissioning facilities as well. This would also provide an indirect applicability to decommissioning plants as well. The primary intent of this part is to identify and notify the NRC of any defects in systems, structures, or components which could create a substantial safety hazard if failed. By definition (§21.3), a substantial safety hazard means a loss of safety function to the extent that there is a major reduction in the degree of protection provided to public health and safety. Although defects discovered during decommissioning may no longer be safety significant to the affected facility, it is incumbent on a decommissioning licensee to report such defects so that the potential impact on operating facilities can be assessed.
Applicability Binning: Regulations are directly applicable to decommissioning nuclear power plants.
Citation: **Part 25, Access Authorization For Licensee Personnel**
Retrieval Keyword Phrase: license issued pursuant to 10 CFR Part 50; regulations apply to licensees...who may require classified information related to a license
Background: The regulations of this part provide the requirements for the protection of, and access to classified information.
Applicability Analysis: By the definition (§25.5), license in this part means a license issued pursuant to 10 CFR Part 50, et al., which would specifically encompass both operating and decommissioning plants. By the title of this section, these regulations define the access requirements for personnel including security clearance.
Applicability Binning: Regulations are directly applicable to decommissioning nuclear power plants.

Citation: **Part 26, Fitness For Duty**
Retrieval Keyword Phrase: licensees authorized to operate a nuclear power reactor, to possess or use formula quantities of SSNM, or to transport formula quantities of SSNM
Background: The regulations of this part provide that licensee personnel are not impaired (physically or mentally) or under the influence of any substance which may adversely affect their ability to safely and competently perform their duties.
Applicability Analysis: As stated in the scope (§26.2(a)), the regulations of this part are applicable to licensees authorized to operate a nuclear power reactor, and those licensed to possess, use, or transport formula quantities of SSNM. Decommissioning nuclear power plants are not specifically addressed. However, several specific sections of this part appear to have applicability to decommissioning plants. §26.24(a) refers to chemical and alcohol testing required before granting unescorted access to protected areas. As defined in this part (§26.2), protected areas refers to areas encompassed by physical barriers and to which access is controlled. There are designated protected areas in both operating and decommissioning plants. These protected areas would include the safe storage of spent fuel in the pool, radiologic areas, etc. The intent of this part, to ensure licensee personnel are not adversely impaired such that the abilities are affected, would apply to decommissioning plants as well. The NRC initially provided a precedent for this by granting several exemptions to decommissioned plants. By letter dated August 21, 1990, the NRC granted an exemption to the Long Island Lighting Company (LILCO) from the full scope of the requirements of Part 26. In lieu, a limited scope fitness for duty program, which pertained only to those persons who had unescorted access to any area that contained equipment necessary to support and maintain the continued safe storage and handling of spent fuel, was specified. A similar exemption was granted to the Sacramento Municipal Utility District (SMUD) for Rancho Seco by letter dated January 18, 1990. However, this position was modified in subsequent correspondence (NRC to LILCO November 20, 1991 and SMUD to NRC January 9, 1992) when the NRC stated that a POL did not require compliance with Part 26 since both plants were no longer licensed for operation. In the response to comments associated with the 1996 decommissioning rulemaking (61 FR 39287), the NRC stated that Part 26 continues to be applicable to decommissioning plants. Consideration on the applicability of this part to decommissioning plants is ongoing. While a review of the background material regarding this regulation indicates a changing applicability to decommissioning plants, the most recent clarification indicates a direct applicability. However, based upon the applicability section of the regulation, it has been categorized as potentially applicable. Neither Part 72 (ISFSI) or Part 73 (Security) require compliance with Part 26. Each addresses the subject generally. §72.194 and §73.56(b)(2)(iii) provide terms which infer the need for some type of fitness for duty program without being as proscriptive. Clarification appears to be needed to address whether pool storage requires a limited Part 26 program as initially done by the NRC at Shoreham and Rancho Seco, or to state that plants shutdown in accordance with 50.82 (which no longer can operate but still retain a Part 50 license) no longer need comply, or full compliance is required.
Applicability Binning: Regulations are potentially applicable to decommissioning nuclear power plants.

Citation:	**Part 30, Rules of General Applicability to Domestic Licensing of Byproduct Material**
Retrieval Keyword Phrase: transfer, receive, acquire, possess byproduct material; decommission; termination of the license; source material; utilization facility; power reactor licensee	
Background: This part contains the regulations governing the safe use of byproduct material. Both general and specific licenses are issued, the latter which requires specific information regarding emergency planning, training, exercises, etc.	
Applicability Analysis: As defined in this part (§30.4), license means a license for byproduct material issued pursuant to the regulations of Parts 30-36 and 39. Byproduct material refers to any radioactive material (except SNM) yielded in, or made radioactive, by exposure to SNM. Most decommissioning plants will have byproduct materials onsite (such as highly irradiated material). Therefore, in addition to maintaining a Part 50 license, decommissioning plants may also possess a Part 30 license as well. §30.35 and §30.36 address decommissioning financial assurance and site decommissioning, respectively. For decommissioning plants, these provisions are prescribed by §50.75 and §50.82. Therefore, §30.35 and §30.36 are not applicable to decommissioning nuclear power plants. The NRC may wish to review these subsections and clarify as required. §30.55(c) provides specific requirements applicable to tritium (except that contained in spent fuel). Specific power plants have been licensed to produce tritium, and these requirements may be applicable to those plants.	
Applicability Binning: Regulations are directly applicable to decommissioning nuclear power plants.	
Citation:	**Part 31, General Domestic Licenses For Byproduct Material**
Retrieval Keyword Phrase: none	
Background: The regulations of this part grant a general license for the use of byproduct material in specific instances.	
Applicability Analysis: Byproduct material refers to any radioactive material (except SNM) yielded in, or made radioactive, by exposure to the radiation incident to the process of utilizing the SNM. Byproduct material is used in both civilian and military applications, in various consumer products, and medical applications. Neither operating nor decommissioning power plants licensed under Part 50 are specifically addressed in this part. In the event an operating or decommissioning nuclear plant holds a Part 31 license, the regulations of this are applicable. The actual state of the plant (operating or decommissioning) would have no effect on the regulations contained in this part.	
Applicability Binning: Regulations are not applicable to decommissioning nuclear power plants.	
Citation:	**Part 32, Specific Domestic Licenses To Manufacture Or Transfer Certain Items Containing Byproduct Material**
Retrieval Keyword Phrase: none	
Background: This part contains regulations applicable to the manufacture and initial transfer items which contain byproduct materials for sale or distribution.	

Applicability Analysis: Neither operating nor decommissioning nuclear power plants are referenced in the regulations of this part.
Applicability Binning: Regulations are not applicable to decommissioning nuclear power plants.
Citation: **Part 33, Specific Domestic Licenses of Broad Scope For Byproduct Material**
Retrieval Keyword Phrase: none
Background: This part contains requirements for the issuance of specific licenses of broad scope for byproduct material.
Applicability Analysis: Neither operating nor decommissioning nuclear power plants are referenced in the regulations of this part.
Applicability Binning: Regulations are not applicable to decommissioning nuclear power plants.
Citation: **Part 34, Licenses for Industrial Radiography and Radiation Safety Requirements for Industrial Radiographic Operations**
Retrieval Keyword Phrase: none
Background: The regulations of this part provide for the safe use of sealed sources of byproduct material in industrial radiography.
Applicability Analysis: Neither operating nor decommissioning nuclear power plants are referenced in the regulations of this part. However, it is conceivable that an operating plant may have a Part 34 license to support its operations. However, permanent cessation of operations would have no effect on the requirements of this part.
Applicability Binning: Regulations are not applicable to decommissioning nuclear power plants.
Citation: **Part 35, Medical Use of Byproduct Material**
Retrieval Keyword Phrase: none
Background: This part regulates the safe use of byproduct material for medical uses.
Applicability Analysis: Neither operating nor decommissioning nuclear power plants are referenced in the regulations of this part.
Applicability Binning: Regulations are not applicable to decommissioning nuclear power plants.
Citation: **Part 36, Licenses and Radiation Safety Requirements For Irradiators**
Retrieval Keyword Phrase: none
Background: This part regulates the safe use of sealed sources containing radioactive materials in irradiators used to irradiate objects using gamma radiation.
Applicability Analysis: Neither operating nor decommissioning nuclear power plants are referenced in the regulations of this part.
Applicability Binning: Regulations are not applicable to decommissioning nuclear power plants.

Citation: **Part 39, Licenses and Radiation Safety Requirements For Well Logging**
Retrieval Keyword Phrase: none
Background: This part regulates the use of licensed materials in well logging.
Applicability Analysis: Neither operating nor decommissioning nuclear power plants are referenced in the regulations of this part.
Applicability Binning: Regulations are not applicable to decommissioning nuclear power plants.

Citation: **Part 40, Domestic Licensing of Source Material**
Retrieval Keyword Phrase: licenses to receive title to, receive, possess, use, transfer, or deliver source and byproduct materials; source materials, byproduct material
Background: This part regulates the licenses for source material and byproduct material.
Applicability Analysis: The applicability of this section (§40.1(a)) applies to the issuance of licenses to receive title to, possess, or use source and byproduct materials. As discussed in the applicability analysis for Part 30, decommissioning plants typically may maintain a Part 50 license as well as a Part 40 license. Decommissioning plants may possess source materials (such as check and calibration sources for radiation control instrumentation). §40.42 discussed the expiration and termination of licenses for Part 40 facilities. The controlling regulations applicable to decommissioning plants are contained in §50.75 and §50.82. Therefore, the Part 40 regulations are not applicable to decommissioning plants. The NRC may wish to review this subsection and clarify the applicability as required.
Applicability Binning: Regulations are directly applicable decommissioning nuclear power plants.

Citation: **Part 50, Domestic Licensing of Production and Utilization Facilities**
Retrieval Keyword Phrase: licensing of utilization facilities; nuclear power plant; nuclear power reactors; decommission; nuclear power reactor facility; permanent cessation of operation(s); permanent fuel removal; major decommissioning activity
Background: The regulations of this part provide for the licensing of production and utilization facilities.
Applicability Analysis: The regulations of this part provide the majority of the regulations applicable to the safe operation of nuclear power plants (both operating and decommissioning). This part contains numerous specific regulations. Each will be assessed on an individual basis to determine the applicability to operating and/or decommissioning nuclear power plants.

Citation: **§50.3, Interpretations**
Retrieval Keyword Phrase: regulations in this part
Background: Interpretations are issued when needed by the OGC to clarify specific regulations and applicability issues.

Applicability Analysis: By definition, the regulations of Part 50 are applicable to nuclear power plants. No specific delineation between operating and decommissioning is made in this section.
Applicability Binning: Regulations are directly applicable to decommissioning nuclear power plants.
Citation: **§50.4, Written communications**
Retrieval Keyword Phrase: licensee to the Nuclear Regulatory Commission; license; operating licenses; amendments of licenses; facilities described in §50.22; certification of permanent cessation of operations; certification of permanent fuel removal; pursuant to §50.82
Background: The requirements of this section prescribe how the NRC will receive original correspondence from licensees for specific licensing issues.
Applicability Analysis: §50.4(a) and (b) prescribe the address and distribution requirements for all written communication (correspondence, reports, applications, etc.). Both operating and decommissioning plants are addressed in this part. §50.4(b)(1) through (7) provide specific information which must be included with amendments to licenses including security plans, emergency plans, updated FSAR, and QA plan revised information. §50.4(b)(8) and (9) specifically address submittals concerning certification of permanent cessation of operations and permanent fuel removal. This section is also referenced in other sections of 10 CFR which require submittal of reports (i.e., §50.36a effluent reporting).
Applicability Binning: Regulations are directly applicable to decommissioning nuclear power plants.
Citation: **§50.5, Deliberate misconduct**
Retrieval Keyword Phrase: any licensee; any license issued by the NRC
Background: The regulations of this section provide the consequences from acts of deliberate misconduct by NRC licensees.
Applicability Analysis: As stated in §50.5(a), the deliberate misconduct regulations pertain to any licensee, which specifically includes decommissioning plants. As discussed in 63FR1897 (January 13, 1998), deliberate misconduct may involve providing information which is known to be incomplete or inaccurate in submittals to the NRC, or it may involve conduct that causes (or would have caused if not detected) a licensee to be in violation of the Commission's requirements. This section defines that deliberate misconduct would be subject to enforcement action. As stated in the Supplementary Information (63FR1897), the staff did not believe that it was necessary to add this rule to 10 CFR Part 54 (license renewal) and Part 55 (operators licenses) because, in both instances, Part 50 operating license are held. This same rationale would be applicable to a permanently shutdown plant which still retains a Part 50 license.
Applicability Binning: Regulations are directly applicable to decommissioning nuclear power plants.
Citation: **§50.7, Employee protection**
Retrieval Keyword Phrase: commission licensee
Background: Regulations of this part provide certain rights and protection against discrimination to a licensee's employees.

Applicability Analysis: The regulations in this section provide for protection to the employees of an NRC licensee who may provide information to the NRC concerning alleged violations. §50.7(a)(1) (i) thru (v) define protected activities (i.e., providing information to the Commission, refusing to engage in unlawful practices, requesting Commission action, testifying, or any other assistance to the NRC regarding alleged violations). These regulations are applicable to any NRC license, which includes both operating and decommissioning nuclear power plants which hold a Part 50 license. The protection requirements are applicable throughout the decommissioning process until the operating license is terminated.
Applicability Binning: Regulations are directly applicable to decommissioning nuclear power plants.
Citation: **§50.8, Information collection requirements: OMB approval**
Retrieval Keyword Phrase: information requirements contained in this part; 50.82
Background: The regulations of this section implement the provisions of the Paperwork Reduction Act of 1995.
Applicability Analysis: Any regulation which requires a collection of information must be approved by the OMB. As stated in §50.8(a), the NRC may not request, and a licensee need not respond to, any information requirement which has not been reviewed and approved by the OMB. The specific information requirements of this part are specifically defined in §50.8(b). These sections include those applicable to both operating and decommissioning nuclear power plants.
Applicability Binning: Regulations are directly applicable to decommissioning nuclear power plants.
Citation: **§50.9, Completeness and accuracy of information**
Retrieval Keyword Phrase: license; licensee; regulated activity
Background: The regulations of this section are applicable to information submitted by a licensee to the NRC.
Applicability Analysis: §50.9(a) requires that all information submitted by a licensee to the NRC must be complete and accurate in all respects. §50.9(b) requires licensees to notify the NRC of any regulated activity which has a significant implication for public health and safety or common defense and security. The requirements of this section are applicable to all licensees of this part.
Applicability Binning: Regulations are directly applicable to decommissioning nuclear power plants.
Citation: **§50.10, License required**
Retrieval Keyword Phrase: utilization facility
Background: Regulations of this section prohibit specific activities prior to the issuance of a construction permit.
Applicability Analysis: §50.10(a) specifically prohibits the use or possession of a utilization facility except as authorized by a license issued by the NRC. This statement is applicable to both operating and decommissioning nuclear power plants since both have specific limitations on activities which can be performed at the plant (e.g., LCO's, technical specifications). This regulation prohibits use of a utilization facility outside of these bounds.
Applicability Binning: Regulations are directly applicable to decommissioning nuclear power plants.

Citation:	**§50.11, Exceptions and exemptions from licensing requirements**
Retrieval Keyword Phrase: utilization facility	
Background: Regulations of this section provide for exceptions and exemptions from this part for work performed for the Departments of Defense and Energy.	
Applicability Analysis: The regulations of this part apply to the facilities under the control of the Department of Defense or Energy. It appears that any licensed facility which may be used both for commercial power under this part, and the production of tritium, will still fall under the licensing provisions of this part such that the exemptions of this section would not apply.	
Applicability Binning: Regulations are not applicable to decommissioning nuclear power plants.	
Citation:	**§50.12, Specific exemptions**
Retrieval Keyword Phrase: any interested person; regulations of this part	
Background: The regulations of this section provide for the request and issuance of specific exemptions to the regulations of this part.	
Applicability Analysis: These regulations provide the regulatory basis under which the NRC will grant specific exemptions to the requirements of this part to any interested person, which by definition would include all licensees. The special circumstances (§50.12(a)(i) through (vi)) include conflicts with other rules, inability to achieve the underlying purpose, unique hardship, benefit to public health and safety, good faith effort on behalf of the licensee, and other previously unconsidered special circumstances. These special circumstances can relate to both operating and decommissioning nuclear power plants. During the decommissioning process, changes are made to the plant (removal of specific equipment, removal of fuel from the site, etc.) that may make regulations no longer applicable. In addition, the imposition of operating regulations on decommissioning plants may not take into consideration the reduced hazards of decommissioning resulting in regulatory hardship or unnecessary regulatory burden. Until the NRC can permanently change specific regulations, where appropriate, to address differences between operating and decommissioning plants, this part provides the regulatory basis for granting relief.	
Applicability Binning: Regulations are directly applicable to decommissioning nuclear power plants.	
Citation:	**§50.13, Attacks and destructive acts by enemies of the United States; and defense activities**
Retrieval Keyword Phrase: operate a utilization facility; amendment to such license	
Background: Regulations provide design limitations required for nuclear power plants to protect against destructive acts.	
Applicability Analysis: This section is applicable to applicants for license to construct and operate a production or utilization facility, including amendments to the same. The regulations of this section provide limitations pertinent to the design of a nuclear facility as related to protection features against actions by enemies of the United States. However, the security requirements of Part 73 are still applicable and are designed to provide reasonable assurance against access by unauthorized personnel.	
Applicability Binning: Regulations are directly applicable to decommissioning nuclear power plants.	

Citation: **§50.20, Two classes of licenses**
Retrieval Keyword Phrase: Class 103 and 104 licenses
Background: This section states that the NRC will issue two classes of licenses (class 103 or 104).
Applicability Analysis: This section simply states that the NRC will issue either a class 104 or a class 103 license to specific named persons. There are no other regulations associated with this section. Decommissioning plants may hold either class of license.
Applicability Binning: Regulations are directly applicable to decommissioning nuclear power plants.
Citation: **§50.21, Class 104 licenses; for medical therapy and research and development facilities**
Retrieval Keyword Phrase: class 104 license; utilization facility
Background: Section provides when a class 104 license will be issued by the NRC.
Applicability Analysis: The regulations of this section pertain primarily to medical therapy and R&D facilities which possess a class 104 license. As discussed in §50.22, commercial nuclear power plants typically would possess a class 103 license. However, §50.21(b)(1) and (2) appear to be applicable to unique utilization facilities. From the basis (§50.1), the regulations of Part 50 are applicable to both production and utilization facilities. In the event a commercial facility possesses a class 104 license, it is still licensed under this part, and the regulation would be directly applicable.
Applicability Binning: Regulations are directly applicable to decommissioning nuclear power plants.
Citation: **§50.22, Class 103 licenses; for commercial and industrial facilities**
Retrieval Keyword Phrase: a production or utilization facility for industrial or commercial purposes
Background: Section provides when a class 103 license will be issued by the NRC.
Applicability Analysis: The regulations of this section apply to persons who possess and operate a production or utilization facility. This would include decommissioning nuclear power plants. An operating nuclear power plant which is used for commercial purposes (sale of power) would, by definition (§50.2), be considered a utilization facility and possess a class 103 license. As stated in this section, this would include any production and utilization facility, which is used for R&D and which more that 50 percent of the operating costs come from the sale energy. From the basis (§50.1), the regulations of Part 50 apply to both production and utilization facilities. A class 103 license would still be considered an operating license under this part, which means that the requirements of this part would apply.
Applicability Binning: Regulations are directly applicable to decommissioning nuclear power plants.
Citation: **§50.23, Construction permits**
Retrieval Keyword Phrase: utilization facility, license
Background: This section discusses the issuance of construction permits for a production or utilization facility and the conversion to an operating license when completed.

Applicability Analysis: A construction permit is issued only for the construction of a facility and does not pertain to the operation of a nuclear power plant. Certain provisions may be defined in the construction permit regarding facility design and equipment to ensure it meets the requirements necessary for eventual safe operation. The same may be applicable to decommissioning. In the event of new facility construction, certain provisions may be defined to ensure it can be decommissioned at end of life. This section also discusses how, upon completion of construction, the application would be converted to a license. It is not clear how this section would be applicable to a decommissioning plant. §50.82 makes no reference to the need for construction permits required if facilities are to be altered as part of the decommissioning process. The NRC may wish to revise this section to explicitly exclude permanently shutdown facilities.
Applicability Binning: Regulations are not applicable to decommissioning nuclear power plants.
Citation: **§50.30, Filing an application for licenses; oath or affirmation**
Retrieval Keyword Phrase: license to operate a production or utilization facility; application for a license or amendment; operating license for a nuclear power reactor; termination of operating license
Background: The regulations of this part provide the procedural requirements for an operating license, or amendment.
Applicability Analysis: The regulations of this part provide the requirements for filing an application for a license to operate a nuclear power plant. While most of this section is procedural (which would apply to operating and decommissioning nuclear plants), §50.30(a)(6) requires that each application for a license (and amendments) must be executed in a signed original under oath or affirmation. However, upon permanent cessation of operations and fuel removal, §50.82(a)(1)(i) and (ii) only specifically requires written notifications consistent with the requirements of §50.4(b)(8) and (9), which only requires a notary on the original notification submitted to the NRC. It would appear that such notifications should be made under oath as well. §50.30(e) specifies the fees which are to accompany an application for a utilization facility license. As stated in this section, no fee is required for a termination of an operating license, except as provided in §170.21, which allows for full cost recovery for NRC inspections and licensing effort for both operating and permanent shutdown nuclear plants. This subsection is directly applicable to termination of operating licenses. The NRC may wish to review whether the notification of permanent cessation of operations and fuel removal require to be made under oath, and if not, revise this section to explicitly exempt them.
Applicability Binning: Regulations are potentially applicable to decommissioning nuclear power plants.
Citation: **§50.31, Combining applications**
Retrieval Keyword Phrase: licenses
Background: Regulations address the combination of several applications for licenses.
Applicability Analysis: This section permits a licensee to combine applications for different license into one under this chapter. One interpretation of this may infer that a licensee could combine other licenses held under this chapter (i.e., materials license) into a single application.
Applicability Binning: Regulations are directly applicable to decommissioning nuclear power plants.

Citation: **§50.32, Elimination of repetition**
Retrieval Keyword Phrase: application
Background: Regulation allows the use of references to previously submitted information.
Applicability Analysis: The regulation contained in this section refers to all applications submitted to the NRC, which would include decommissioning plants as well. A decommissioning plant would be allowed to reference previously submitted information which may be relevant to the current action. As such, the licensee, in the course of previous licensing actions with the NRC, would have submitted documents which need not be replicated if the information has not been revised when submitting license amendments for operating or permanently shutdown facilities.
Applicability Binning: Regulations are directly applicable to decommissioning nuclear power plants.
Citation: **§50.33, Contents of applications; general information**
Retrieval Keyword Phrase: license to operate a utilization facility; decommission the facility
Background: The regulations of this section provide a summary of the information needed to be included with a license application.
Applicability Analysis: This section details the general information required to be submitted to the NRC with an application. As discussed in §50.82(a)(9), all power reactor licensees must submit an application for termination of license. This section includes specific information needed to be submitted with such an application. It appears that both sections would regulate termination applications. However, certain provisions of §50.33 may be applicable in specific instances. The right to request additional information (§50.33(f)(4)) may be deemed pertinent to the license termination plan. Another consideration pertains to the restructuring seen in the electric utility industry. It is conceivable that a license for an operating plant may be transferred. The regulations for a transfer of an operating license is contained in §50.80(b), which references §50.33 and §50.34 as a list of information which may needed to be provided. The exact information needed to be submitted would be dependant on the nature of the transfer. In the event of a new holding company, financial assurance may need to be provided in accordance with §50.33(f)(2) for operating licenses and §50.33(k)(1) for assurance of the availability of decommissioning funds. The latter would also be applicable if a permanently shutdown plant was transferred before completion of the decommissioning process. The NRC may wish to review this section and clarify the applicability to plants submitting an application for license termination per §50.82(a)(9) and license transfers per §50.80(b).
Applicability Binning: Regulations are directly applicable to decommissioning nuclear power plants.
Citation: **§50.33a, Information requested by the Attorney General for antitrust review**
Retrieval Keyword Phrase: none
Background: This section lists the information required to be submitted for an antitrust review by the Attorney General.

Applicability Analysis: The regulations of this section refer only to applications for a construction permit for nuclear power reactors and fuel reprocessing plants. Operating licenses are not discussed at all. The required information would have been submitted and reviewed prior to the issuance of a operating license, as well as any amendment to it. The same logic is applicable to a permanently shutdown reactor as well. No additional information has been identified as being required to be submitted to the Attorney General during plant operation.

Applicability Binning: Regulations are not applicable to decommissioning nuclear power plants.

Citation: **§50.34, Contents of applications; technical information**

Retrieval Keyword Phrase: application for a license to operate a facility; application to operate a production or utilization facility

Background: This section contains an overview of the information which is required to be included in both a Preliminary Safety Analysis Report in conjunction with a application for a construction permit, and a Final Safety Analysis Report in conjunction with a license to operate. This section also contains the revised site criteria, applicable to new license applicants (submitted after 1/10/97), which is based upon experience and importance to risk.

Applicability Analysis: Permanently shutdown facilities are not specifically included in the scope of this section. However, much of the information is the type which would be necessary for the permanently shutdown plant to provide in the post-shutdown FSAR. The requirements of §50.34(b) discuss information to be included in a Final Safety Analysis Report submitted with an application for a operating license. An FSAR is also required to be maintained during the decommissioning process, as well, and is necessary for controlling dismantlement and modifications using the §50.59 process. Information that is typically included in a FSAR is relied on by other sections of this part which have applicability during decommissioning. Specific examples of the information which would be expected in a decommissioning plant FSAR (or similar licensing basis document) include:

- §50.34(b)(2), Description of SSCs important for the safe storage of the spent fuel in the pool and radiologic waste control system (performance requirements, bases, etc.);
- §50.34(b)(3), Estimates of the kinds and quantities of radioactive materials expected to be processed during decommissioning and how the exposure limits of Part 20 will be satisfied;
- §50.34(b)(6)(i), Licensees decommissioning organizational structure;
- §50.34(b)(6)(ii), Quality assurance program description;
- §50.34(b)(6)(iv), Licensee's plan for conduct of decommissioning operations, including maintenance, surveillance, and testing of SSCs important for the safe storage of spent fuel;
- §50.34(b)(6)(vi), Decommissioning Technical Specifications;
- §50.34(b)(7), Technical qualification of licensee to perform decommissioning activities safely;
- §50.34(b)(8), Description of licensees operator training program, personnel qualifications, and requalification program;

The information contained §50.34(a) and (f) pertains specifically to a PSAR and TMI related requirements, respectively, for applications for construction permits, which are not applicable to decommissioning nuclear power plants.

The requirements of §50.34(c) - §50.34(e) discuss the contents of the physical security plan and

safeguards contingency plan and appear to remain relevant to decommissioning plants. Therefore, the regulations of this section, which specify the technical information needed to be submitted with an application, while not directly applicable to a decommissioning plant, do provide a framework of the information needed to be addressed by the post-shutdown FSAR or other licensing basis documents (such as the physical security plan, technical specifications, and quality assurance). For this reason, it is binned as potentially applicable. However, this regulation requires additional review and clarification to determine how it should be applied to decommissioning.
Applicability Binning: The regulations are potentially applicable to decommissioning nuclear power plants.

Citation:	**§50.34a, Design objectives for equipment to control releases of radioactive material in effluents-nuclear power reactors**
Retrieval Keyword Phrase:	
Background: This section requires that the principles of ALARA be incorporated into a plant design to control the release of radioactive effluents to unrestricted areas.	
Applicability Analysis: Similar to §50.34, the requirements of this section are applicable to construction applications. As discussed above, while these requirements of this section are not directly applicable to a permanently shutdown plant, the information discussed does provide a framework needed to ensure that the principles of ALARA are incorporated to control and minimize the release of radioactive effluents and is potentially applicable to decommissioning plants. For example, Appendix I provides guidance on design objectives to meet the ALARA requirements of this section. This appendix references §50.36(a) which pertains to technical specifications for operating plants. The principles of ALARA are as important to activities in a decommissioning plant as an operating plant.	
Applicability Binning: Regulations are potentially applicable to decommissioning nuclear power plants.	

Citation:	**§50.35, Issuance of construction permits**
Retrieval Keyword Phrase: license authorizing operation	
Background: This section discusses the methodology used by the NRC in reviewing and issuing construction permits.	
Applicability Analysis: The regulations of this section pertain to the review of applications for construction permits and the issuance of such permits. As stated in §50.35(c), such permits are subject to the limitation that an operating license will not be granted until the NRC has reviewed the final design to ensure public health and safety, and that all requirements and regulations of this section have been met. A construction permit is not applicable to a permanently shutdown facility.	
Applicability Binning: Regulations are not applicable to operating and decommissioning nuclear power plants.	

Citation: **§50.36, Technical specifications**
Retrieval Keyword Phrase: license authorizing operation of a production or utilization facility; decommissioning; nuclear power facilities that have submitted the certifications required by §50.82(a)(1); licensees for nuclear power reactors; each nuclear reactor licensee whose authority to operate the reactor has been removed by license amendment
Background: This section provides the basis for requiring technical specifications for both operating and decommissioning plants.
Applicability Analysis: As defined by the regulations of this section, both operating and decommissioning nuclear power plants are required to perform specific licensed functions in accordance with technical specifications. Technical specifications upon permanent cessation of operations will be specified on a case-by-case basis per §50.36 (c)(6). While standardized technical specifications have been developed for operating plants, they have not been developed for decommissioning plants. As discussed by the NRC in the response to comments for the 1996 decommissioning rulemaking (61FR 39287), consideration to the development of standardized technical specifications may be given. However, the current categories of items required to be addressed by the decommissioning technical specifications (e.g., safety limits, limiting safety system settings, limiting control system settings, and even limiting conditions of operation) do not appear to be applicable and should be reviewed for clarification.
Applicability Binning: Regulations are directly applicable to decommissioning nuclear power plants.
Citation: **§50.36a, Technical specifications on effluents from nuclear power reactors**
Retrieval Keyword Phrase: each licensee of a nuclear power reactor
Background: The requirements of this section address the technical specifications required for each licensee of a nuclear power reactor to minimize the release of radionuclides to unrestricted areas.
Applicability Analysis: These requirements, which are applicable to all licensees, ensure compliance with the provisions of §20.1301, which provides dose limits for individuals applicable to all licensees. As stated in §50.36(a)(1), each licensee is also required to develop operating procedures for the control of effluents. These procedures shall remain in effect as a record until the license is terminated by the NRC. In addition, each licensee, in accordance with §50.36(a)(2), shall submit an annual report which specifies the quantities of each radionuclide released (as a gas or liquid) to unrestricted areas. The direct applicability of these regulations can also be seen from the response to comments for the 1996 decommissioning rulemaking (61FR39283), where the NRC states that the final rule explicitly extends certain technical requirements to cover decommissioning activities (e.g., Sections 50.36, 50.36a, 50.36b, and Appendix I regarding technical specifications for surveillance requirements, administrative controls, control of effluents, and conditions to protect the environment).
Applicability Binning: Regulations are directly applicable to decommissioning nuclear power plants.

Citation: **§50.36b, Environmental conditions**
Retrieval Keyword Phrase: license authorizing operation of a production or utilization facility; license for a nuclear power reactor facility for which certification of permanent cessation of operations required under §50.82(a)(1)
Background: The requirements of this section pertain to technical specifications which identify obligations for the environmental area.
Applicability Analysis: In addition to technical areas, the NRC (for operating and permanently shutdown plants) may include conditions to ensure protection of the environment a part of the license. These conditions may include requirements for recordkeeping, reporting, and monitoring.
Applicability Binning: Regulations are directly applicable to decommissioning nuclear power plants.
Citation: **§50.37, Agreement limiting access to Classified Information**
Retrieval Keyword Phrase: issuance of a license
Background: The requirements of this section ensure that classified information in the possession of NRC licensees is protected in accordance with national policies.
Applicability Analysis: This section is applicable to any holder of (or applicant for an NRC license). The regulations of this section require an agreement, in writing, which will not permit any individual access to restricted data or classified National Security information until such individuals have been approved for clearance. While such data is not normally associated with commercial nuclear plants, several operating plants have expressed their intention to make tritium for the DOE as well as generate power. If licensed, such operations may involve classified data during both plant operation and eventual decommissioning.
Applicability Binning: Regulations are directly applicable to decommissioning nuclear power plants.
Citation: **§50.38, Ineligibility of certain applicants**
Retrieval Keyword Phrase: obtain a license
Background: This section establishes requirements for holders of an NRC license.
Applicability Analysis: The requirements of this section prohibit persons (or other entities) who are citizens, nationals, or agents of foreign countries, corporations, or governments from applying for and holding a NRC license.
Applicability Binning: Regulations are directly applicable to decommissioning nuclear power plants.
Citation: **§50.39, Public inspection of applications**
Retrieval Keyword Phrase: none
Background: This section allows for public inspection of licensee submitted documents.

Applicability Analysis: The regulation of this section state that any information (with the exception of classified, proprietary, or some similar type information) may be made available for public inspection in accordance with the licensing procedures of 10 CFR Part 2. Part 2 covers all aspects of licensing proceedings for both operating and decommissioning plants.
Applicability Binning: Regulations are directly applicable to decommissioning nuclear power plants.
Citation: **§50.40, Common standards**
Retrieval Keyword Phrase: a license will be issued; applicant for an operating license for a utilization facility
Background: This section provides the common standards which will be considered by the NRC when issuing a class 103 or 104 license.
Applicability Analysis: The regulations of this section pertain to the issuance of a license. Upon permanent cessation of operation, the Part 50 license is modified to preclude operation, but no new license is issued.
Applicability Binning: Regulations are not applicable to decommissioning nuclear power plants.
Citation: **§50.41, Additional standards for class 104 licenses**
Retrieval Keyword Phrase: class 104 license will be issued
Background: Section discusses standards (in addition to §50.40) which will be considered by the NRC when issuing a class 104 license.
Applicability Analysis: Similar to the applicability analysis of §50.40 (above), this section provides additional considerations for the issuance of a class 104 license, including permission for the performance of medical treatment and research and development. It also will consider antitrust considerations by the Attorney General in accordance with §50.42(b) for a class 104 operating license.
Applicability Binning: Regulations are not applicable to decommissioning nuclear power plants.
Citation: **§50.42, Additional standards for class 103 licenses**
Retrieval Keyword Phrase: a class 103 issuance will be issued to an applicant; license to operate a production or utilization facility
Background: This section provides additional standards which will be considered by the NRC (in addition to the common standards of §50.40) for the issuance of class 103 operating licenses.
Applicability Analysis: Similar to the analysis of §50.40 (above), this section provides additional considerations for the issuance of a class 103 license, including a review of the useful purpose proportional to the quantity of SNM, and an antitrust review (for new applicants which have not been subject to a previous review).
Applicability Binning: Regulations are not applicable to decommissioning nuclear power plants.

Citation:	**§50.43, Additional standards and provisions affecting class 103 licenses for commercial power**
Retrieval Keyword Phrase: class 103 license for a facility for the generation of commercial power;	
Background: This section provides additional standards taken by the NRC for class 103 licenses for commercial power.	
Applicability Analysis: Similar to the applicability analysis of §50.40 and §50.42 (above), this section provides additional considerations for the issuance of a class 103 license for the generation of commercial power. Unlike the previous two referenced sections, the regulations of this section deal with providing official notice to all parties who may have an interest in the facility, before the license is issued.	
Applicability Binning: Regulations are not applicable to decommissioning nuclear power plants.	
Citation:	**§50.44, Standards for combustible gas control system in light-water-cooled power reactors**
Retrieval Keyword Phrase: section does not apply to a nuclear power reactor facility...under §50.82(a)(1) have been submitted	
Background: This section provides the requirements necessary for the control of hydrogen gas following a LOCA.	
Applicability Analysis: The requirements of this section are applicable to operating power reactors. As stated in §50.44(a), this section does not apply to nuclear power facilities which have submitted the permanent cessation of operation and fuel removal certifications under §50.82(a)(1).	
Applicability Binning: Regulations are not applicable to decommissioning nuclear power plants.	
Citation:	**§50.45, Standards for construction permits**
Retrieval Keyword Phrase: amendment of a license; alter a production or utilization facility	
Background: This section defines the standards for issuance of a construction permit for a production or utilization facility.	
Applicability Analysis: The regulations of this section state that a construction permit will be issued for a license or an amendment of a license to construct or alter a production or utilization facility, provided the application conforms with referenced criteria and standards §50.31 through §50.38 and §50.40 through §50.43. Included in these references are some which were directly applicable to decommissioning plants (§50.36(c)(6) technical specifications for decommissioning). The act of decommissioning a plant may be viewed as altering a facility. However, BNL feels that it is not the intent of the NRC to issue a construction permit upon permanent cessation of operations and plant decommissioning. The NRC may wish to review this section and revise to specifically clarify this.	
Applicability Binning: Regulations are not applicable to a decommissioning nuclear power plant.	

Citation:	**§50.46, Acceptance criteria for emergency core cooling systems for light-water nuclear power reactors**
Retrieval Keyword Phrase: section does not apply to...facilities for which the certifications required under §50.82(a)(1) have been submitted	
Background: The regulations of this section provide for emergency core cooling systems for LWRs.	
Applicability Analysis: As specified in §50.46(a)(1)(i), this section does not apply to a nuclear power reactor facility for which the certifications required under §50.82(a)(1) have been submitted.	
Applicability Binning: Regulations are not applicable to a decommissioning nuclear power plant.	
Citation:	**§50.47, Emergency plans**
Retrieval Keyword Phrase: nuclear facility licensee	
Background: The regulations of this section and Appendix E detail the requirements for onsite and offsite emergency plans.	
Applicability Analysis: The scope of this section appear to apply to operating licenses for nuclear power reactors. However, in numerous locations throughout this section and the referenced Appendix E, the more general term nuclear facility licensee is used. This would infer that the emergency planning requirements are applicable to all licensees. §50.54(q) requires licensees authorized to possess and operate a nuclear power reactor to have a emergency plan in effect which meets the standards of §50.47(b) and Appendix E. §50.54(t) discusses the maintenance and revision of the emergency plan and also requires an independent review. In addition, in a response to a comment published with the 1996 decommissioning regulation (61 FR39287), which addressed the potential for deleting emergency plans from permanently shutdown plants, the NRC declined to allow modifications to the emergency plan for these facilities, stating that efforts in this area are ongoing. These references, including the terminology used in this section, make it clear that the regulations of this section remain directly applicable to decommissioning plants. The only exception made for permanently shutdown facilities is to eliminate the need for the ERDS (Part 50, Appendix E, Section VI).	
Applicability Binning: Regulations are directly applicable to decommissioning nuclear power plants.	
Citation:	**§50.48, Fire protection**
Retrieval Keyword Phrase: each operating nuclear power plant; certifications required under §50.82(a)(1)	
Background: The requirements of this section detail the requirements for a fire protection plan designed to protect the plant and vital equipment.	

Applicability Analysis: The regulations of this section detail the fire protection regulations for both operating and permanently shutdown nuclear plants. The primary goal of the fire protection plan for operating plants is the preservation of the safe shutdown capability during and after a fire. For permanently shutdown plants, the emphasis is shifted to the potential of fires which could result in the release or spread of radiologic materials and cause a radiological hazard (§50.48(f)). As discussed in a response to a comment associated with the 1996 decommissioning rule (61 FR 39287) and Draft Regulatory Guide DG-1069 (Fire Protection Program for Nuclear Power Plants During Decommissioning), the requirements for a permanently shutdown facility maintains the fire protection regulations but allows for a performance-based program which can be modified during the decommissioning process to address residual hazards. Because of this, the fire protection regulations are deemed to be directly applicable to decommissioning plants. The NRC may wish to revise the language in this section to clarify the status of the requirements of §50.48(f) with respect to record retention requirements for operating plants (§50.48(a)) and Appendix R (§50.48(b)).

Applicability Binning: Regulations are directly applicable to decommissioning nuclear power plants.

Citation: **§50.49, Environmental qualification of electric equipment important to safety for nuclear power plants**

Retrieval Keyword Phrase: holder of...a license for a nuclear power plant, other than a nuclear power plant for which the certifications required under §50.82 (a)(1) have been submitted

Background: The regulations of this section provide for an EQ program to address the qualification of safety-related electric equipment.

Applicability Analysis: The scope of §50.49(a) clearly states that the regulations of this section are applicable to each holder of, or an applicant for a license for a nuclear power plant, except for nuclear power plants which have submitted the required certifications under §50.82(a)(1). This would appear to clearly state the nonapplicability of this section to decommissioning plants. However, in response to a comment with the 1996 decommissioning rule (61 FR 39287), the NRC states that the EQ regulations apply to selected safety and nonsafety-related equipment as described in 50.49(b). This statement appears to be in contradiction with the regulation and implies a limited applicability of the EQ regulations to decommissioning plants. Regardless of this, the regulations of this section have been determined to be not applicable to decommissioning plants. However, the NRC should review the Federal Register citation to determine if the intent was to require a limited applicability to decommissioning plants, perhaps as a function of the spent fuel storage status. In the event of pool storage, certain electric equipment may be deemed as important to ensuring the safe storage of the pool and, as such, are applicable to the EQ rule. If so, the requirements of this section would need to be clarified.

Applicability Binning: Regulations are not applicable to decommissioning nuclear power plants.

Citation: **§50.50, Issuance of licenses and construction permits**

Retrieval Keyword Phrase: applicant for a license

Background: This section details the review process the NRC uses prior to the issuance of a license.

Applicability Analysis: As discussed in the regulations, prior to the issuance of a license, the NRC will ensure that all applicable standards and requirements have been met and all required official notifications made for the application. If so, a license (or if appropriate a construction permit) will be issued. The license will contain all applicable conditions, limitations, and technical specifications. As discussed in §50.51(a), applications for license termination shall be made in accordance with §50.82. However, as discussed previously, the transition from an operating plant to a decommissioning plant does not result in the issuance of a new license or a construction permit. The NRC may wish to clarify the language to clearly state that permanent cessation of operations does not involve an issuance of a license.
Applicability Binning: Regulations are not applicable to decommissioning nuclear power plants.
Citation: **§50.51, Continuation of license**
Retrieval Keyword Phrase: each license; application for termination of license shall be made in accordance with §50.82
Background: The regulations of this section specify the length of licenses issued by the NRC.
Applicability Analysis: As discussed in §50.51(a), the maximum term of a license is 40 years, and that applications for termination of license shall be made in accordance with §50.82. As per §50.51(b)(1) and (2), the license for a permanently shutdown facility shall extend beyond the expiration date of the original license, to ensure continuity of ownership and possession, until the NRC terminates the license in writing. During this period of extended ownership (60 years per §50.82(a)(3)), the fuel will be stored in a safe manner and the plant will undergo decommissioning and decontamination. All activities will be conducted in accordance with specific NRC regulations.
Applicability Binning: Regulations are directly applicable to decommissioning nuclear power plants.
Citation: **§ 50.52, Combining licenses**
Retrieval Keyword Phrase: a license
Background: This regulation allows the combination of several licensed activities into one.
Applicability Analysis: The regulations of this section allow the NRC to combine licenses for separate activities into one single license. It is applicable to all licenses issued by the NRC.
Applicability Binning: Regulations are directly applicable to decommissioning nuclear power plants.
Citation: **§50.53, Jurisdictional limitations**
Retrieval Keyword Phrase: license under this part
Background: This section limits the jurisdiction of NRC licenses.
Applicability Analysis: As per the regulation of this section, no license will be issued under this part for activities which are not under, or within, the jurisdiction of the United States.
Applicability Binning: Regulations are directly applicable to decommissioning nuclear power plants.

Citation: **§50.54, Conditions of licenses**

Retrieval Keyword Phrase: every license

Background: The regulations of this section define specific conditions applicable to all licenses.

Applicability Analysis: The regulations of this section address a wide variety of issues. Each section will be addressed separately for clarity.

§50.54(a)(1) through (3): The regulations of this subsection require that each nuclear power plant licensee subject to the QA requirements of Appendix B, implement the program. In the response to comments associated with the 1996 decommissioning rule (61 FR39283), the NRC explicitly states that Appendix B is applicable to decommissioning plants. The licensee is allowed to make changes to the QA program without prior NRC approval provided the changes do not reduce previous commitments in the program which were previously approved by the NRC. Changes which fit this description shall be documented in periodic FSAR revisions as per §50.71(e). Any changes which reduce previously approved commitments must be submitted for prior approval in conformance with the notification requirements of §50.4. Documentation detailing the specifics of the change must be maintained at the facility for three years. However, the structures, systems, and components (SSCs) at decommissioning plants that are subject to the QA program is not apparent since most decommissioning SSCs are not important to safety. This needs to be clarified.

Applicability Binning: The regulations of this subsection are directly applicable to decommissioning plants.

§50.54(b): This section prohibits the bestowing of any rights to SNM, except as defined by the license.

Applicability Binning: The regulations of this subsection are directly applicable to decommissioning plants.

§50.54(c): No license applicable to SNM shall be transferred, assigned, or disposed of via transfer of the license unless NRC approval is granted in writing.

Applicability Binning: The regulations of this subsection are directly applicable to decommissioning plants.

§50.54(d): In the event Congress declares a state of war or national emergency, any license issued by the NRC is subject to suspension and recapture. This would apply to all nuclear facilities, operating or decommissioning.

Applicability Binning: The regulations of this subsection are directly applicable to decommissioning plants.

§50.54(e): Any license issued by the NRC is subject to revocation, suspension, modification, or amendment for cause.

Applicability Binning: The regulations of this subsection are directly applicable to decommissioning plants.

§50.54(f): The licensee may request the licensee to submit under oath or affirmation, information which it deems necessary to determine if grounds for modification or suspension of the license exist

for potential safety significant events.

Applicability Binning: The regulations of this subsection are directly applicable to decommissioning plants.

§50.54(g): The issuance of any license shall not waive or relieve compliance with the antitrust laws. In the event the NRC licensee is found, by a court, to have violated these rules, the license may be suspended or revoked.

Applicability Binning: The regulations of this subsection are directly applicable to decommissioning plants.

§50.54(h): Any license issued by the NRC shall be subject to the provisions of the Atomic Energy Act, including amendments and revisions, which may be invoked by amendment to the license.

Applicability Binning: The regulations of this subsection are directly applicable to decommissioning plants.

§50.54(i): The regulations of this subsection require that a licensee may not allow the manipulation of controls of any facility by anyone other than a licensed operator or senior operator per Part 55. The only exception to this rule noted is per §55.13, which allows for fuel movement (to unload/load fuel into or out of the reactor, or within the vessel) by an individual under the direct supervision of a licensed senior operator. As written, these regulations appear to be directly applicable to decommissioning plants. However, once the fuel has been permanently removed from the reactor vessel, the applicability of this regulation becomes less apparent. The NRC may wish to review the applicability of this subsection to plants which have permanently ceased operation and following permanent removal of the fuel from the reactor vessel.

Applicability Binning: The regulations of this subsection are directly applicable to decommissioning plants.

§50.54(j): The regulations of this subsection require that all apparatus and mechanisms (other than controls) which may affect reactivity or power, be manipulated only with the knowledge and consent of a licensed person (per Part 55) present at the controls. As written, these regulations appear to be directly applicable to decommissioning plants. However, once the fuel has been permanently removed from the reactor vessel, the applicability of this regulation becomes less apparent. The NRC may wish to review the applicability of this section to plants which have permanently ceased operation and following permanent removal of the fuel from the reactor vessel.

Applicability Binning: The regulations of this subsection are directly applicable to decommissioning plants.

§50.54(k): The regulations of this subsection require that an operator or senior operator be at the controls at all times during operation. While the applicability of this subsection appears to apply to plant operation, the section is applicable to all licenses; therefore, it is judged to be applicable to decommissioning plants as well. However, once the fuel has been permanently removed from the reactor vessel, the applicability of this regulation becomes less apparent. The NRC may wish to review the applicability of this section to plants which have permanently ceased operation and following permanent removal of the fuel from the reactor vessel.

Applicability Binning: The regulations of this subsection are directly applicable to decommissioning

plants.

§50.54(l): The regulation of this subsection requires that persons be designated (senior operators per Part 55) for directing the activities of licensed operators. As written, these regulations appear to be directly applicable to decommissioning plants. However, once the fuel has been permanently removed from the reactor vessel, the applicability of this regulation becomes less apparent. The NRC may wish to review the applicability of this section to plants which have permanently ceased operation and following permanent removal of the fuel from the reactor vessel.

Applicability Binning: The regulations of this subsection are directly applicable to decommissioning plants.

§50.54(m)(1) through (3): The regulations of this subsection provide specific staffing requirements during plant operations. While the applicability of this subsection appears to apply to plant operation, the section is applicable to all licenses; therefore, it is judged to be directly applicable to decommissioning plants as well. However, once the fuel has been permanently removed from the reactor vessel, the applicability of this regulation becomes less apparent. The NRC may wish to review the applicability of this section to plants which have permanently ceased operation and following permanent removal of the fuel from the reactor vessel.

Applicability Binning: The regulations of this subsection are directly applicable to decommissioning plants.

§50.54(n): The regulations of this subsection prohibit changes to the facility which constitute a change in the technical specifications previously incorporated in the license (per §50.36). As discussed in §50.36(c)(6), technical sepecification for a permanently shutdown plant will be developed on a case-by-case basis and, therefore, will be representative of the plant. No changes should be made to these technical specifications. The regulations of this subsection are directly applicable to decommissioning nuclear power plants.

Applicability Binning: The regulations of this subsection are directly applicable to decommissioning plants.

§50.54(o): The regulations of this subsection provide for containment leak rate testing per Appendix J. The regulations of this subsection are specifically not applicable to facilities which have submitted certifications per §50.82(a).

Applicability Binning: The regulations of this subsection are not applicable to decommissioning plants.

§50.54(p)(1) through (3): The regulations of this subsection deal with changes to the safeguards plan per Part 73. The primary intent of Part 73 is to provide a physical security systems and a plan to prevent any threat against SNM. As long as SNM remains at a decommissioning site, Part 73 applies and the change process of §50.54(p) should also be applicable to decommissioning nuclear plants. However, 50.54(p) has been used for making significant modifications to a decommissioning facility safeguards after a determination has been made that vital areas no longer exist. The changes under this regulation have been subject to varied interpretation. The NRC may wish to review the applicability of this section to decommissioning plants which are storing spent fuel in the spent fuel pool.

Applicability Binning: The regulations of this subsection are directly applicable to decommissioning

plants.

§50.54(q): The regulations of this subsection require licensees authorized to possess a nuclear power reactor license (which includes decommissioning plants) to follow and maintain emergency plans which meet §50.47(b). In a response to a comment published with the 1996 decommissioning rule (61 FR39287), which addressed the potential for deleting emergency plans from permanently shutdown plants, the NRC declined to allow modifications to the emergency plan for these facilities, stating that efforts in this area are ongoing. This reference, including the terminology used in this subsection, make it clear that the regulations of this section remain directly applicable to decommissioning plants. The only exception made for permanently shutdown facilities is to remove the need for the ERDS (Part 50, Appendix E, Section VI). The NRC may wish to consider modifications to the emergency plan based on source term studies to determine the need for offsite and onsite emergency plans which are a function of the spent fuel storage and status of the decommissioning process.

Applicability Binning: The regulations of this subsection are directly applicable to decommissioning plants.

§50.54(r): The regulations of this subsection require all reactors authorized to operate at a power level greater than 2 MW thermal to submit emergency plans to the NRC for approval. A permanently shutdown plant, in accordance with §50.82, is no longer licensed for operation. Therefore, the regulations of this subsection are not applicable to decommissioning plants.

Applicability Binning: The regulations of this subsection are not applicable to decommissioning plants.

§50.54(s): The regulations of this subsection require that licensees who are authorized to possess and/or operate a nuclear power reactor submit to the NRC the radiological emergency response plans of all government entities which are within a plume exposure pathway EPZ. As written, this subsection is applicable to decommissioning plants. In a response to a comment published with the 1996 decommissioning rule (61 FR39287), which addressed the potential for deleting emergency plans from permanently shutdown plants, the NRC declined to allow modifications to the emergency plan for these facilities, stating that efforts in this area are ongoing. This reference, including the terminology used in this subsection, make it clear that the regulations of this section remain directly applicable to decommissioning plants. The NRC may wish to consider modifications to the emergency plan to determine the need for offsite and onsite emergency plans which are a function of the spent fuel storage and status of the decommissioning process.

Applicability Binning: The regulations of this subsection are directly applicable to decommissioning plants.

§50.54(t): The regulations of this subsection require an annual independent review of a licensees emergency preparedness program. As written, this subsection is applicable to decommissioning plants. In a response to a comment published with the 1996 decommissioning rule (61 FR39287), which addressed the potential for deleting emergency plans from permanently shutdown plants, the NRC declined to allow modifications to the emergency plan for these facilities, stating that efforts in this area are ongoing. This reference, including the terminology used in this subsection, make it clear that the regulations of this section remain directly applicable to decommissioning plants. §50.54(t)(3) requires an annual review, or as necessary, based upon the assessment by the licensee against performance indicators, and as soon as practicable after a change occurs in personnel, procedures, equipment, or facilities which could affect emergency preparedness (64FR14814). The NRC may wish

to consider modifications to the emergency plan to determine the need for offsite and onsite emergency plans which are a function of the spent fuel storage and status of the decommissioning process.

Applicability Binning: The regulations of this subsection are directly applicable to decommissioning plants.

§50.54(u): The regulations of this subsection require that each nuclear power reactor licensee submit to the NRC plans for coping with emergencies which meet the standards of §50.47(b) and Appendix E. Both of these references were deemed applicable to decommissioning nuclear power plants. In a response to a comment published with the 1996 decommissioning rule (61 FR39287), which addressed the potential for deleting emergency plans from permanently shutdown plants, the NRC declined to allow modifications to the emergency plan for these facilities, stating that efforts in this area are ongoing. This reference, including the terminology used in this subsection, make it clear that the regulations of this section remain directly applicable to decommissioning plants. The NRC may wish to consider modifications to the emergency plan to determine the need for offsite and onsite emergency plans which are a function of the spent fuel storage and status of the decommissioning process.

Applicability Binning: The regulations of this subsection are directly applicable to decommissioning plants.

§50.54(v): This subsection, applicable to licensees subject to Part 73, requires that measures be instituted to ensure no unauthorized disclosure of security and safeguards information. As discussed (in the applicability analysis), Part 73 is applicable to plants which have permanently ceased operations.

Applicability Binning: The regulations of this subsection are directly applicable to decommissioning plants.

§50.54(w): The regulations of this subsection require each power reactor licensee (production and utilization facility) to take reasonable steps to obtain onsite insurance coverage ($1.06 billion), at reasonable costs. The insurance coverage should be sufficient to stabilize and decontaminate the reactor and site in the event of an accident. As discussed in NUREG/CR-6451, the intent of this regulation is not to require a licensee to obtain more insurance coverage than necessary to recover from an accident. In a response to a comment dealing with the possible elimination of this coverage (61 FR39288), as well as a 1997 draft regulatory analysis, "Regulatory Analysis for Rulemaking on Financial Protection Requirements for Permanently Shutdown Reactors," the NRC tied the need for this insurance to the potential radiologic consequences of hot, high-density packaged fuel in the spent fuel pool. It was further stated that evaluations in this area were ongoing, and any modifications would be made at a later date. From this explanation, it appears that the prime factor for considering the amount of insurance required for a decommissioning plant is a function of the spent fuel storage. Plants which have permanently removed the fuel from the facility would appear to have a less risk compared to plants which maintain pool storage. The NRC may wish to review these regulations to address the unique aspects pertinent to a decommissioning plant.

Applicability Binning: The regulations of this subsection are directly applicable to decommissioning plants.

§50.54(x): The regulations of this subsection allows a licensee to take reasonable actions which

depart from license conditions or technical specifications in an emergency when needed. The regulations are directly applicable to decommissioning plants and provide a degree of flexibility in the event of an unforeseen occurrence.

Applicability Binning: The regulations of this subsection are directly applicable to decommissioning plants.

§50.54(y): The regulations of this subsection require that actions taken in accordance with §50.54(x) be approved by a licensed senior operator or certified fuel handler at plants which have submitted certifications in accordance with §50.82(a)(1). These regulations are directly applicable to decommissioning nuclear plants.

Applicability Binning: The regulations of this subsection are directly applicable to decommissioning plants.

§50.54(z): The regulations of this subsection require licensees of utilization facilities to notify the NRC Operations Center of any event specified in §50.72. Among these events, §50.72(vii) pertains to incidents related to spent fuel storage, which is applicable to decommissioning nuclear power plants. Therefore, the regulations are directly applicable to decommissioning nuclear power plants.

Applicability Binning: The regulations of this subsection are directly applicable to decommissioning plants.

§50.54(aa): This subsection imposes the federal Water Pollution Control Act on all licensees. The potential for water pollution is applicable to both operating and decommissioning power plants. The regulations of this subsection are directly applicable to decommissioning power plants.

Applicability Binning: The regulations of this subsection are directly applicable to decommissioning plants.

§50.54(bb): The regulations of this subsection require that all reactors licensed by the NRC to submit the plan to manage and provide funding for spent fuel management, until the fuel is transferred to the DOE under the NWPA. This subsection provides specific submission timetables for both operating and permanently shutdown facilities. The approval of this plan shall be maintained by the licensee as a record until expiration of the operating license. The regulations of this subsection are directly applicable to decommissioning nuclear power plants. However, clarification to the current regulations should be considered to address what constitutes preliminary approval of the program. The clarification should also address when final approval is needed (i.e., what constitutes "...any proceeding for continued licensing under part 50 or part 72..."). In addition, it is unclear what constitutes a significant change to the program that would require the licensee to notify the NRC but does not require approval.

Applicability Binning: The regulations of this subsection are directly applicable to decommissioning plants.

§50.54(cc): The regulations of this subsection require that each licensee notify the NRC in the event of filing for voluntary or involuntary bankruptcy. This would have a impact on the licensees ability to continue with the decommissioning of a plant and is, therefore, directly applicable to decommissioning nuclear power plants.

Applicability Binning: The regulations of this subsection are directly applicable to decommissioning plants.

§50.54(dd): The regulations of this subsection allow a licensee to depart from licensed conditions or technical specification requirements in a national security emergency. The requirements are directly applicable to decommissioning nuclear power plants.

Applicability Binning: The regulations of this subsection are directly applicable to decommissioning plants.

§50.54(ee): The regulations of this subsection permit the possession of byproduct material or SNM from another facility in the same or altered form or combined with byproduct or SNM. The regulations of this section are directly applicable to decommissioning nuclear power plants.

Applicability Binning: The regulations of this subsection are directly applicable to decommissioning plants.

§50.54(ff): The regulations of this subsection pertain to licensees of power plants which have implemented the seismic criteria of Appendix S. In the event of a seismic event, the licensee must demonstrate that the ability of SSCs required to provide and maintain a safe shutdown have not been damaged. A review of Appendix S indicates that the scope is applicable to operating plants. Therefore, the regulations of this subsection should be not applicable. However, the NRC should review the applicability statement of this subsection to determine if it was the intent to specifically limit the applicability to operating facilities. These regulations have been binned to be potentially applicable to decommissioning plants based on this.

Applicability Binning: The regulations of this subsection are potentially applicable to decommissioning plants.

Citation: **§50.55, Conditions of construction permits**

Retrieval Keyword Phrase:

Background: The regulations of this section address specific terms and conditions for construction permits.

Applicability Analysis: This section specifically addresses the terms and conditions applicable to construction permits. Specific items addressed include the expiration of the permit, identification and evaluation of defects and failures, quality assurance, timely NRC notification, record retention, and updates to the FSAR. As discussed in previous sections, the transition from an operating plant to a permanently shutdown facility in accordance with §50.82 does not involve the application for, or need for a construction permit. As discussed, the NRC may wish to clarify this point in the regulations. Therefore, the regulations have been determined as being not applicable to decommissioning plants.

Applicability Binning: Regulations are not applicable to decommissioning plants.

Citation: **§50.55a, Codes and standards**

Retrieval Keyword Phrase: operating license for a boiling or pressurized water-cooled nuclear power facility

Background: This section states the codes, standards, and requirements for ISI and IST for certain safety-related components.

Applicability Analysis: The applicability of §50.55a(a) thru (e) in this section appears to primarily address the code used to construct nuclear power reactors. Operating reactors are required to maintain inservice testing (IST) and inservice inspection (ISI) programs in accordance with §50.55a(f) and (g), respectively. The scope of an IST program is defined as the pumps and valves classified as ASME Code Class 1, 2, or 3 and are required to perform a specific function in shutting down a reactor, maintaining the shutdown condition, or mitigating the consequences of an accident. A plant which has certified permanent cessation of operations in accordance with §50.82 does not appear to meet the applicability requirements for an IST program. Components which fall under ISI include vessels, containments, piping systems, core support structures, and storage tanks classified as ASME Code Class 1, 2, or 3. Guidance on classifying components is provided in Regulatory Guide 1.26. As stated in this Regulatory Guide, the Group C quality standards should be applied to water-, steam-, and radioactive-waste-containing pressure vessels, heat exchangers (other than turbines and condensers), storage tanks, piping, pumps, and valves which are part of residual heat removal from the reactor and from the spent fuel storage pool (including primary and secondary storage systems). In a response to a comment received for the 1996 decommissioning rule which stated that this section should not be applicable to decommissioning plants (61 FR 39288), the NRC responded by stating that no change in the regulations was necessary because they provide assurance that the relevant portions of the facility are maintained functional or operational to adequate standards so they are operational capable. Based upon this, there is a potential applicability to decommissioning plants. SSCs specifically addressed as important to decommissioning are those associated with the storage, control, and maintenance of spent fuel in a safe condition (as defined in the maintenance rule - §50.65(a)(1)) and may be subject to ISI. Other operating plant systems that remain functional during decommissioning, such as those for processing and storing radioactive waste may also be subject ISI. The NRC should consider clarifying this section to address this potential applicability.
Applicability Binning: Regulations are potentially applicable to decommissioning nuclear power plants.

Citation:	**§50.56, Conversion of construction permit to license; or amendment of license**
Retrieval Keyword Phrase:	
Background: This section defines the conversion of a construction permit to a license.	
Applicability Analysis: The regulations of this section provide for the issuance upon the completion of facility construction or alteration provided all terms and conditions were complied with. As discussed previously, the transition for an operating plant to permanent cessation of operations in compliance with §50.82 is not considered to require a construction permit. Therefore, the regulations of this section are not applicable to decommissioning power plants.	
Applicability Binning: Regulations are not applicable to decommissioning nuclear power plants.	

Citation:	**§50.57, Issuance of operating license**
Retrieval Keyword Phrase: operating license	
Background: This section details the issuance process for a full-term operating license.	

Applicability Analysis: The regulations of this section state that a full-term operating license may be issued by the NRC upon completion of facility construction, compliance with all amendments, rules and regulations, financial qualifications, and a finding that the operation will not endanger public health and safety. Therefore, the regulations of this section are not applicable to decommissioning nuclear power plants.
Applicability Binning: Regulations are not applicable to decommissioning nuclear power plants.

Citation:	**§50.58, Hearings and report of the Advisory Committee on Reactor Safeguards**
Retrieval Keyword Phrase: amendment to an operating license;	
Background: This section describes the review of licenses and amendments by the ACRS.	
Applicability Analysis: As stated in §50.58(a), the ACRS reviews and reports on each application for a construction permit and operating license. An amendment to an operating license may be referred to this Committee as well. Since decommissioning plants may seek license amendments, the NRC may request the review of this Committee. Following appropriate public notice, the NRC may grant an amendment without a hearing, or it may decide to hold a public hearing. If a hearing is necessary, §50.58(b)(1) through (6) detail the hearing process used to amend operating licenses. If a review determines no significant hazard per §50.92, the amendment may be made effective immediately. Input from this Committee may also be sought upon an application for license termination.	
Applicability Binning: Regulations are directly applicable to decommissioning nuclear power plants.	

Citation:	**§50.59, Changes, tests, and experiments**
Retrieval Keyword Phrase: nuclear power reactor licensee that has submitted the certification of permanent cessation of operation.	
Background: This section allows a licensee to make changes to the facility as described in the FSAR, provided it does not result in an unreviewed safety question.	
Applicability Analysis: The regulations of this section allow for licensees to make changes to the facility, procedures, or evaluations as described in the FSAR, or conduct tests and experiments which are not described in the FSAR, provided that certain criteria in this regulation are satisfied. If the proposed change is found to not meet the criteria in this regulation, then an application for an amendment must be submitted. The criteria consists of assessment of the changes against the updated FSAR in terms of how the change impacts SSC important to safety as described or evaluated in the FSAR. The licensee shall maintain records of the changes which include a written safety evaluation documenting the evaluation. A report of these changes shall be made to the NRC. This report will also document the associated changes to the FSAR. The records of these changes shall be maintained. Per §50.59(b), the regulations of this section are applicable to nuclear power reactor licensees which has submitted the certification of permanent cessation of operations in accordance with §50.82(a)(1)(i). This is a principal regulation for facility dismantlement modifications made by licensees during decommissioning. However, the screening criteria in this regulation needs to be	

reviewed for decommissioning appropriateness since most of the SSC and evaluations in the FSAR are not relevant to a decommissioning plant. Another approach would be to specify the licensing content of the decommissioning FSAR against which the 50.59 assessment could be consistently applied.
Applicability Binning: Regulations are directly applicable to decommissioning nuclear power plants.
Citation: **§50.60, Acceptance criteria for fracture prevention measures for lightwater nuclear power reactors for normal operation**
Retrieval Keyword Phrase: all lightwater nuclear power reactors; other than reactor facilities for which the certification of permanent cessation of operation
Background: This section addresses the fracture toughness and material surveillance requirements applicable to RCS pressure boundary.
Applicability Analysis: The regulations of this section describe the fracture toughness and material surveillance requirements (per Appendices G and H) applicable to the RCS pressure boundary. As stated in §50.60(a), the requirements of this section are not applicable to nuclear facilities which have submitted the certifications per §50.82(a)(1).
Applicability Binning: The regulations are not applicable to decommissioning nuclear power plants.
Citation: **§50.61, Fracture toughness requirements for protection against pressurized thermal shock events**
Retrieval Keyword Phrase: other than reactor facilities for which the certification of permanent cessation of operation
Background: This section details the requirements applicable to PWRs against thermal shock.
Applicability Analysis: The regulations of this sections are applicable to all operating PWRs. The regulations are designed to protect the reactor vessel against thermal shock events followed by significant pressure. As specified in §50.61(b), these regulations are not applicable to nuclear power reactor facilities for which the certifications required under §50.82(a)(1) have been submitted.
Applicability Binning: The regulations are not applicable to decommissioning nuclear power plants.
Citation: **§50.62, Requirements for reduction of risk from anticipated transients without scram (ATWS) events for light-water-cooled nuclear power plants**
Retrieval Keyword Phrase: other than reactor facilities for which the certification of permanent cessation of operation
Background: This section describes the requirements applicable to ATWS events.
Applicability Analysis: The regulations of this section, applicable to all LWRs, are designed to mitigate the consequences of events involving operational occurrences followed by the failure of the reactor trip portion of the protective system. As specified in §50.62(b), these regulations are not applicable to nuclear power reactor facilities for which the certifications required under §50.82(a)(1) have been submitted.
Applicability Binning: The regulations are not applicable to decommissioning nuclear power plants.

Citation:	**§50.63, Loss of all alternating current power**
Retrieval Keyword Phrase: each light-water-cooled nuclear power plant licensed to operate	
Background: This section discusses the regulations applicable to the station blackout rule.	
Applicability Analysis: From a literal reading of the applicability statements contained in §50.63(a) through (c) (light-water-cooled nuclear power plants licensed to operate), it is apparent that the regulations associated with the station blackout rule apply to operating plants. The question of extended applicability of this section to permanently shutdown plants was addressed by the NRC in a response to a question associated with the 1996 decommissioning rule (61 FR39288). In responding to the question, the NRC quoted the potential radiological consequences of hot, high-density packaged fuel in the pool. In the event of station blackout, the plant may need to ensure power to the systems associated with SFP cooling. Present studies are attempting to quantify the risks associated with boil off events at decommissioning SFPs. The results of these studies should be considered when determining the applicability of this regulation to decommissioning plants. For this reason, these regulations are being assessed as potentially applicable to decommissioning plants. The NRC may wish to review the applicability of this section to decommissioning plants.	
Applicability Binning: The regulations are potentially applicable to decommissioning nuclear power plants.	
Citation:	**§50.64, Limitations on the use of highly enriched uranium (HEU) in domestic non-power reactors**
Retrieval Keyword Phrase: non-power reactors	
Background: This section addresses the use of HEU for unique purposes at non-power reactors.	
Applicability Analysis: As stated in §50.64(a), the applicability of this section is limited to non-power reactors. §50.82(b) addresses the cessation of operations at non-power reactors. The use of HEU may present unique issues applicable to fuel storage not associated with power reactors. While the object of this review was to assess applicability to nuclear power plants, these regulations may be potentially applicable to the decommissioning of non-power reactors. For this reason, the regulations have been assessed as being not applicable to decommissioning nuclear power	
Applicability Binning: The regulations are not applicable to decommissioning nuclear power plants.	
Citation:	**§50.65, Requirements for monitoring the effectiveness of maintenance at nuclear power plants**
Retrieval Keyword Phrase: nuclear power plant for which the licensees has submitted the certifications specified in §50.82(a)(1)	
Background: This section details the requirements associated with the maintenance rule.	

Applicability Analysis: As stated in §50.65(a)(1), for plants certified under §50.82, the requirements of this section apply to the extent that the performance and condition of all SSCs associated with the storage, control, and maintenance of spent fuel is monitored such that there is reasonable assurance these SSCs are capable of fulfilling the intended function. As discussed by the NRC in a response to a comment associated with the 1996 decommissioning rule (61 FR39288) and Draft Regulatory Guide DG-1082, "Assessing and Managing Risk Before Maintenance Activities At Nuclear Power Plants," this allows flexibility in establishing the goals for these components and in the monitoring. The ISI provisions of §50.55a(g) may be useful in assuring that these SSCs remain capable of providing the desired function. The NRC may wish to reassess the applicability of this requirement once the fuel has been permanently removed from the spent fuel pool.
Applicability Binning: The regulations are directly applicable to decommissioning nuclear power plants.
Citation: **§50.66, Requirements for thermal annealing of the reactor pressure vessel**
Retrieval Keyword Phrase: light-water power reactors
Background: This section describes a program for LWRs to thermal anneal the RPV to recover fracture toughness.
Applicability Analysis: As stated in §50.66(a), thermal annealing may be applied to the RPV at any LWR to recover the fracture toughness of the material. This section also references §50.61 and Appendix G as defining the limits for fracture toughness. This reference is not specifically applicable to decommissioning plants. It is unlikely that a decommissioning plant would use the thermal annealing techniques for a RPV which is to be decommissioned.
Applicability Binning: The regulations are not applicable to decommissioning nuclear power plants.
Citation: **§50.68, Criticality accident requirements**
Retrieval Keyword Phrase: construction permit or operating license for a nuclear power reactor
Background: This section details requirements necessary, in lieu of monitoring, to prevent a criticality accident.
Applicability Analysis: The requirements of this section are applicable to holders of a construction permit or an operating license. Though decommissioning nuclear power plants are not specifically included in the scope, it appears that the procedures detailed in §50.68(b) for the safe storage and handling of both new and spent fuel are potentially applicable to permanently shutdown plants until all new and spent fuel is permanently removed from the facility. The NRC should review the applicability of this section as it pertains to plants which have permanently ceased operation per §50.82. While the facility still maintains fuel storage, the regulations appear to be applicable. Once the fuel has been permanently removed from the facility, the applicability is no longer apparent.
Applicability Binning: Regulations are potentially applicable to decommissioning nuclear power plants.
Citation: **§50.70, Inspections**
Retrieval Keyword Phrase: each licensee

Background: This section provides the responsibilities of each licensee regarding NRC inspections.
Applicability Analysis: As specified in §50.70(a) and (b), the regulations of this section pertaining to NRC inspections are applicable to all licensees. Each licensee is required to provide office space and associated services to allow for these inspections. However, the amount of inspectors which will be at a decommissioning plant as opposed to an operating plant is anticipated to be different. As stated in the response to Question 4.3.6 in the Staff Responses to Frequently Asked Questions on Decommissioning Nuclear Power Reactors, the inspection effort at a decommissioning plant is considerably less than an operating plant. It was further stated that the NRC may remove the onsite inspector from a single unit site within one year of permanent cessation of operations. After that, the amount of inspection oversight will be dependant on the activities scheduled to take place. The rights of access and the non-announcement to the licensee employees if required for the inspectors to the decommissioning facility remain applicable to a decommissioning plant. The NRC may wish to allow for the modification of the space requirements for inspectors at plants which have permanently ceased operations in this section.
Applicability Binning: The regulations are directly applicable to decommissioning nuclear power plants.
Citation: **§50.71, Maintenance of records, making of reports**
Retrieval Keyword Phrase: each licensee; nuclear power reactor facilities that have submitted the certifications required by §50.82(a)(1)(i)
Background: This section defines the regulations applicable to record management and updating the FSAR.
Applicability Analysis: As explicitly stated in §50.71(f), the provisions of this section are directly applicable to licensees which have submitted certifications per §50.82(a)(1). These regulations include record retention, management, and FSAR updating every two years.
Applicability Binning: The regulations are directly applicable to decommissioning nuclear power plants.
Citation: **§50.72, Immediate notification requirements for operating nuclear power reactors**
Retrieval Keyword Phrase: each nuclear power reactor licensee licenses under §50.21(b) or §50.22
Background: The requirements of this section define specific events and occurrences which require immediate notification of the NRC.

Applicability Analysis: As stated in the scope of this section, these regulations are applicable to nuclear power reactor licensee's licensed under §50.21(b) or §50.22, which would include plants which have certified permanent cessation of operations. There are specific instances detailed in this section requiring immediate NRC notification via the Emergency Notification System, including declaration of any of the Emergency Classes per the approved Emergency Plan (§50.72(a)(i)). Other examples which would be applicable to permanently shutdown plants (and would require NRC notification under this section) include deviations from plant technical specifications in an emergency (§50.54(x)), plant conditions outside the design bases, natural phenomena, any event which results in a major loss of emergency assessment capability, fires, toxic gas releases, and radioactive releases. §50.72(a)(2)(iv) through (vii) provide for 4 hour NRC notification of radioactive releases (airborne and liquid effluent), transportation of a contaminated individual to an offsite medical facility, and instances which adversely affect the safe storage of spent fuel. Each of these instances are directly applicable to events which can happen at a permanently shutdown facility. The NRC addressed the applicability of this section to permanently shutdown plants while responding to a comment associated with the 1996 decommissioning rule (61 FR39288), which clearly stated that the requirements of this section remain applicable. While it is clear that the intent of this section is directly applicable to decommissioning plants, the NRC may wish to clarify reporting requirements related to decommissioning plants to distinguish them from those applicable only to operating plants (e.g., ERDS, ECCS discharge, actuation of the ESF system).
Applicability Binning: Regulations are directly applicable to decommissioning nuclear power plants.
Citation: **§50.73, Licensee event report system**
Retrieval Keyword Phrase: holder of an operating license for a nuclear power plant (licensee)
Background: This section defines when a LER is required to be submitted and the information it is to contain.
Applicability Analysis: The applicability of this regulation to decommissioning nuclear power plants should be the same as determined for §50.72 since many of the events that require immediate notification of the NRC also require an LER. Many of the LER reportable events appropriately pertain to plants that have permanently ceased operations (e.g., Technical Specification violations or deviations, natural phenomena, fires, toxic gas releases, and radioactive releases). The NRC may wish to specifically define the instances related to decommissioning plants which require an LER, while removing those which are applicable only to operating plants (e.g., systems required for a plant shutdown, actuation of the ESF system).
Applicability Binning: Regulations are directly applicable to decommissioning nuclear power plants.
Citation: **§50.74, Notification of change in operator or senior operator status**
Retrieval Keyword Phrase: each licensee
Background: This section requires that the NRC be notified of status changes pertaining to licensed operators or senior operators.

Applicability Analysis: Each licensee is required by the regulations of this section to notify the NRC within 30 days of a change of status in regards to licensed operators or senior operators (e.g.,permanent reassignment, termination, or permanent disability or illness). It is likely that the status of most licensed operators or senior operators will change after a licensee permanently shuts down and will need to be reported under this requirement. Therefore, this regulations is directly applicable to decommissioning nuclear power plants.
Applicability Binning: Regulations are directly applicable to decommissioning nuclear power plants.
Citation: **§50.75, Reporting and recordkeeping for decommissioning planning**
Retrieval Keyword Phrase: licensee; power reactor licensee
Background: The regulations of this section require that power reactor licensees assure adequate decommissioning funding.
Applicability Analysis: The regulations of this section are applicable to power reactor licensees. The decommissioning financial assurance requirements of this section respond to the potential rate deregulation, and the NRC's responsibility to ensure assurance of adequate funding to complete the decommissioning process. Licensees are required to periodically report on the status of these funds and on changes in external trust agreements and other financial assurance means. The requirements of this section ensure that utilities have ensured that adequate funding is available to complete the decommissioning process and eventual license termination. The restrictions placed on permanently shutdown plants with regards to using the generic amount specified in this section are detailed in §50.82(a)(8). The regulations of this section are, therefore, directly applicable to decommissioning nuclear power plants.
Applicability Binning: Regulations are directly applicable to decommissioning nuclear power plants.
Citation: **§50.78, Installation information and verification**
Retrieval Keyword Phrase: holder of a construction permit
Background: The requirements of this section allow for imposition of safeguards concerning nuclear material accounting and material control.
Applicability Analysis: The applicability of this section is to holders of construction permits to ensure that access is provided to ensure implementation of the nuclear materials safeguards in accordance with applicable USA and IAEA agreements specified in Part 75. A decommissioning plant would not normally be a holder of a construction permit. However, per the requirements of §75.4(k), installations for which Part 75 regulations are applicable include ISFSIs, which are likely to be constructed at most decommissioning plants. The NRC may wish to review the applicability of this section to decommissioning plants.
Applicability Binning: Regulations are indirectly applicable to decommissioning nuclear power plants.
Citation: **§50.80, Transfer of licenses**
Retrieval Keyword Phrase: license for a production or utilization facility
Background: The regulations of this section state how a NRC issued license may be transferred.

Applicability Analysis: The regulations of this section are applicable to all licenses for a production or utilization facility (§50.80(a)), which includes decommissioning nuclear power plants. No license may be transferred unless authorized by the NRC, in writing. The information required to support a license transfer include general and technical information as per§50.33 and §50.34, respectively. Both of these sections are applicable to decommissioning plants.
Applicability Binning: Regulations are directly applicable to decommissioning nuclear power plants.
Citation: **§50.81, Creditor regulations**
Retrieval Keyword Phrase: any license or construction permit issued by the Commission
Background: The regulations of this section allow for the creation of a mortgage or lien upon a nuclear facility, provided it does not result in the transfer of the license.
Applicability Analysis: The regulations of this section are applicable to all licenses for production and utilization facilities (§50.81(a) and (d)), which includes decommissioning nuclear power plants. As stated, licensees are allowed to mortgage or place liens against a facility without specific NRC approval, provided the action does not result in the repossession of the facility. A license transfer, per the provisions of §50.80(b), may be pursued.
Applicability Binning: Regulations are directly applicable to decommissioning nuclear power plants.
Citation: **§50.82, Termination of license**
Retrieval Keyword Phrase: power reactor licensees; permanent cessation of operations
Background: This section provides the regulations pertaining to certification of permanent cessation of operations, facility decommissioning, and license termination.
Applicability Analysis: The regulations contained in this section define the steps required upon a decision by an operating plant to permanently cease operations (§50.82(a)(1)(i)). Upon certification of permanent cessation of operations and fuel removal from the reactor, the license is no longer authorized to operation (§50.82(a)(2)). Decommissioning will then be required to be completed within 60 years. Prior to, or within 2 years of certification of cessation of operations, a post-shutdown decommissioning activities report (PSDAR) must be submitted. This document will detail how the decommissioning will progress and the estimated costs. In addition, an environmental review will be required to ensure all activities are still bounded by existing environmental impact statements. Major decommissioning activities (as defined by §50.2) are not permitted until 90 days following the submittal of the PSDAR. Most facility dismantlement activities will be performed under the §50.59 change process. This section also defines how the decommissioning funds can be spent. The license termination application and plan must be formally submitted to and approved by the NRC.
Applicability Binning: Regulations are directly applicable to decommissioning nuclear power plants.
Citation: **§50.90, Application for amendment of license or construction permit**
Retrieval Keyword Phrase: holder of a license
Background: The requirements of this section describe how a licensee will submit an application for a license amendment.

Applicability Analysis: The requirements of this section, which are applicable to holders of a NRC Part 50 license, specify that when an amendment to a license is desired, it must be filed with the NRC in accordance with §50.4. Decommissioning facilities hold a Part 50 license and often require licensee amendments, especially related to technical specification changes. In addition, amendments may be needed for changes at decommissioning plants that do not meet the 50.59 screening criteria.
Applicability Binning: Regulations are directly applicable to decommissioning nuclear power plants.
Citation: **§50.91, Notice for public comment; State consultation**
Retrieval Keyword Phrase: amendment to an operating license for a facility license under §50.21(b) or §50.22
Background: This section defines the procedures followed by the NRC upon receipt of an application for an amendment to an operating license.
Applicability Analysis: The regulations of this section are applicable to licensees requesting an amendment to an operating license. Therefore, this would include decommissioning nuclear power plants as discussed in the applicability analysis for §50.90 above. The process followed includes issuance of a public notice, a public comment period, and publication of a notice for public comment ((a)). In the event the NRC concludes that the requested amendment does not involve a significant hazard, it may issue the amendment without advance public notification. However, the NRC will periodically list in the Federal Register any such actions. The NRC may issue the requested license amendment, even with adverse public comments, if a finding of no significant hazards is made. These regulations also provide for state notification and consultation (§50.91(b)) for requests to amendments for operating licenses.
Applicability Binning: Regulations are directly applicable to decommissioning nuclear power plants.
Citation: **§50.92, Issuance of amendment**
Retrieval Keyword Phrase: amendment to a license; amendment to an operating license for a facility license under §50.21(b) or §50.22
Background: This section describes the guidelines followed by the NRC in deciding whether to issue a license amendment.
Applicability Analysis: The regulations in this section do not include any specific requirements for the licensee regarding a license amendment. This section does provide the methodology followed by the NRC in determining if a requested license amendment will be issued. The regulations of this section are applicable to licensees requesting an amendment to an operating license, which would include decommissioning nuclear power plants. However, §50.92(a) states that a construction permit will be issued, prior to a license amendment, if the application involves a material alteration to the licensed facility. A strict interpretation of this may lead to a conclusion that the decommissioning process will include such an alteration; therefore, a construction permit is required. As stated in previous sections, BNL does not feel that the intent of the decommissioning regulations are to require a construction permit. The NRC may wish to review the words to specifically exempt the license amendment following permanent cessation of operations and fuel removal.
Applicability Binning: Regulations are directly applicable to decommissioning nuclear power plants.
Citation: **§50.100, Revocation, suspension, modification of licenses and construction permits for cause**

Retrieval Keyword Phrase: a license
Background: The regulations of this section define under which specific circumstances the NRC may revoke, suspend, or modify a license.
Applicability Analysis: This section allows for the NRC to revoke, suspend, or modify a license in the event of material false statements. The applicability of this section applies to all licenses issued by the NRC, which includes decommissioning nuclear power plants. As per §50.82, the licensee is required to make specific commitments regarding actions to be taken during the decommissioning process to protect public health and safety and not to preclude eventual license termination. In the event such commitments are found to be invalid, the NRC may take actions against the licensee in accordance with this section.
Applicability Binning: Regulations are directly applicable to decommissioning nuclear power plants.
Citation: **§50.101, Retaking possession of special nuclear material**
Retrieval Keyword Phrase: revocation of a license
Background: This section permits the NRC to repossess all SNM in the event of license revocation.
Applicability Analysis: The regulations of this section allow for the repossession of SNM in the event of license revocation. This section is applicable to all licenses, which would include decommissioning nuclear power plants. In the unlikely event the NRC may revoke a license at a permanently shutdown facility, the NRC would also repossess any SNM still at the facility.
Applicability Binning: Regulations are directly applicable to decommissioning nuclear power plants.
Citation: **§50.102, Commission order for operation following revocation**
Retrieval Keyword Phrase: operation of a production or utilization facility
Background: The regulations of this section allow the NRC to take possession of a facility which has had the license revoked, and order it to be operated, in the event of public convenience or necessity.
Applicability Analysis: The regulations of this section provide for the NRC to order a facility (which had a license revoked), to operate in the event of public convenience or necessity. This section appears to apply to operation of a facility, not to decommissioning plants. Once the plant has permanently ceased operations, and following the permanent removal of fuel from the reactor vessel, the licensee may make modifications to the plant which would preclude restart. However, until such modifications are made, it is conceivable that the plant could be placed back into operation. Therefore, the regulations of this section are potentially applicable to decommissioning plants.
Applicability Binning: Regulations are potentially applicable to decommissioning nuclear power plants.

Citation: **§50.103, Suspension and operation in war or national emergency**
Retrieval Keyword Phrase: any license it has issued; any license facility
Background: The regulations of this section provide specific powers to the NRC in times of war or national emergencies.
Applicability Analysis: The powers granted to the NRC by this section (i.e., suspend licenses, recapture SNM, order facility operation) are applicable to all licenses issued by the NRC, including decommissioning nuclear power plants. While it may be impossible to order the operation of a facility which is undergoing decommissioning, the NRC may suspend the license, or recapture any SNM which may still be at the facility, if it is warranted in the event of war or national emergency.
Applicability Binning: Regulations are directly applicable to decommissioning nuclear power plants.
Citation: **§50.109, Backfitting**
Retrieval Keyword Phrase: facility
Background: The Backfit Rule defined by this section defines under what circumstances the NRC may require modifications to previously licensed facilities.
Applicability Analysis: As defined (§50.109(a)(1)), backfitting is defined as a modification of or addition to systems, structures, components, or design of a facility, or the procedures or organization required to operate a facility. If required, changes to a previously issued license can be required by the NRC through this rule provided criteria in the rule are met. As stated in §50.109(c)(1) through (9), changes can be ordered if they have a potential impact on radiological exposure, change in the risk to the public from an accidental offsite release, or have a potential safety impact. Each of these conceivably could be applied to decommissioning nuclear power plants. Lessons learned at other sites or new design analysis could impact the licensing basis for a decommissioning plant, and the NRC could impose changes through this section. However, based on recent direction associated with SECY-98-253, clarification to address how this regulation is applied to decommissioning nuclear power plants may be needed.
Applicability Binning: Regulations are directly applicable to decommissioning nuclear power plants.
Citation: **§50.110, Violations**
Retrieval Keyword Phrase: any license
Background: The regulations of this section allow the NRC to ensure compliance with the regulations and payment of civil penalties by obtaining court orders and injunctions if needed.
Applicability Analysis: The applicability of this section covers all the regulations imposed by the NRC. Compliance with these regulations and payment of any civil penalties may be sought through a court injunction or court order.
Applicability Binning: Regulations are directly applicable to decommissioning nuclear power plants.
Citation: **§50.111, Criminal penalties**
Retrieval Keyword Phrase: all the regulations in Part 50

Background: The regulations of this section allow for the imposition of criminal penalties for violations of the regulations of this part.
Applicability Analysis: As stated in the response to a public comment associated with the 1996 decommissioning rule (61 FR39288), the NRC believes that certain actions are essential for the decommissioning process. These include the certification of permanent cessation of operations and fuel removal and the submittal of the PSDAR. These actions are treated as substantive with respect to the criminal penalty provisions of the Atomic Energy Act. Improperly initiated decommissioning actions may seriously compromise public health and safety and the environment. Willful violations of the requirements of §50.82 would be a significant concern to the NRC.
Applicability Binning: Regulations are directly applicable to decommissioning nuclear power plants.
Citation: **§50.120, Training and qualification of nuclear power plant personnel**
Retrieval Keyword Phrase: each holder of an operating license for a nuclear power plant of the type specified in §50.21(b) or §50.22; each nuclear power plant licensee
Background: The regulations of this section define the contents of the training program and qualifications for specific nuclear power plant personnel.
Applicability Analysis: The applicability of this section, as defined in §50.120(a), appears to be limited to holders of an operating license (licensees). However, §50.120(b) appears to be applicable to nuclear power plant licensees, which would include decommissioning plants as well. The intent of this section is to define the training program required for specific personnel. Of the nine personnel categories specified in §50.120(b), only the shift technical adviser would not be applicable to decommissioning plants. The remaining eight personnel categories would be needed at a permanently shutdown plant. The provisions for the training program (§50.120(b)(2)) are described in general terms to be applicable to both operating and decommissioning plants. The NRC may wish to review the applicability of this section to clarify its applicability to decommissioning plants. Also this section should be reviewed to determine if the need for an STA can be deleted for plants which have permanently ceased operations in accordance with §50.82.
Applicability Binning: Regulations are directly applicable to decommissioning nuclear power plants.
Citation: **Appendix A to Part 50-General Design Criteria For Nuclear Power Plants**
Retrieval Keyword Phrase: SSCs important to safety; water-cooled nuclear power plants
Background: This Appendix contains 64 General Design Criteria (GDC) divided into five main categories. These GDC establish the minimum requirements for the design of LWRs.
Applicability Analysis: The GDC defined by this Appendix establish general design criteria for LWRs and are applicable to the extent that they were used to establish the design or licensing basis of any particular facility during its licensing process. The intent is ensure that safety requirements are satisfied. While many of the GDC are applicable only to operating plants, several appear to be applicable to decommissioning plants as well, especially for as long as fuel is stored in the SFP. Each GDC will be reviewed to determine applicability to decommissioning plants. Criterion 1-Quality standards and records This GDC requires that SSCs important to safety be tested to quality standards commensurate with the

safety function and that a quality assurance program be established. The SSCs important to safety should be tested in accordance with recognized codes and standards to ensure the required safety function. Appropriate records should be maintained throughout the life of the plant (including the decommissioning period) for these SSCs to document the inspections, tests, etc., performed to verify this. A quality assurance program is required for all Part 50 licensees and, therefore, this criterion is directly applicable to decommissioning plants. However, clarification of what SSCs are important to safety at decommissioning plants is needed (e.g., such as those needed for the safe storage of spent fuel).

Applicability Binning: GDC directly applicable to decommissioning nuclear power plants.

Criterion 2-Design bases for protection against natural phenomena
This GDC requires that SSCs important to safety be designed to withstand the effects of natural phenomena. While this would have been done in the initial design phase, the licensee must insure that the SSCs important to decommissioning safety have not been compromised by the decommissioning process. However, clarification of what SSCs are important to safety at decommissioning plants is needed (e.g., such as those needed for the safe storage of spent fuel).

Applicability Binning: GDC directly applicable to decommissioning nuclear power plants.

Criterion 3-Fire protection
This GDC requires that SSCs important to safety be designed to minimize adverse effects of a fire. This requirement appears to remain applicable during decommissioning for those SSCs that, if damaged by a fire, could cause the release or spread of radioactive material. Many of the elements of an operating plants fire protection program continue to be applicable during decommissioning (baseline analysis, description of plant fire hazards, administrative controls, physical protection features, and emergency response capabilities).

Applicability Binning: GDC directly applicable to decommissioning nuclear power plants

Criterion 4-Environmental and dynamic effects design bases
This GDC requires that SSCs important to safety be designed to accommodate the environment and withstand the dynamic effects of postulated design basis accidents. While this would have been done in the initial design phase, the licensee must insure that the SSCs important to decommissioning safety have not been compromised by the decommissioning process. However, based on the non-applicability of the environmental qualification regulations under 50.49, this criterion does not appear to be applicable to decommissioning plants.

Applicability Binning: GDC is not applicable to decommissioning nuclear power plants.

Criterion 5-Sharing of structures, systems, and components
This GDC discusses the limitations of sharing SSCs important to safety among different power units. It is possible that a multi-unit site may have a common spent fuel pool or other support functions provided by or to the decommissioning plant. If such a condition exists, this GDC is applicable to ensure no impairment of the safety functions.

Applicability Binning: GDC directly applicable to decommissioning nuclear power plants.

Criterion 10-Reactor Design
Criterion 11-Reactor inherent protection
Criterion 12-Suppression of reactor power oscillations
These three GDCs apply to the reactor core and associated coolant, control, and protection systems. The intent of these is to control reactivity and conformance to fuel design limits.

Applicability Binning: GDCs 10, 11, and 12 are not applicable to decommissioning nuclear power plants.

Criterion 13-Instrumentation and control
This GDC requires that I&C be provided to monitor variables and systems over the anticipated ranges of normal operation and accidents. Included in these is the monitoring of the fission process. This remains important while fuel is stored in the fuel pool.

Applicability Binning: GDC directly applicable to decommissioning nuclear power plants.

Criterion 14-Reactor coolant pressure boundary
Criterion 15-Reactor coolant system design
Criterion 16-Containment design
These three GDCs concern the design of the reactor coolant system and containment. They are not applicable to decommissioning power plants.

Applicability Binning: GDCs are not applicable to decommissioning nuclear power plants.

Criterion 17-Electric power systems
Criterion 18-Inspection and testing of electric power systems
These two GDCs cover the need for onsite and offsite electric power systems to allow for the proper functioning of SSCs important to safety. While fuel is stored in the spent fuel pool, it is important that adequate spent fuel pool cooling be provided. SFP cooling reliability at decommissioning plants is very dependent on the electrical power system arrangements. Therefore, these criteria may be applicable to decommissioning plants.

Applicability Binning: GDCs 17 and 18 are directly applicable to decommissioning nuclear power plants.

Criterion 19-Control room
This GDC explains the requirements associated with the control room and other remote locations which can be used to maintain the plant in a hot shutdown and subsequent cold shutdown. As written, this GDC is not applicable to a decommissioning plant. However, while fuel is stored in the fuel pool, monitoring of the fuel pool conditions is accomplished from a decommissioning control room. Since the relationship between the decommissioning control room and the control room established for operating plants is unspecified, this criterion could be interpreted as applicable. The applicability of this criterion for decommissioning plants should be clarified.

Applicability Binning: GDC is potentially applicable to decommissioning nuclear power plants.

Criterion 20-Protection system functions
Criterion 21-Protection system reliability and testability
Criterion 22-Protection system independence
Criterion 23-Protection system failure modes
Criterion 24-Separation of protection and control systems
Criterion 25-Protection system requirements for reactivity control malfunctions

Criterion 26-Reactivity control system redundancy and capability
Criterion 27-Combined reactivity control systems capability
Criterion 28-Reactivity limits
Criterion 29-Protection against anticipated operational occurrences
These 10 GDCs define the design and operation requirements for the reactor protection and reactivity control systems. Once the fuel has been permanently removed from the reactor, they are no longer applicable.

Applicability Binning: GDCs 20 through 29 are not applicable to decommissioning nuclear power plants.

Criterion 30-Quality of reactor coolant pressure boundary
Criterion 31-Fracture prevention of reactor coolant pressure boundary
Criterion 32-Inspection of reactor coolant pressure boundary
Criterion 33-Reactor coolant makeup
These four GDCs pertain to ensuring the integrity of the reactor coolant pressure boundary. Once a plant permanently ceases operation and removes all the fuel from the reactor, they are no longer applicable.

Applicability Binning: GDCs 30 through 33 are not applicable to decommissioning nuclear power plants.

Criterion 34-Residual heat removal
In some plants, the RHR system is designed to provide an alternate source of cooling for the spent fuel pool. In those instances, the RHR system may be required to be maintained during spent fuel storage in the SFP at a decommissioning plant and tested periodically to assure operation.

Applicability Binning: GDC 34 is potentially applicable to decommissioning nuclear power plants.

Criterion 35-Emergency core cooling
Criterion 36-Inspection of emergency core cooling systems
Criterion 37-Testing of emergency core cooling system
Criterion 38-Containment heat removal
Criterion 39-Inspection of containment heat removal system
Criterion 40-Testing of containment heat removal system
GDCs 35 through 40 pertain to the operation of the ECCS and containment heat removal systems. Once a plant permanently ceases operation and removes all the fuel from the reactor, they are no longer applicable.

Applicability Binning: GDCs 35 through 40 are not applicable to decommissioning nuclear power plants.

Criterion 41-Containment atmosphere cleanup
Criterion 42-Inspection of containment atmosphere cleanup systems
Criterion 43-Testing of containment atmosphere cleanup systems
Criterion 44-Cooling water
Criterion 45-Inspection of cooling water system
Criterion 46-Testing of cooling water system
GDCs 41 through 46 pertain to the operation, inspection, and testing of the containment atmosphere cleanup and cooling water systems. In BWRs, the containment atmosphere cleanup system may be needed as long as fuel is stored in the pool. Similarly, the cooling water system provides for heat

transfer to an ultimate heat sink and may be used to remove heat from the RHR of spent fuel pool cooling systems.

Applicability Binning: GDCs 41 through 46 are potentially applicable to decommissioning nuclear power plants.

Criterion 50-Containment
Criterion 51-Fracture prevention of containment pressure boundary
Criterion 52-Capability for containment leakage testing
Criterion 53-Provisions for containment testing and inspection
Criterion 54-Piping systems penetrating containment
Criterion 55-Reactor coolant pressure boundary penetrating containment
Criterion 56-Primary containment isolation
Criterion 57-Closed system isolation valves
These eight GDCs concern the design, operation, and testing of the reactor containment systems. Once the fuel has been permanently removed from the reactor, they are no longer applicable.

Applicability Binning: GDCs 50 through 57 are not applicable to decommissioning nuclear power plants.

Criterion 60-Control of releases of radioactive material to the environment
This GDC requires that the plant design include means to suitably control the release of gaseous and liquid effluents during normal operation. While it appears that the applicability is for operating plants, the same controls have to be provided during the decommissioning process as well. Sufficient holdup capacity needs to be provided to ensure this during the decommissioning process.

Applicability Binning: GDC is potentially applicable to decommissioning nuclear power plants.

Criterion 61-Fuel storage and handling and radioactivity control
This GDC describes the attributes required for the safe storage of spent fuel and radioactive wastes. Included are requirements for periodic inspection, cooling and cleanup systems, shielding, and prevention of loss of pool water. The SSC that satisfy this criterion would continue to be applicable to decommissioning plants. While the criterion would have been applied in the initial design phase, the licensee must insure that the SSCs that provide these functions for decommissioning safety have not been compromised by the decommissioning process.

Applicability Binning: GDC is directly applicable to decommissioning nuclear power plants.

Criterion 62-Prevention of criticality in fuel storage and handling
This GDC specifies how criticality should be prevented during fuel storage. The licensee must insure that the methods important for criticality prevention during decommissioning have not been compromised by the decommissioning process. This criterion appears to be applicable to decommissioning plants as long as fuel is stored onsite.

Applicability Binning: GDC is directly applicable to decommissioning nuclear power plants.

GDC 63-Monitoring fuel and waste storage
This GDC specifies the use of monitoring systems which are capable of detecting excessive pool heat up or excessive radiation levels and to initiate appropriate safety actions. It appears to be applicable to decommissioning plants to the extent that it was applicable in the initial licensing and the licensee must insure that the SSCs important to meeting this decommissioning criterion have not been compromised by the decommissioning process.

Applicability Binning: GDC is directly applicable to decommissioning nuclear power plants.

Criterion 64-Monitoring radioactivity releases
This GDC specifies the need for monitoring the plant environs for radioactivity which may be released from normal operations and postulated accidents. It appears to be applicable to decommissioning plants to the extent that it was applicable in the initial licensing and the licensee must insure that the SSCs important to meeting this decommissioning criterion have not been compromised by the decommissioning process.

Applicability Binning: GDC is directly applicable to decommissioning nuclear power plants.

Citation: **Appendix B to Part 50-Quality Assurance Criteria For Nuclear Power Plants and Reprocessing Plants**

Retrieval Keyword Phrase: applicant for an operating license; nuclear power plants

Background: This Appendix defines the quality assurance program necessary to provide assurance that a SSC will perform the design function adequately during service.

Applicability Analysis: Based on the introduction to this Appendix, the applicability appears to be limited to applicants for construction permits and operating licenses. However, as discussed in a response to a comment associated with 1996 decommissioning rule (61 FR39283), the NRC explicitly stated that the provisions of this appendix are applicable to decommissioning plants. The NRC may wish to review Appendix B to clarify the extent of its applicability to decommissioning plants.

Applicability Binning: Regulations are directly applicable to decommissioning nuclear power plants.

Citation: **Appendix C to Part 50-A Guide For the Financial Data And Related Information Required To Establish Financial Qualifications For Facility Construction Permits**

Retrieval Keyword Phrase: applicants for licenses to construct production or utilization facilities

Background: This Appendix contains information on the kind of financial data and other related information to demonstrate financial qualification.

Applicability Analysis: The information in this Appendix describes the financial information which is needed to be submitted to the NRC to demonstrate financial qualification. As stated in the general information, it is intended for applicants for construction permits. As such, this information would have already been submitted in the case of a permanently shutdown plant. However, it may be possible that a decommissioning plant may seek a license transfer, per the regulations described in §50.80. The type of financial information is the same as discussed in §50.33 and §50.34 as being required to be reviewed by the NRC as part of the transfer process.

Applicability Binning: Regulations are potentially applicable to decommissioning nuclear power plants.

Citation: **Appendix E to Part 50-Emergency Planning and Preparedness For Production and Utilization Facilities**

Retrieval Keyword Phrase: applicant for a construction permit; applicant for an operating license; nuclear power plants which are shut down permanently

Background: This Appendix establishes the minimum requirements for emergency plans for nuclear power plants.

Applicability Analysis: The requirement for maintaining an emergency plan at decommissioning nuclear power plants was discussed in Federal Register notice 61 FR39287 (related to the 1996 decommissioning rule) and was concluded to be directly applicable to decommissioning plants. The only exception noted is the exclusion of decommissioning plants from the Emergency Response Data System (ERDS) requirements stated in Section VI of this Appendix. The NRC may wish to clarify the emergency planning and preparedness requirements for decommissioning plants.
Applicability Binning: Regulations are directly applicable to decommissioning nuclear power plants.
Citation: **Appendix F to Part 50-Policy Relating To The Siting Of Fuel Reprocessing Plants and Related Waste Management Facilities**
Retrieval Keyword Phrase: none
Background: The regulations of this Appendix provide for the safe operation and design characteristics of fuel reprocessing plants.
Applicability Analysis: There is no information contained in this Appendix applicable to decommissioning nuclear power plants.
Applicability Binning: Regulations are not applicable to decommissioning nuclear power plants.
Citation: **Appendix G to Part 50-Fracture Toughness Requirements**
Retrieval Keyword Phrase: light water nuclear power reactors
Background: Appendix provides details related to fracture prevention measures for LWRs.
Applicability Analysis: Permanently shutdown plants in accordance with the provisions of §50.82(a)(1) are exempted from the requirements of this Appendix by §50.60(a) and §50.61(b).
Applicability Binning: Regulations are not applicable to decommissioning nuclear power plants.
Citation: **Appendix H to Part 50-Reactor Vessel, Material Surveillance Program Requirements**
Retrieval Keyword Phrase: light water nuclear power reactors
Background: This Appendix provides the details of the surveillance program to monitor reactor vessel embrittlement.
Applicability Analysis: Permanently shutdown plants in accordance with the provisions of §50.82(a)(1) are exempted from the requirements of this Appendix by §50.60(a) and §50.61(b).
Applicability Binning: Regulations are not applicable to decommissioning nuclear power plants.
Citation: **Appendix I to Part 50-Numerical Guides For Design Objectives And Limiting Conditions For Operation To Meet The Criterion "As Low As Is Reasonably Achievable" For Radioactive Material In Light-Water-Cooled Nuclear Power Reactor Effluents**
Retrieval Keyword Phrase: nuclear power reactors
Background: This Appendix provides guidance on design objectives to meet ALARA requirements.

Applicability Analysis: As discussed in the applicability analysis for §50.34a and 61 FR39283 (Federal Register notice for the 1996 decommissioning rule), this Appendix ensures that the provisions of ALARA are used to control and minimize the release of radioactive effluents from a decommissioning nuclear plant. These provisions are incorporated into the technical specifications for a decommissioning plant.
Applicability Binning: Regulations are directly applicable to decommissioning nuclear power plants.
Citation: **Appendix J to Part 50-Primary Reactor Containment Leakage Testing For Water-Cooled Power Reactors**
Retrieval Keyword Phrase: water-cooled power reactors
Background: This Appendix defines the containment leak rate testing program.
Applicability Analysis: The provisions of this Appendix are not applicable to permanently shutdown facilities as per §50.54(o).
Applicability Binning: Regulations are not applicable to decommissioning nuclear power plants.
Citation: **Appendix K To Part 50-ECCS Evaluation Models**
Retrieval Keyword Phrase:
Background: This Appendix defines the ECCS evaluation models.
Applicability Analysis: The provisions of this Appendix are not applicable to permanently shutdown facilities as per §50.46(a)(1)(i).
Applicability Binning: Regulations are not applicable to decommissioning nuclear power plants.
Citation: **Appendix L To Part 50-Information Requested By The Attorney General For Antitrust Review Facility License Applications**
Retrieval Keyword Phrase: applicant; construct or operate
Background: This Appendix details the specific information required to be submitted for the Attorney General antitrust review.
Applicability Analysis: As discussed in the regulations pertaining to license transfer (§50.80), specific information is required to be submitted to the Attorney General for an antitrust review as described in §50.33a. This information is detailed in this Appendix. Therefore, this Appendix is potentially applicable to decommissioning nuclear power plants undergoing license transfer.
Applicability Binning: Regulations are potentially applicable to decommissioning nuclear power plants.
Citation: **Appendix M to Part 50-Standardization Of Design; Manufacture Of Nuclear Power Reactors; Construction and Operation Of Nuclear Power Reactors Manufactured Pursuant To Commission License**
Retrieval Keyword Phrase: production or utilization facility; nuclear power reactor; operating license for a nuclear power reactor
Background: This Appendix defines the requirements for the issuance of a manufacturing license.

Applicability Analysis: The regulations of this Appendix are applicable to the construction and manufacture of nuclear power reactors. It codifies one approach to nuclear power reactor standardization. There are no regulations contained in this Appendix which are applicable to plants which have permanently ceased operations.
Applicability Binning: Regulations are not applicable to decommissioning nuclear power plants.
Citation: **Appendix N to Part 50-Standardization Of Nuclear Power Plant Designs: Licenses To Construct And Operate Nuclear Power Reactors Of Duplicate Designs At Multiple Sites**
Retrieval Keyword Phrase: issuance of an operating license; production or utilization facility
Background: This Appendix defines the requirements for applicants desiring to design, construct, and operate nuclear power reactors of the same design at different locations.
Applicability Analysis: This Appendix contains no regulations applicable to decommissioning nuclear power plants. It is concerned with detailing the information required for the issuance of a construction permit and an operating license for nuclear power plants of similar design at different locations.
Applicability Binning: Regulations are not applicable to decommissioning nuclear power plants.
Citation: **Appendix O To Part 50-Standardization Of Design: Staff Review Of Standard Designs**
Retrieval Keyword Phrase: nuclear power reactor; reactor facility
Background: This Appendix describes the procedures concerning the application for, and the review of, standard nuclear power reactor designs.
Applicability Analysis: The regulations of this Appendix describe the technical information needed to be submitted, and the review process, for applications concerning standard designs. No mention is made of standardized plans for decommissioning.
Applicability Binning: Regulations are not applicable to decommissioning nuclear power plants.
Citation: **Appendix Q To Part 50-Pre-Application Early Review Of Site Suitability Issues**
Retrieval Keyword Phrase: operation of certain utilization facilities
Background: This Appendix describes the procedures concerning the application for, and the review of, site suitability issues before an application for a construction permit.
Applicability Analysis: The regulations of this Appendix describe the technical information needed to be submitted, and the review process, for applications concerning early review of specific site suitability issues. No reference is made to eventual decommissioning or license termination issues.
Applicability Binning: Regulations are not applicable to decommissioning nuclear power plants.
Citation: **Appendix R To Part 50-Fire Protection Program For Nuclear Power Facilities Operating Prior To January 1, 1979**
Retrieval Keyword Phrase: licensed nuclear power electric generating stations; each nuclear power plant

Background: This Appendix specifies the requirements for fire protection at all nuclear power plants.

Applicability Analysis: As discussed in the applicability analysis for §50.48, the emphasis of a fire protection program for plants which have permanently ceased operations is focussed on fires which could result in the release, or spread, of radioactive materials. The NRC has stated that a performance-based fire protection program can be used at these facilities. Appendix R contains guidelines for protecting SSCs which are important to safety. Additional information regarding fire protection programs (§50.48) is provided in Branch Technical Position APCSB 9.5-1. As stated in this document:

-a fire protection program for new fuel storage areas must be fully operational before storage of new fuel,
-fire protection and automatic detection is required for the spent fuel pool area,
-fire detection and protection program must be provided for radwaste buildings, and
-any materials that contain radioactivity must be stored in approved metal tanks or containers away from ignition sources or combustibles.

Each of these requirements would be applicable to decommissioning plants. Therefore, the Appendix is judged to be applicable to decommissioning plants. The NRC may wish to clarify the applicability specific sections of this appendix for decommissioning plants.

Applicability Binning: Regulations are directly applicable to decommissioning nuclear power plants.

Citation: **Appendix S To Part 50-Earthquake Engineering Criteria For Nuclear Power Plants**

Retrieval Keyword Phrase: operating license

Background: This Appendix provides the seismic criteria required to insure nuclear power plants can withstand the effects of natural phenomena.

Applicability Analysis: As discussed in the applicability analysis for §50.54(ff) and Appendix A, General Design Criteria 2, the applicability of these sections are limited to operating nuclear power plants. Any SSC related to the safe storage of spent fuel would have been designed in accordance with these parameters. No mention is specifically made regarding plant modifications during decommissioning. While fuel is stored in the facility, the licensee would be expected to ensure that those SSCs important to the safe storage of the fuel have not been seismically compromised by any decommissioning operation.

Applicability Binning: Regulations are potentially applicable to decommissioning nuclear power plants.

Citation: **Part 51-Environmental Protection Regulations For Domestic Licensing and Related Regulatory Functions**

Retrieval Keyword Phrase: NRC's domestic licensing; license amendment authorizing the decommissioning of a production or utilization facility; license termination plan or decommissioning plan under §50.82

Background: This part contains the environmental protection regulations applicable to nuclear power plants.

Applicability Analysis: As per §50.82(a)(4)(i), a permanently shutdown facility must submit a PSDAR which documents the proposed decommissioning process and activities which will take place.

Included in this report is a discussion which provides the licensee's reasons for concluding that the environmental impacts associated with the decommissioning are bounded by the previously issued EIS. In the event impacts are identified which have not been previously considered, the licensee must address the impacts per the guidelines of §51.45. A supplement to the environmental report must also be submitted relating to the additional impacts. In accordance with §50.82(a)(9)(ii)(G), the application for the license termination plan must include a supplement to the environmental report, pursuant to §51.53(d), describing new information or significant changes associated with the proposed termination activities. Specific subsections which relate to decommissioning nuclear power plants are:

§51.22(c)(9) discusses specific examples eligible for categorical exclusion from the environmental review requirements. While permanently shutdown plants in accordance with §50.82(a) are not specifically mentioned, this subsection addresses amendments to Part 50 licenses. The NRC may wish to review this subsection to determine if a permanently shutdown plant which concludes that all decommissioning activities are bounded by a previous EIS can be exempt.

§51.23(b) and (c) discuss the need for consideration of the environmental impacts of fuel storage during the term of a reactor operating license and amendments thereto. No discussion is included to cover the potential of long-term pool storage. The NRC may wish to review this subsection to determine if the time period from operation to permanent fuel removal from the facility needs to be included.

§51.55(a) provides information on the number of copies and distribution of the environmental report for plants which are seeking an amendment authorizing decommissioning or to store spent fuel at the plant following operating license expiration. No specific reference is made to permanently shutdown plants in accordance with §50.82. The NRC may wish to review this subsection to clarify the applicability to §50.82.

§51.95(d) requires the NRC to prepare a supplemental EIS for operating license amendments to authorize decommissioning or to store spent fuel at the reactor following the expiration of the operating license. §51.100 provides for a 90-day period to allow public review and comment of the EIS. No specific reference is made to permanently shutdown plants in accordance with §50.82. The NRC may wish to review this subsection to clarify the applicability to §50.82.

Applicability Binning: Regulations are directly applicable to decommissioning nuclear power plants.

Citation: **Part 52-Early Site Permits; Standard Design Certifications; and Combined Licenses for Nuclear Power Plants**

Retrieval Keyword Phrase: nuclear power facilities

Background: The three subparts of this part govern the issuance of early site permits, standardized design certifications, and combined licenses for nuclear power facilities.

Applicability Analysis: Subpart A provides the requirements and procedures necessary for NRC issuance of an early site permit. No reference is made to eventual decommissioning or license termination issues. The regulations of this subpart are not applicable to decommissioning nuclear power plants.

Subpart B provides the requirements and procedures applicable to standard design certification. No reference is made to eventual decommissioning or license termination issues. The regulations of this subpart are not applicable to decommissioning nuclear power plants.

Subpart C provides the requirements applicable to the issuance of combined licenses for nuclear power facilities. No reference is made to eventual decommissioning or license termination issues. The regulations of this subpart are not applicable to decommissioning nuclear power plants.

Subpart D provides for the NRC obtaining court injunctions to prevent violations of the provisions of this part. Since this part was deemed not to be applicable to decommissioning nuclear plants, this subpart is also not applicable.

Although these regulations are not applicable to decommissioning nuclear power plants under Part 50, review of Part 52 and Part 50 may be appropriate to confirm that no modifications or additions are needed to decommissioning regulations to address standard design licensed under Part 52.

Applicability Binning: Regulations are not applicable to decommissioning nuclear power plants.

Citation: **Part 54-Requirements For Renewal Of Operating Licenses For Nuclear Power Plants**

Retrieval Keyword Phrase: nuclear power plants

Background: The regulations of this part required for the renewal of operating licenses for nuclear power plants.

Applicability Analysis: The regulations of this part address the technical requirements needed to insure a plant can safely operate beyond the time period specified by the original operating license. No regulations of this part address decommissioning. When these license renewal plants eventually permanently cease operations, the regulations of §50.82 will apply.

Applicability Binning: Regulations are not applicable to decommissioning nuclear power plants.

Citation: **Part 55-Operator's Licenses**

Retrieval Keyword Phrase: any utilization facility; any facility license

Background: The regulations of this part define the procedures and criteria for issuing licenses to operate nuclear facilities.

Applicability Analysis: The training requirements for operating and decommissioning plants was discussed in the applicability analysis for §50.54 (i) through (m). As discussed, these sections were determined to be directly applicable to decommissioning plants. These regulations stated that

apparatus, mechanisms, and controls must be operated by, or under the direct supervision, of a licensed operator or senior operator. As defined in §55.4, controls means apparatus and mechanisms which the manipulation of directly affects the reactivity or power level of the reactor. This definition, when applied to a facility which has permanently ceased operations and removed all fuel from the reactor, may not be applicable. The NRC, when responding to a comment associated with the 1996 decommissioning rule (61 FR39288), stated that this issue was being further evaluated. As defined, the regulations of this part are deemed to be applicable to decommissioning plants as long as licensed operators are used by the decommissioning plant for staffing. However, the NRC should review the applicability of this part to decommissioning plants.
Applicability Binning: Regulations are directly applicable to decommissioning nuclear power plants.
Citation: **Part 60-Disposal Of High-Level Radioactive Wastes In Geologic Repositories**
Retrieval Keyword Phrase: none
Background: This part provides the regulations applicable to the disposal of HLW in a geologic repository per the provisions of the Nuclear Waste Policy Act.
Applicability Analysis: This part contains no regulations applicable to operating or decommissioning nuclear power plants.
Applicability Binning: Regulations are not applicable to decommissioning nuclear power plants.
Citation: **Part 61-Licensing Requirements For Land Disposal Of Radioactive Waste**
Retrieval Keyword Phrase: all persons in the United States
Background: The regulations of this part establish the procedures for the safe land disposal of radioactive wastes.
Applicability Analysis: As stated in §61.1(b), the regulations of this part are applicable to all persons in the United States. However, this part contains no regulations applicable to operating or decommissioning nuclear power plants. It is concerned with the licensing, safe operation, and eventual closure of land disposal sites.
Applicability Binning: Regulations are not applicable to decommissioning nuclear power plants.
Citation: **Part 62-Criteria And Procedures For Emergency Access To Non-Federal And Regional Low-Level Waste Disposal Facilities**
Retrieval Keyword Phrase:
Background: The regulations of this part provide for the disposal of LLW to persons who have been denied access to regional or non-Federal LLW disposal facilities.
Applicability Analysis: This section may be applicable to decommissioning plants in the event that have been denied access to a LLW disposal facility. The procedures define how these persons will be granted emergency access for a specific period of time to dispose of LLW waste. The provisions of this part may be applicable to decommissioning plants.
Applicability Binning: Regulations are potentially applicable to decommissioning nuclear power plants.

Citation: **Part 70-Domestic Licensing Of Special Nuclear Material**

Retrieval Keyword Phrase: use, possess special nuclear material; all persons in the United States; each licensee

Background: This part provides procedures and related criteria to own, acquire, deliver, receive, possess, use and transfer SNM.

Applicability Analysis: This part contains the requirements that are applicable to SNM licensing. Part 50 licensees are also generally subject to Part 70. Therefore, decommissioning nuclear power plants which have spent fuel stored in the SFP or have fresh fuel onsite may still be subject to Part 70 regulations. A detailed review of the regulations indicate that plants which are licensed pursuant to Part 50 are specifically exempted from some regulations. These include:

-the criticality accident requirements as specified in §70.24(c) and (d),
-other specific license conditions (i.e., measurement control, safeguards and security, emergency planning) are not applicable to nuclear reactors licensed pursuant to Part 50 per (§70.32(c)),
-the reporting requirements per §70.50, and
-the fundamental SNM control and accounting regulations per §70.58.

A review of other specific regulations indicate that although they may apply to nuclear power plants, they appear to duplicate other Part 50 regulations. These include:

-the regulations regarding decommissioning financial assurance and recordkeeping per §70.25 for applicants for specific Part 70 licenses. Though it appears the applicability is limited to applicants, this section does address decommissioning. It appears that these requirements are bounded by reporting and recordkeeping planning requirements of §50.75 for plants which have permanently ceased operations. As discussed in §50.75, the decommissioning costs required per this section do not include the cost associated with the removal and disposal of spent fuel. These costs would not be included in this part either.

-the recordkeeping requirements as specified in §70.25(g)(1) and (2) appear to duplicate the requirements specified in §50.75(g).
-§70.38 discusses requirements for decommissioning sites licensed under this part. It does not appear that this section contains any special requirements which would not have been considered in the decommissioning or license termination plan submitted per §50.82.

Other specific regulations will remain applicable to decommissioning nuclear power plants which are subject to Part 70. These include:

-specific requirements for those areas designated as restricted areas where spills may have occurred require additional recordkeeping per §70.25(g)(3),
-testing and inspection programs as requested by the NRC per §70.55 and § 70.56.

Because some of the requirements of this part apply to all licensees which are subject to Part 70, it has been binned as being directly applicable to decommissioning plants. However, as noted, some regulations appear to be covered by Part 50 regulations, while others have been specifically exempted

from Part 50 plants. The NRC may wish to review these specific sections to determine their applicability to nuclear power plants which have permanently ceased operations per §50.82.

Applicability Binning: Regulations are directly applicable to decommissioning nuclear power plants.

Citation: **Part 71-Packaging And Transportation of Radioactive Material**

Retrieval Keyword Phrase: packaging, preparation for shipment, and transportation of licensed material; apply to any licensee authorized to possess licensed material

Background: This part contains the regulations pertaining to the shipment of licensed material, including spent fuel.

Applicability Analysis: The requirements of this part describe the procedures necessary for the packaging, preparation for shipment, and transportation of licensed material. As stated in §71.10(c), the regulations of this part apply to any licensee authorized by specific or general license to receive, possess, use, or transfer licensed material. Therefore, these regulations would be applicable to decommissioning nuclear power plants that transport radioactive material (such as material associated with decommissioning waste) offsite for disposal

Applicability Binning: Regulations are directly applicable to decommissioning nuclear power plants.

Citation: **Part 72-Licensing Requirements For The Independent Storage of Spent Nuclear Fuel and High-Level Radioactive Waste**

Retrieval Keyword Phrase: persons authorized to possess or operate nuclear power reactors under Part 50

Background: The regulations of this part establish the requirements and procedures related to the storage of spent fuel in an ISFSI.

Applicability Analysis: The regulations of this part describe the safe storage of spent nuclear fuel in an ISFSI. As defined in §72.3, an ISFSI is a complex designed and constructed for the interim storage of spent nuclear fuel aged for at least one year. As defined, this does not include existing spent fuel pools at nuclear power plants.

An ISFSI is designed to be an independent facility which can be located on the site of a decommissioning nuclear power plant, even following license termination for the plant. In this case, the licensee would have to maintain the ISFSI according to this part for as long as fuel is stored. Therefore, the financial assurance and recordkeeping requirements for an ISFSI (§72.30) are different than that considered in §50.75. The ISFSI decommissioning requirements are defined in §72.54 and are also separate from the decommissioning and termination plans described in §50.82. However, as described in §72.218(b), an application for license termination under §50.82 must describe how the spent fuel will eventually be removed from the site. An additional applicability was found from §72.210, which states that a general licensee for the storage of spent fuel in an ISFSI is issued at power reactor sites to persons authorized to possess or operate nuclear power reactors. Given the uncertainty of the timetable of a geologic repository, it is likely that a Part 50 license may be terminated before the need for an ISFSI expires. The NRC should review this section to clarify what effect the termination of a Part 50 license will have on the general license issued under this subpart.

A licensee which maintains a ISFSI at the site of a decommissioning plant will need to be cognizant of

the conditions of the general license issued per Subpart K. Per this subpart (§72.212(a)(6)), a review is required to be performed of the emergency plan, and the QA, training, and radiation protection programs to assure continued adequacy. If any changes were made based on the decreased need or risk of the nuclear power plant which resulted in unacceptable programs related to the ISFSI, changes would have to reviewed and approved by the NRC. The physical security protection of an ISFSI under a general license per Subpart K is subject to nuclear reactor safeguards regulations specified in 73.55. The Part 73.55 requirements may not be appropriate for an ISFSI at a decommissioning nuclear power plant and should be review to determine if the requirements of 73.51 may be more better suited for an ISFSI whether licensed under a general or plant specific license.
Applicability Binning: Requirements are directly applicable to decommissioning nuclear power plants.
Citation: **Part 73-Physical Protection Of Plants And Materials**
Retrieval Keyword Phrase: production and utilization facilities licensed pursuant to Part 50; SNM at fixed sites; activities licensed pursuant to Part 70
Background: This part provides the regulations for a the protection of SNM at fixed sites or in transit, and plants where SNM is used.
Applicability Analysis: The detailed physical protection requirements of this part are applicable to facilities licensed pursuant to Parts 50 and 70. As described, decommissioning nuclear plants fall under this definition. As described in §73.21, the physical protection plan shall ensure that the plan will provide for the physical protection of the SNM such that it does not constitute a risk to public health and safety, and includes a contingency plan to meet specific threats. §73.37 provides specific physical protection for the transit of irradiated spent fuel. These would be applicable to a decommissioning plant which may choose to remove its fuel from site. The physical protection requirements for nuclear power plant licensees (which would include spent fuel pools at decommissioning sites) is described §73.55. §50.54(p) requires nuclear facilities to maintain a physical protection and safeguards program in accordance with the provisions of Part 73. Any changes which would decrease the effectiveness of this plan must be submitted and approved by the NRC. This section was deemed to be directly applicable to decommissioning plants, as is Part 73. The NRC may wish to consider flexibility to plants which have permanently ceased operations per §50.82 to amend their plans to reflect the permanently shutdown condition of the plant.
Applicability Binning: Regulations are directly applicable to decommissioning nuclear power plants.
Citation: **Part 74-Material Control and Accounting Of Special Nuclear Material**
Retrieval Keyword Phrase: each person licensed pursuant to Part 70 and 72; nuclear reactor licensee, as defined in §50.21 and §50.22
Background: This part defines the requirements for the control and accounting of special nuclear material at fixed sites and for documenting the transfer of SNM.

Applicability Analysis: This part is separated into five subparts. Production and utilization facilities licensed pursuant to Part 50 are specifically exempted (per §74.31(a) and §74.51(a), respectively) from the requirements of Subparts C and E. These subparts deal with the material control of low strategic significance and formula quantities of SNM. The general reporting requirements of Subpart B (per §74.11(a) and §74.13(a)(1)) are applicable to nuclear reactor licensees, which include decommissioning plants. The enforcement regulations of Subpart F, which define the inspection, test, violations and imposition of criminal penalties, are also applicable to each licensee.
Applicability Binning: Regulations are directly applicable to decommissioning nuclear power plants.
Citation: **Part 75-Safeguards On Nuclear Material-Implementation Of US/IAEA Agreement**
Retrieval Keyword Phrase: all persons licensed by the Commission to possess source or SNM
Background: The regulations of this part define the system for nuclear material accounting and control to implement the agreement between the U.S. and IAEA.
Applicability Analysis: The physical accounting and material status report requirements of this part are applicable to all persons licensed by the Commission to possess source or SNM. As discussed, this includes decommissioning nuclear plants which still maintain storage of spent fuel on the site. As specified in §50.78, all holders of construction permits shall submit installation information per the requirements of this part. If identified, access authorization for the purpose of inspection shall be granted to representatives of the IAEA for verification. This requirement would include decommissioning plants as well.
Applicability Binning: Regulations are directly applicable to decommissioning nuclear power plants.
Citation: **Part 76-Certification of Gaseous Diffusion Plants**
Retrieval Keyword Phrase: none
Background: This part establishes the requirements which govern the operation the operation of gaseous diffusion plants.
Applicability Analysis: There are no requirements of this part applicable to decommissioning nuclear power plants.
Applicability Binning: Regulations are not applicable to decommissioning nuclear power plants.
Citation: **Part 81-Standard Specifications For The Granting Of Patent Licenses**
Retrieval Keyword Phrase: NRC granted licenses
Background: The regulations of this part pertain to the issuance of licenses to rights to inventions covered by patents issued to the NRC.
Applicability Analysis: The regulations of this section do not restrict applicability to any license for pertaining to a patented invention. A license to a patent would not, therefore, be dependant on the license status of a Part 50 facility. Therefore, it is applicable to decommissioning plants.
Applicability Binning: Regulations are directly applicable to decommissioning nuclear power plants.

Citation:	**Part 95-Security Facility Approval And Safeguarding Of National Security Information And Restricted Data**
Retrieval Keyword Phrase: licensees regulated by the Commission	
Background: The regulations of this part establish the procedures for obtaining security facility approval and for safeguarding Secret and Confidential National Security information and Restricted data.	
Applicability Analysis: As defined (per §95.5), licenses refers to those issued pursuant to Parts 50, 70, or 72, which as previously discussed includes decommissioning plants. Control of access to restricted data could include information related to the use of SNM used in the production of energy.	
Applicability Binning: Regulations are directly applicable to decommissioning nuclear power plants.	
Citation:	**Part 100-Reactor Site Criteria**
Retrieval Keyword Phrase: stationary power reactors subject to Part 50 or 52	
Background: This part provides the siting factors and criteria which are to be used in evaluations of nuclear plants.	
Applicability Analysis: As stated in §100.2, the siting requirements contained in this part apply to applications for site approval for the purpose of constructing and operating nuclear reactors. No additional siting criteria are presented which would be applicable to a plant which has permanently ceased operations.	
Applicability Binning: Regulations are not applicable to decommissioning nuclear power plants.	
Citation:	**Part 110-Export and Import Of Nuclear Equipment And Material**
Retrieval Keyword Phrase: apply to all persons in the United States	
Background: The regulations of this part prescribe the licensing, enforcement, and rulemaking procedures and criteria for the import and export of nuclear equipment and material.	
Applicability Analysis: The regulations of this part are applicable to all persons, including decommissioning nuclear power plants. In the event a decommissioning power plant desires to export equipment from the decommissioning plant (including fuel), the provisions of this part will apply.	
Applicability Binning: Regulations are directly applicable to decommissioning nuclear power plants.	
Citation:	**Part 140-Financial Protection Requirements and Indemnity Agreements**
Retrieval Keyword Phrase: each person who is a holder of a license issued pursuant to 10 CFR Parts 50 and 54	
Background: The regulations of this part describe the procedures and requirements for determining the financial protection required and the indemnification and limitation of liability.	
Applicability Analysis: This part contains many subsections and subparts which may be applicable to nuclear plants which have permanently ceased operations. Each will be reviewed individually to determine specific applicability.	

Subpart A-General Provisions

As defined in the scope (§140.2(a)(1)), the regulations of this part apply to each person who is a holder of a license issued pursuant to 10 CFR Part 50, which would include decommissioning nuclear power plants. The fees for each reactor licensee is provided in §140.7(a). These fees are dependant upon the amount of indemnification specified in §140.11. However, the regulations, as written, base this amount as a function of thermal power level, which is not applicable to a plant which has permanently ceased operation. By default, it appears the regulations of §140.7(a)(5), which states that no annual fee shall be less than $100, would be potentially applicable.
The NRC may wish to revise this section to specifically address the fees associated with plants which have permanently ceased operations.

Applicability Binning: Regulations are potentially applicable to decommissioning nuclear power plants.

Subpart B-Provisions Applicable Only to Applicants and Licensees Other than Federal Agencies and Nonprofit Educational Institutions

As per the scope of this subpart (§140.10), applicability is limited to holders of licenses issued pursuant to 10 CFR Part 50 which authorize operation of nuclear reactors. Taken literally, this would appear to be not applicable to plants which have permanently ceased operation. However, the next subsection (§140.11(a)(1) through (4)) delineates the financial protection amounts (primary and secondary financial protection) applicable to each licensee, which would include decommissioning plants. Similar to the fees, this amount is a function of the thermal power level and ranges from $1,000,000 to $200,000,000. The current maximum obligation for secondary financial protection for a licensee in the industry retrospective rating plan is $83.9 million. The provisions of §140.11(a)(1) apply to nuclear reactors licensed to operate at a thermal power level not exceeding 10 kw. In this case, the amount of financial protection is specified as $1,000,000. §140.12 addresses the amount of financial protection required for other reactors not addressed in §140.11. But again, the formula provided to calculate this amount is based on the maximum power level. In a response to a comment on the 1996 decommissioning rule (61 FR39288) which requested a reduction in the amount of primary coverage for decommissioning plants (e.g., $100,000,000), the NRC stated that the amount associated with the Price-Anderson financial protection would be decided at a later time and would be based on the potential radiological consequences of fuel stored in the spent fuel pool. The regulations pertaining to the types of financial protection (§140.14), proof of financial protection (§140.15), NRC review of the proof (§140.16), special provisions pertaining to financial protection §140.17 and §140.18), failure to provide financial protection (§140.20) and indemnity agreements and liens (§140.20) are applicable to all licensees and, therefore, would remain in effect for decommissioning plants as well. The regulations of guaranteed payments of deferred premiums (§140.21), applicable to each licensee, require that proof be submitted annually to the NRC that guarantee payment of deferred premiums of $10 million per reactor. §140.22 states that all licensees required to maintain financial protection include an indemnity agreement whereby the NRC would pay deferred premiums not payed by the licensee, and the licensee would reimburse the NRC for such payments. While the applicability of this guarantee is applicable to operating facilities, it is potentially applicable to decommissioning plants as well. The NRC should review this section to determine if it remains applicable to plants which have permanently ceased operation, and if so, what amount insurance is required to remain in effect.

Applicability Binning: Regulations are directly applicable to decommissioning nuclear power plants.
Subpart C-Provisions Applicable Only To Federal Agencies

Subpart D-Provisions Applicable Only to Nonprofit Educational Institutions

The regulations of these subparts apply to Federal agencies which are holders of a Part 50 license and nonprofit educational facilities. Both subparts would not be typically applicable to decommissioning commercial nuclear power plants.

Applicability Binning: Regulations are not applicable to decommissioning nuclear power plants.

Subpart E-Extraordinary Nuclear Occurrences

This subpart is applicable to holders of licenses authorizing operation of production or utilization facilities. The purpose of this subpart is to define an "extraordinary nuclear occurrence" and to establish the conditions of the waivers of defenses proposed for incorporation in insurance policies. As defined in§140.84 and §140.85, the two criterion used to determine if an extraordinary nuclear occurrence happened is dependent on a substantial discharge of radioactive materials or radiation levels offsite and substantial damages to offsite persons or property. The risk of such an occurrence associated with a zirconium fire of spent fuel in the spent fuel pool at a decommissioning plant is extremely unlikely and is postulated for only a short period of time until the spent fuel decays sufficiently; however, because such an event cannot be categorically excluded, this subpart is binned as applicable to decommissioning nuclear plants.

Applicability Binning: Regulations are applicable to decommissioning nuclear power plants.

Subpart F-Violations

The regulations of this subpart pertain to the NRC obtaining court orders and other injunctions to ensure compliance and potential criminal penalties if they are not.

Applicability Binning: Regulations are directly applicable to decommissioning nuclear power plants

Appendix A-Form of nuclear energy liability policy for facilities

This Appendix contains an example policy of the type the NRC would find acceptable as evidence of financial protection. This policy, as written, covers all nuclear facilities. This policy appears to be written to cover all aspects of operating plants and accidents which may result in offsite consequences. It appears that some type of policy would still be required for permanently shutdown facilities. The NRC should review this Appendix and specifically state where it is applicable to a decommissioning plant and what modifications may be needed.

Applicability Binning: Appendix potentially applicable to decommissioning nuclear power plants.

Appendix B-Form of indemnity agreement with licensees furnishing insurance policies as proof of financial protection

Appendix C-Form of indemnity agreement with licensees furnishing proof of financial protection in the form of licensee's resources.

Similar to Appendix A, these sample policies are applicable to all nuclear facilities and would, therefore, be applicable to decommissioning plants. However, a review of the policies indicates that it appears to be mainly applicable to operating plants and the possibility of extraordinary nuclear

occurrences. The NRC should review this Appendix and specifically state if it is applicable to plants which have permanently ceased operation or what modifications may be required.

Applicability Binning: Appendices are directly applicable to decommissioning nuclear power plants.

Appendix D-Form of indemnity agreement with Federal Agencies

Appendix E-Form of indemnity agreement with nonprofit educational institutions

As discussed, decommissioning commercial nuclear plants will not typicallly be associated with other federal agencies or nonprofit educational institutions.

Applicability Binning: Appendices are not applicable to decommissioning nuclear power plants.

Appendix F-Indemnity locations

This Appendix provides additional details as to what area is to be included for indemnity agreements during construction and preoperational storage of fuel. No specific reference is made to a permanently shutdown facility. As written, this Appendix is not applicable to decommissioning plants. However, the NRC should review this Appendix to determine if such locations need to be defined for decommissioning plants as well.

Applicability Binning: Appendices are not applicable to decommissioning nuclear power plants.

Appendix G-Form of indemnity agreement with licensees processing plutonium for use in plutonium processing and fuel fabrication plants and furnishing insurance policies as proof of financial protection

Appendix H- G-Form of indemnity agreement with licensees processing plutonium for use in plutonium processing and fuel fabrication plants and furnishing proof of financial protection in the form of licensee's resources

Applicability Binning: Appendices are not applicable to decommissioning nuclear power plants.

Appendix I-Nuclear Energy Liability Insurance

This general indemnity form pertains to secondary financial protection obtained from the Nuclear Energy Liability Insurance Association. As written, it is applicable to all nuclear facilities. The NRC should review this Appendix and specifically state if it is applicable to plants which have permanently ceased operation or what modifications may be required in these cases.

Applicability Binning: Appendix directly applicable to decommissioning nuclear power plants.

Citation: **Part 150-Exemptions and Continued Regulatory Authority In Agreement States and In Offshore Waters Under Section 274**

Retrieval Keyword Phrase:

Background: The regulations of this part define certain exemptions from NRC regulations to persons in Agreement States.

Applicability Analysis: The regulation allows certain exemptions to NRC regulations for licensees in Agreement States. This specifically does not apply to the construction and operation of a nuclear

power plant including the storage, handling, and discharge of radioactive wastes at the facility site (§150.15(a)(1)(i)). This would appear to encompass decommissioning nuclear power plants and, therefore, this regulation should not be applicable to decommissioning plants.

Applicability Binning: Regulations are not applicable to decommissioning nuclear power plants.

Citation: **Part 160-Trespassing On Commission Property**

Retrieval Keyword Phrase:

Background: This part is issued for the protection and security of all facilities and installations in the custody of NRC.

Applicability Analysis: The regulations of this part apply to all holdings subject to the proprietary jurisdiction, administration, and custody of the NRC. This would not include decommissioning nuclear power plants.

Applicability Binning: Regulations are not applicable to decommissioning nuclear power plants.

Citation: **Part 170-Fees For Facilities, Materials, Import And Export Licenses, And Other Regulatory Services Under The Atomic Energy Act Of 1954, As Amended.**

Retrieval Keyword Phrase:

Background: The regulations of this part specify the fees charged by the NRC for licensing services.

Applicability Analysis: As per the scope of this part (§170.2), numerous activities associated with a decommissioning plant apply to the regulations of this part. These include a SNM license per Part 70, holder of spent nuclear fuel associated with an ISFSI per Part 72, holder of a production or utilization facility operating license, required to have examinations and tests for personnel qualified per Part 55, and safeguard and safety inspections. While it is clear that the intent is to include plants which have permanently ceased operations per §50.82, the NRC may wish to specifically include these plants in the scope. Activities specifically included are those associated with nuclear power plant dismantlement, decommissioning, and termination (§170.21(A)), and inspections associated with permanently closed down production and utilization facilities (§170.21(H)). A similar schedule of fees associated with materials license which may also be held by the licensees of a decommissioning nuclear plant are specified in §170.31(e.g., ISFSI related fees). All fees which are subject to full cost recovery will be billed quarterly at a rate of $141 per hour (§170.12 and §170.20). As per §170.41, any licensee which has failed to pay the fees prescribed in this part is subject to enforcement action by the NRC.

Applicability Binning: Regulations are directly applicable to decommissioning nuclear power plants.

Citation: **Part 171-Annual Fees For Reactor Operating Licenses, And Fuel Cycle Licenses And Materials Licenses, Including Holders Of Certificates Of Compliance, Registrations, And Quality Assurance Program Approvals And Government Agencies Licensed By NRC**

Retrieval Keyword Phrase: any person holding an operating license for a power reactor issued under Part 50 that is in a decommissioning or possession only status and has spent fuel onsite

Background: The regulations of this part define the annual fees charged to persons who hold licenses issued by the NRC.
Applicability Analysis: As per the scope (§171.3), the regulations of this part apply to any person holding an operating license for a power reactor issued under Part 50. However, as stated in §171.15, an annual fee is assessed to each person holding a Part 50 license that is in a decommissioning or possession only status and has spent fuel onsite. Per §171.15(c)(1), this fee is $206,000. As discussed in the Federal Register (64 FR31455), this annual fee is not applicable to decommissioning plants which have no fuel onsite. This fee includes costs for the NRC's generic research associated with reactor decommissioning and spent fuel storage. The NRC may wish to revise the scope statement for this part to specifically include decommissioning plants.
Applicability Binning: Regulations are directly applicable to decommissioning nuclear power plants.