

# Supplement to Fuel Cycle Program Integrated Schedule

## Last Updated March 10, 2017

This supplement provides a public version of the purpose, brief overview, and background documentation available for the regulatory activities being tracked on the Fuel Cycle Cumulative Effects of Regulation Integrated Schedule. Links to the background documents have been included where possible.

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## RULEMAKINGS

<b>Part 61 “Proposed Rule: Low-Level Radioactive Waste Disposal”</b>	
Key Contact:	<a href="#">Gary Comfort</a> , 301-415-8106.
Purpose:	Rulemaking for a site-specific analysis or performance assessment for the disposal of depleted uranium and other long-lived isotopes in a near-surface disposal facility.
Key Information	<ul style="list-style-type: none"> <li>Proposed rule (80 FR 16082) and related guidance (80 FR 15930) were published in the <i>Federal Register</i> for public comment on March 26, 2015. The comment period originally ended on July 24, 2015. It was reopened (80 FR 51964) on August 27, 2015 and closed on September 21, 2015.</li> <li>The final rule package was submitted to the Commission on September 15, 2016.</li> <li>The staff is awaiting Commission direction regarding publication of the final rule.</li> </ul>
Related Documents	<ul style="list-style-type: none"> <li><a href="http://www.regulations.gov/#!docketDetail;D=NRC-2011-0012">http://www.regulations.gov/#!docketDetail;D=NRC-2011-0012</a>.</li> <li><a href="http://www.nrc.gov/about-nrc/regulatory/rulemaking/potential-rulemaking/potential-part61-revision.html">http://www.nrc.gov/about-nrc/regulatory/rulemaking/potential-rulemaking/potential-part61-revision.html</a>.</li> <li><a href="http://www.nrc.gov/about-nrc/regulatory/rulemaking/potential-rulemaking/uw-streams.html">http://www.nrc.gov/about-nrc/regulatory/rulemaking/potential-rulemaking/uw-streams.html</a>.</li> <li>Technical basis for proposed rule dated April 28, 2011 (<a href="#">ML111040419</a>).</li> <li>Preliminary proposed rule language dated May 2011 (<a href="#">ML111150205</a>).</li> <li>COMWDM-11-0002/COMGA-11-0002 - Revision to 10 CFR Part 61 dated November 3, 2011 (<a href="#">ML113070543</a>).</li> <li>SRM-COMWDM-11-0002/COMGEA-11-0002 - Revision to 10 CFR Part 61 dated January 19, 2012 (<a href="#">ML120190360</a>).</li> <li>Draft 10 CFR Part 61 proposed rule package (SECY-13-0075) dated July 18, 2013 (<a href="#">ML13128A160</a>).</li> <li>Staff requirements memorandum – SECY-13-0075 – proposed rule: Low-Level Radioactive Waste Disposal (10 CFR Part 61) (RIN 3150-A192) dated February 12, 2014 (<a href="#">ML14043A371</a>).</li> <li>Draft 10 CFR Part 61 final rule package (SECY-16-0106) dated September 15, 2016 (ML16188A290).</li> </ul>
Meeting Information	<ul style="list-style-type: none"> <li>None scheduled</li> </ul>

<b>Part 73 “Part 73-Enhanced Security for SNM”</b>	
Key Contact:	<a href="#">Keith McDaniel</a> , 301-415-5252.
Purpose:	Update security regulations within <i>Title 10 of the Code of Federal Regulations</i> (10 CFR) Part 73 that govern the security for special nuclear material at fixed sites and during transportation. Update considers material attractiveness.
Key Information	<ul style="list-style-type: none"> <li>• Make generically applicable security requirements similar to those imposed by security orders issued following the terrorist attacks of September 11, 2001.</li> <li>• Consider risk insights, operational oversight, inspection activities, and international guidance (e.g., Material Attractiveness, Dose Limit Threshold, Sabotage, Safety-safeguards Interface).</li> <li>• Improve consistency and clarity.</li> <li>• Use a risk-informed and performance-based structure.</li> <li>• Public comments on the draft regulatory basis in a <i>Federal Register</i> notice closed on October 17, 2014.</li> <li>• The staff has reviewed the regulatory basis and determined that it provides adequate justification to initiate the rulemaking.</li> <li>• In April 2016, the Commission directed the NRC staff to suspend efforts on the Enhanced Security of SNM rulemaking. Later, the Commission directed staff to interact with DOE in order to share and discuss perspectives and ideas on the material attractiveness approach in the Enhanced Security of SNM Rulemaking. As such, the staff does not anticipate that the rulemaking will resume in FY2017, but could resume in early FY2018.</li> </ul>
Related Documents	<ul style="list-style-type: none"> <li>• "Security-Related Rulemaking to Update 10 CFR Parts 73 and 26" <a href="http://www.nrc.gov/security/domestic/phys-protect/reg-initiatives/10cfr73.html">http://www.nrc.gov/security/domestic/phys-protect/reg-initiatives/10cfr73.html</a>.</li> <li>• SRM-SECY-09-0123 – "Material Categorization and Future Fuel Cycle Facility Security-Related Rulemaking," dated July 8, 2010 (<a href="#">ML101890711</a>).</li> <li>• SRM-COMSECY-05-0058 – "Schedule and Resources for Security Rulemakings," dated November 16, 2005.</li> <li>• Part 73: Final Regulatory Basis (<a href="#">ML14321A007</a>). The notice was published on April 22, 2015.</li> </ul>
Meeting Information	<ul style="list-style-type: none"> <li>• None Scheduled.</li> </ul>

<b>Part 73 “Cyber Security”</b>	
Key Contact:	<a href="#">Cardelia Maupin</a> , 301-415-2312 and <a href="#">Matthew Bartlett</a> , 301-415-7154
Purpose:	The Commission directed the U.S. Nuclear Regulatory Commission (NRC) staff to proceed with a proposed rulemaking to implement cyber security into Part 73 for certain fuel cycle facilities. The Commission directed the rulemaking to be a high priority, expedited rulemaking that uses a graded, consequence based regulatory approach and is informed by industry’s voluntary efforts.
Key Information	<ul style="list-style-type: none"> <li>• The NRC staff published SECY-14-0147, “Cyber Security For Fuel Cycle Facilities,” in December 2014, which proposed three options to implement cyber security. These options included orders, rulemaking, or continuation of voluntary initiatives.</li> <li>• The Commission provided SRM-SECY-14-0147, “Staff Requirements – SECY-14-0147 – Cyber Security for Fuel Cycle Facilities” in March 2015, which directed the NRC staff to proceed with rulemaking.</li> <li>• The NRC published the Regulatory Basis and Comment Resolution document for the cyber security proposed rulemaking on March 3, 2016 (<a href="#">ML15355A461</a>).</li> <li>• The NRC staff provided draft proposed rule language (<a href="#">ML16131A115</a>) for discussion at a public meeting on May 19, 2016.</li> <li>• The NRC staff provided Revised Preliminary Draft Proposed Rule Language and Related Draft Regulatory Guide (<a href="#">ML16221A078</a>) for discussion at a public meeting on August 25, 2016.</li> <li>• The NRC developed updated versions of the Revised Preliminary Draft Proposed Rule Language and Related Draft Regulatory Guide (<a href="#">ML16273A130</a>) to address stakeholder comments. These updates were made publically available to support a presentation to the Advisory Committee on Reactor Safeguards (ACRS) sub-committee on November 2, 2016.</li> <li>• An update to the Draft Regulatory Guide (<a href="#">ML17031A018</a>) was made publicly available to support a presentation to the ACRS sub-committee on February 23, 2017.</li> <li>• Staff is developing the proposed rule package and related guidance.</li> </ul>

Related Documents	<ul style="list-style-type: none"> <li>• June 2012 – SECY-12-0088, “Cyber Security Roadmap” (<a href="#">ML12135A050</a>).</li> <li>• December 2014 – SECY-14-0147, “Cyber Security for Fuel Cycle Facilities” (Non-public).</li> <li>• March 2015 – SRM-SECY-14-0147, “Staff Requirements – SECY-14-0147 – Cyber Security for Fuel Cycle Facilities” (<a href="#">ML15083A175</a>).</li> <li>• Commissioner Baran's Vote on SECY-14-0147 – Cyber Security for Fuel Cycle Facilities (<a href="#">ML15118A921</a>).</li> <li>• Commissioner Ostendorff's Vote on SECY-14-0147 – Cyber Security for Fuel Cycle Facilities (<a href="#">ML15132A632</a>).</li> <li>• August 27, 2015 – “Draft Regulatory Basis - Cyber Security at Fuel Cycle Facilities” (<a href="#">ML15198A019</a>).</li> <li>• September 4, 2015 – “<i>Federal Register</i> Notice for Draft Regulatory Basis for Cyber Security at Fuel Cycle Facilities [Package]” (<a href="#">ML15198A024</a>).</li> <li>• “Documents to Support December 10, 2015, Public Meeting on Cyber Security for Fuel Cycle Facilities [Package]” (<a href="#">ML15344A296</a>).</li> <li>• February 18, 2016, “Summary of Public Meeting to Discuss Fuel Cycle Cyber Security Proposed Rule Concepts” (<a href="#">ML16054A160</a>).</li> <li>• March 17, 2016, “Public Meeting Summary Regarding [Concepts for the] Proposed Cyber Security Rulemaking at Fuel Cycle Facilities” (<a href="#">ML16092A124</a>).</li> <li>• Draft proposed rule text to support the May 19, 2016, public meeting (<a href="#">ML16131A115</a>).</li> <li>• Revised Preliminary Draft Proposed Rule Language and Related Draft Regulatory Guide (<a href="#">ML16221A078</a>) to support the August 25, 2016 Public Meeting.</li> <li>• Updated Preliminary Draft Proposed Rule Language and Related Draft Regulatory Guide (<a href="#">ML16273A130</a>) to support the November 2, 2016, (ACRS) sub-committee briefing.</li> <li>• Updated Draft Regulatory Guide (<a href="#">ML17031A018</a>) to support February 23, 2017, ACRS sub-committee briefing.</li> </ul>
Meeting Information	<ul style="list-style-type: none"> <li>• May 4, 2017 – ACRS Full Committee meeting</li> <li>• July 2017 – September 2017, 75 day comment period on proposed rulemaking.</li> <li>• July 2017 – Public meetings to support comment period on the proposed rulemaking.</li> <li>• April 2018 – Public meeting to discuss completion of the final rule and implementation period.</li> </ul> <p>(Note: Additional public meetings will be conducted, as needed).</p>

<b>Part 74 “Material Control &amp; Accounting of Special Nuclear Material”</b>	
Key Contact:	<a href="#">Thomas Young</a> , 301-415-5795 and <a href="#">Tom Pham</a> , 301-415-7254
Purpose:	This rulemaking revises and consolidates the material control and accounting (MC&A) requirements in order to update, clarify and strengthen them.
Key Information	<ul style="list-style-type: none"> <li>• The NRC plans to issue the draft final rule language and the associated cost-benefit information.</li> <li>• Six guidance documents are being revised in connection with Part 74 rulemaking and will be finalized after the rule has been approved by the Commission. Those documents are: <ul style="list-style-type: none"> <li>○ NUREG-1280, Revision 2, “Acceptable Standard Format and Content for the Material Control and Accounting (MC&amp;A) Plan Required for Strategic Special Nuclear Material.” (<a href="#">ML13253A308</a>)</li> <li>○ NUREG-2159, “Acceptable Standard Format and Content for the Material Control and Accounting (MC&amp;A) Plan Required for Special Nuclear Material of Moderate Strategic Significance.” (<a href="#">ML13253A310</a>)</li> <li>○ NUREG-1065, Revision 3, “Acceptable Standard Format and Content for the Material Control and Accounting (MC&amp;A) Plan Required for Special Nuclear Material of Low Strategic Significance.” (<a href="#">ML13253A305</a>)</li> <li>○ NUREG-2158, (formerly NUREG/CR-5734), “Acceptable Standard Format and Content for the Material Control and Accounting (MC&amp;A) Plan Required for Low Enriched Uranium Enrichment Facilities.” (<a href="#">ML13253A309</a>)</li> <li>○ NUREG/BR-0096, Revision 2, “Instructions and Guidance for Completing Physical Inventory Summary Reports.” (<a href="#">ML13253A303</a>)</li> <li>○ Regulatory Guide DG-5057 for non-fuel cycle facilities was issued in May 2015 for comment (<a href="#">ML15015A271</a>).</li> </ul> </li> <li>• The draft final rule is due to the Commission in November 2017.</li> </ul>
Related Documents	<ul style="list-style-type: none"> <li>• <a href="#">Regulations.gov Material Control and Accounting of Special Nuclear Material.</a></li> <li>• OIG Report 03-A-15 dated February 6, 2013 (<a href="#">ML13037A476</a>).</li> <li>• SECY-08-0059 dated April 2008 (<a href="#">ML080580273</a>).</li> <li>• SRM-SECY-08-0059 dated February 2009 (<a href="#">ML090360473</a>).</li> <li>• SECY-11-0175 dated December 2011 (<a href="#">ML113400134</a>).</li> <li>• SRM-SECY-11-0175 dated April 12, 2012 (<a href="#">ML121030104</a>).</li> <li>• COMSECY-12-0026 dated November 2012 (<a href="#">ML12311A436</a>).</li> <li>• SRM-COMSEC-12-0026 dated May 2013 (<a href="#">ML13130A077</a>).</li> <li>• <a href="#">SECY-16-0009</a> – Enclosure 2 dated February 1, 2016 (<a href="#">ML16028A433</a>).</li> </ul>
Meeting Information	<ul style="list-style-type: none"> <li>• July 2017 - Public meeting with Industry to discuss implementation.</li> </ul>

## NON-RULEMAKINGS

<b>Part 21 Draft Guidance - 3049</b>	
Key Contact:	<a href="#">Jennifer Fisher</a> , 301-415-1456.
Purpose:	Develop a regulatory guide to provide guidance to non-reactor and non-power reactor licensees on the implementation of Part 21. The draft guide will provide guidance and clarification on key definitions and describe the processes for evaluating deviations and reporting defects and noncompliance. The draft guide would provide guidance on commercial grade dedication and describe how this process correlates with the licensee's existing quality assurance requirements. The draft guide title is DG-3049, "Reporting of Defects and Noncompliance and the Commercial Grade Dedication Process for Fuel Cycle, Materials, Waste Disposal, Packaging and Transportation, Independent Storage, and Non-Power Reactor Licensees."
Key Information	<ul style="list-style-type: none"> <li>The Part 21 rulemaking effort was discontinued. As directed in SRM SECY-16-0009, the Commission approved the staff's recommendation to continue with guidance development using the existing regulatory requirements.</li> </ul>
Related Documents	<ul style="list-style-type: none"> <li><a href="#">Regulations.gov Clarifying Requirements in Part 21.</a></li> <li><a href="#">10 CFR Part 21 Clarification and Rulemaking</a></li> <li>OIG-10-20 dated September 28, 2010 (<a href="#">ML102710583</a>).</li> <li>OIG-11-A-08 dated March 23, 2011 (<a href="#">ML110820426</a>).</li> <li>SECY-11-0135 dated September 29, 2011 (<a href="#">ML112430138</a>).</li> <li>SECY-16-0009 dated January 31, 2016 (<a href="#">ML16028A208</a>).</li> <li>SRM-16-0009 dated April 13, 2016 (<a href="#">ML160104A158</a>).</li> </ul>
Meeting Information	<ul style="list-style-type: none"> <li>Fall 2017 – Public meeting will be held on DG-3049 during the public comment period.</li> </ul>

<b>ANS 57.11 “ISA Standard”</b>	
Key Contact:	<a href="#">Margie Kotzalas</a> , 301-415-7298.
Purpose:	American Nuclear Society (ANS) is developing an integrated safety assessment (ISA) standard that would provide clear guidelines for licensees to perform an ISA and improve the ability to identify those elements which serve as leading indicators of ISA quality.
Key Information	<ul style="list-style-type: none"> <li>• The draft version of the ANS ISA Standard was returned to the working group in spring 2016 to be reworked.</li> <li>• The working group continues to work on revising the draft.</li> </ul>
Related Documents	<ul style="list-style-type: none"> <li>• <a href="http://www2.ans.org/standards/committees/nfsc/calendar/files/ans-57-11pins(2)-fornfscapproval.doc">www2.ans.org</a> (search ANS 57.11) (<a href="http://www2.ans.org/standards/committees/nfsc/calendar/files/ans-57-11pins(2)-fornfscapproval.doc">http://www2.ans.org/standards/committees/nfsc/calendar/files/ans-57-11pins(2)-fornfscapproval.doc</a>).</li> </ul>



<b>Acute Chemical Exposures (Dermal and Ocular)</b>	
Key Contact:	<a href="#">Marilyn Diaz</a> , 301-415-7110.
Purpose:	Provide guidance for reviewing chemical hazards in the ISA and quantitative standards used to assess the consequences to an individual from licensed material or hazardous chemicals produced from licensed material.
Key Information	<ul style="list-style-type: none"> <li>The draft interim staff guidance (ISG) was published in the <i>Federal Register</i> (80 FR 11692; March 4, 2015). Based on the public comments received, the staff revised the ISG (<a href="#">ML16056A301</a>).</li> <li>The Advisory Committee on Reactor Safeguards and the Committee to Review Generic Requirements recommended and endorsed the issuance of the ISG on October, 8, 2015, and March 25, 2016, respectively.</li> <li>Related to this topic, staff conducted audits at each fuel cycle facility to gather information on the licensee's chemical safety programs and practices. The audits were completed in July 2016.</li> <li>Audit reports for all fuel cycle facilities were completed in December 2016.</li> <li>The Commission Paper regarding the issuance of this ISG and any policy implications related to this guidance was submitted to the Commission in January 2017.</li> <li>The Commission has converted the information paper into a vote paper. Staff is waiting for the Commissioners' votes and Staff Requirements Memorandum.</li> </ul>
Related Documents	<ul style="list-style-type: none"> <li>Information Notice (IN) 2007-22, "Recent Hydrogen Fluoride Exposures at Fuel Cycle Facilities" (<a href="#">ML071410230</a>).</li> <li>Nuclear Energy Institute (NEI) and NRC exchanged letters discussing the regulatory basis for requiring licensees to consider dermal and ocular exposures in the ISA (<a href="#">ML083360632</a>, <a href="#">ML082900889</a>, <a href="#">ML090690732</a> and <a href="#">ML090920296</a>).</li> <li>Response to NEI letter regarding back-fit concern for dermal and ocular exposure standards (<a href="#">ML14251A150</a>).</li> <li>NEI letter regarding concerns related to back-fit evaluation for dermal and ocular exposure standards (<a href="#">ML14322B019</a>).</li> <li><i>Federal Register</i> Notices (80 FR 11692; March 4, 2015 and 80 FR 21274; April 17, 2015).</li> <li>OGC Response to NEI regarding the backfitting concerns (<a href="#">ML15126A070</a>)</li> <li>ACRS Letter to EDO regarding Acute Chemical Exposures ISG (<a href="#">ML15293A314</a>).</li> <li>CRGR Letter to EDO regarding Acute Chemical Exposures ISG (<a href="#">ML16032A047</a>)</li> <li>Revised version of the ISG (<a href="#">ML16056A301</a>) and public comment resolution matrix (<a href="#">ML15253A694</a> and <a href="#">ML15295A163</a>).</li> <li>SECY-17-0006, Interim Staff Guidance on Evaluating Chemical Exposures at Fuel Cycle Facilities. (<a href="#">ML15295A148</a>)</li> </ul>
Meeting Information	<ul style="list-style-type: none"> <li>None scheduled</li> </ul>

<b>Material Control and Accounting Regulatory Guides</b>	
Key Contact:	<a href="#">Glenn Tuttle</a> , 301-415-7230.
Purpose:	Effort to update the regulatory guides to be consistent with the 2006 agency expectation for regular revisions.
Key Information	<ul style="list-style-type: none"> <li>• The purpose of this effort is to consolidate and eliminate outdated guidance.</li> <li>• 27 MC&amp;A guidance documents are consolidated into eight documents. <ul style="list-style-type: none"> <li>○ Draft Guide (DG) 5049 - Independent Assessment of Nuclear Material Control and Accounting Systems. DG-5049 was issued in October 2016 as Revision 1 to RG 5.51.</li> <li>○ DG-5056 - Material Control and Accounting Physical Inventories and Material Balances. Out for public comment February 24, 2017.</li> <li>○ DG-5051 - Shipping, Receiving, and Internal Transfer of Special Nuclear Material. Staff is preparing final issuance package.</li> <li>○ DG-5052 - Determination of Uranium or Plutonium: Methods based on the Analysis of Samples. The five regulatory guides consolidated into DG-5052 have been reviewed and will be revised at a future date.</li> <li>○ DG-5053 - Determination of Uranium or Plutonium: Nondestructive Assay Methods. The eight regulatory guides consolidated into DG-5053 have been reviewed and will be revised at a future date.</li> <li>○ DG-5054 - Design Considerations to Minimize Residual Holdup of Special Nuclear Material in Process Equipment. The three regulatory guides consolidated into DG-5054 have been reviewed and will be revised at a future date.</li> <li>○ Two statistics related regulatory guides have been withdrawn - RG 5.3 on statistical terminology and RG 5.18 on limit of error concepts.</li> <li>○ Two statistics related regulatory guides are being processed for withdrawal – RG 5.22 on testing data for normality and RG 5.36 on testing for outliers.</li> <li>○ DG-5050 - Selection of Material Balance Areas and Item Control Areas. Delayed. TBD.</li> </ul> </li> </ul>
Related Documents	<ul style="list-style-type: none"> <li>• SECY-13-0031 dated March 28, 2013 (<a href="#">ML13063A051</a>).</li> <li>• A cross-walk that links the old regulatory guides to the new DGs (<a href="#">ML15056A518</a>).</li> </ul>
Public Interaction	<ul style="list-style-type: none"> <li>• February 2017 – April 2017 – DG-5056; 60-day comment period.</li> </ul>

<b>Fuel Cycle Information Exchange</b>	
Key Contact:	<a href="#">DyLanne Duvigneaud</a> , 301-415-4010 and <a href="#">Mollie Semmes</a> , 301-415-7486.
Purpose:	The Fuel Cycle Information Exchange (FCIX) provides an opportunity for NRC staff, industry representatives, licensees, and other stakeholders to openly discuss regulatory issues of mutual interest, as they relate to key sectors of the nuclear fuel cycle.
Key Information	<ul style="list-style-type: none"> <li>The FCIX will be held biennially.</li> </ul>
Related Documents	<ul style="list-style-type: none"> <li>Link to the NRC public website on the 2017 FCIX <a href="http://www.nrc.gov/public-involve/conference-symposia/fcix.html">http://www.nrc.gov/public-involve/conference-symposia/fcix.html</a>.</li> </ul>
Meeting Information	<ul style="list-style-type: none"> <li>The next meeting is scheduled for June 13-14, 2017, at the US Nuclear Regulatory Commission Auditorium in Rockville, MD.</li> <li>A cyber threat briefing will be held on June 15, 2017.</li> </ul>