

# **Response to Public Comments on NRC Form 5, “Occupational Dose Record for a Monitoring Period” referenced in Regulatory Guide (DG)-8030 “Instructions for Recording and Reporting Occupational Radiation Dose Data” Proposed Revision 3 of Regulatory Guide (RG) 8.7** (Public comments have been edited for clarity)

On June 19 2012, the NRC published a notice in the Federal Register (77 FR 36583) seeking public comment on proposed revisions to NRC Form 5 “Occupational Dose Record for a Monitoring Period.” The NRC regulation at Title 10 Code of Federal Regulations, Section 20.2106 (10 CFR 20.2106), requires that NRC licensees maintain records of occupational dose received by those individuals for whom monitoring is required under 10 CFR 20.1502. Subsection 20.2106(c) requires that licensees maintain such records on NRC Form 5 or equivalent. Similarly, NRC regulation 10 CFR 20.2206 requires certain categories of NRC licensees to submit to the NRC an annual report of the results of individual monitoring carried out by the licensee for each individual for whom monitoring was required by 10 CFR 20.1502 during that year. Subsection 20.2206(b) requires that licensees record these annual reports on an NRC Form 5 or its equivalent. The public comment period ended on July 20th, 2012. The NRC received four comment submissions. The NRC has identified the commenter and set forth the comments and NRC staff responses thereto in the following table:

Comment submissions were received from the following:

Mr. Randal Cords Mirion Technologies (GDS) Inc. is a NVLAP Accredited Dosimetry provider. Dated: July 20, 2012 ADAMS Accession Number ML16307A437	Mrs. Susan Reese South Carolina Electric & Gas Company/V. C. Summer Nuclear Station Dated: July 20, 2012 ADAMS Accession Number ML16307A439	Ms. Ellen P. Anderson Nuclear Energy Institute (NEI) Dated July 20, 2012 ADAMS Accession Number ML16307A438	Anonymous Individual from the Industry Dated: July 20, 2012 ADAMS Accession Number ML16307A440
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Commenter	Specific Comments	NRC Resolution
Randal Cords, Mirion Technologies (GDS) Inc. is a NVLAP Accredited	Mirion Technologies believes that the NRC Form 5 needs to be changed to properly document the EDEX. There is a general practice of performing EDE calculation without assurance that the monitoring is performed correctly. The licensee is responsible for this assurance, not the Dosimetry provider.	The NRC agrees with the comment. The revised Form 5 (04-2015) provides an EDEX field. Similarly, Revision 3 of RG 8.7 includes the EDEX and an explanation of the values that should be included in the EDEX for the year.

**Commented [PA1]:** If it's more accurate to say “an EDEX field” instead of “an entry for EDEX” that is fine.

Commenter	Specific Comments	NRC Resolution
Dosimetry provider. We provide NRC Form 5 equivalent reports to many of our clients, as well as data in...	We are concerned that the instruction should provide appropriately strict guidance for what values are included in the EDEX for the year.	
Susan Reese, South Carolina Electric & Gas Company/V. C. Summer Nuclear Station	<p>Layout of the proposed draft layout of NRC Form 5 No issues with the proposed layout of the new form.</p> <p>Estimated economic costs associated with modifying information technology (IT) systems to include EDEX field. A total upgrade to the exposure tracking software would be required. The current version does not support this form and EDEX field. The estimated cost would be approximately \$50,000.</p> <p>Estimated DOSE SAVINGS (not economic savings as incorrectly annotated in the Federal Register Notice – clarification received from NRC) associated with calculating EDEX for certain occupational employees. EDEX has limited application but has the potential for significant dose savings with certain types of work; otherwise VCSNS does not expect much impact on dose savings from normal operations or refueling outages.</p> <p>Clarity of the instructions provided for completing the proposed draft NRC Form 5, specifically concerning the use of EDEX and new directions for blocks 11A and 11B. The instructions for block 11a where it states “and the EDEX component estimated by the DDE...” needs</p>	The NRC staff agrees with the commenter. Revised Form 5 (04-2015) has clarified the issues identified by the commenter. Revision 3 of RG 8.7 provides further guidance on the calculation of EDEX and DDE.

Commenter	Specific Comments	NRC Resolution
	clarification. The term “estimated” lends to confusion because of its application in Block 9A. Including examples for blocks 11A and 11B in a separate guide could be beneficial.	
Ellen P. Anderson, Nuclear Energy Institute (NEI)	While the Nuclear Energy Institute (NEI) concurs that the current NRC Form 5 should be modified to align with existing regulations, there are several NRC licensees, including fuel cycle facilities and some power reactors, who do not use nor plan to use "Effective Dose Equivalent for External Exposures (EDEX)." If required to make the proposed changes to Form 5, these facilities would be required to expend resources with little or no benefit. An alternative approach would be an option for the use of two separate forms - one form containing information for licensees that choose to use EDEX (i.e. the proposed revision to Form 5) and another form for those facilities that choose not to use the EDEX methodology (i.e. the current Form 5). With this approach, only those licensees that choose to use EDEX would be required to expend the resources necessary to revise their software, etc. so as to comply with the proposed revision to Form 5.	The NRC staff disagrees with the commenter. The NRC staff believes for consistency there should be just one version of NRC Form 5. The revisions to NRC Form 5, as reflected in the NRC Form 5 (04-2015) version, were made to align with the December 4, 2007 amendments (72 FR 68043) to NRC regulation 10 CFR 20.1201(c), concerning the measurement of external exposure by either deep-dose equivalent (DDE) or EDEX, as well as to the amendments to the definition of “total effective dose equivalent (TEDE)” in 10 CFR 20.1003 and 10 CFR 50.2. The effective date of the December 4, 2007 rulemaking was January 3, 2008. Thus, all NRC licensees, when measuring external exposure with an external personal monitoring device, must use either DDE or EDEX. The revised Form 5 provides fields for both EDEX and DDE. The NRC’s regulatory analysis for the December 4, 2007 rulemaking (72 FR at 68051-58) explains the NRC’s consideration of cost associated with implementation of the amendments.
Anonymous individual	Layout of the proposed draft NRC Form 5 is acceptable.	NRC agrees with the comment

Commenter	Specific Comments	NRC Resolution
Anonymous individual	Cannot modify existing dose tracking system. System is obsolete and not supported. Estimated cost to purchase replacement dose tracking system is \$100,000. Due to replacement cost, will manually track any EDEX and manually update EDEX field on Form 5 when generated. IT cost to modify layout of Form 5's generated from current dose tracking system to include EDEX field is \$4,000.	The NRC acknowledges the comment.
Anonymous individual	Multi badging to calculate EDEX is seldom used at Fermi 2. Economic saving will be minimal.	The NRC acknowledges the comment.
Anonymous individual	The instructions provided for completing the proposed draft NRC Form 5 are acceptable.	The NRC acknowledges the comment.

ENCLOSURE