

**SUBJECT:** LIMITED CHANGE TO DOE O 420.1C, *FACILITY SAFETY*

1. EXPLANATION OF CHANGES. This change cancels DOE O 5480.30, *Nuclear Reactor Safety Design Criteria*, and adds a new section on this topic to Attachment 3.
2. LOCATIONS OF CHANGES:

Page	Paragraph	Changed	To
1	2	This Order (O) cancels: DOE O 420.1B, Chg. 1, <i>Facility Safety</i> ; DOE Guide (G) 420.1-2, <i>Guide for the Mitigation of Natural Phenomena Hazards for DOE Nuclear Facilities and Nonnuclear Facilities</i> ; and DOE G 420.1-3, <i>Implementation Guide for DOE Fire Protection and Emergency Services Programs for Use with DOE O 420.1B, Facility Safety</i> .	This Order (O) cancels: DOE O 420.1C Chg. 2, <i>Facility Safety</i> , dated 7-26-18; and DOE O 5480.30 Chg. 1, <i>Nuclear Reactor Safety Design Criteria</i> , dated 3-14-01.
Att. 3  Page 8	Section 3.c.	Added.	<p><u>Nuclear Reactor Safety Design Criteria.</u> Nuclear reactors are an important class of DOE facilities that require special attention to design criteria and standards to ensure safe design and operations.</p> <p>(1) The Code of Record for existing DOE nuclear reactors has been established by their designs. When a major modification is made to an existing reactor, the existing Code of Record is the starting point for the design of the major modification, and a design upgrade analysis is required in accordance with DOE-STD-1189-2016 to evaluate the application of nuclear safety design criteria and requirements. This design upgrade analysis may identify updated nuclear reactor safety design criteria and updated codes and standards to be applied to the major modification.</p> <p>(2) For any new DOE nuclear reactor, a set of reactor-specific safety</p>

Page	Paragraph	Changed	To
			<p>design criteria and a set of reactor design codes and standards must be established in accordance with the Safety Design Strategy required by DOE-STD-1189-2016. Existing industry codes and standards should be used to the extent possible.</p>