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# PUBLIC SUBMISSION

**Docket:** NRC-2011-0088

Incorporation of American Society of Mechanical Engineers Codes and New and Revised ASME Code Cases

**Comment On:** NRC-2011-0088-0003

Incorporation by Reference of American Society of Mechanical Engineers Codes and Code Cases

**Document:** NRC-2011-0088-DRAFT-0012

Comment on FR Doc # 2015-23193

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## General Comment

Please see attached Duke Energy Letter dated December 2, 2015.

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## Attachments

001 Duke Energy 120215



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December 2, 2015

RA-15-0056

Secretary  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555-0001

ATTN: Rulemakings and Adjudication Staff

Subject: Docket ID NRC-2011-0088  
Duke Energy Carolinas, LLC (Duke Energy) Comments on 10 CFR Part 50  
Proposed Rule, American Society of Mechanical Engineers (ASME) Codes  
and New and Revised ASME Code Cases (RIN 3150-A197)

Duke Energy has reviewed the Federal Register notice published September 18, 2015 (FR Doc. 2015-23193) on the proposed rule for ASME Codes and New and Revised Code Cases. Duke Energy is offering the attached specific comments.

Duke Energy appreciates being given an opportunity to comment on these matters. If you have any questions, please contact Art Zaremba at (980) 373-2062.

Sincerely,

A handwritten signature in black ink, appearing to read 'Chris Nolan', written in a cursive style.

M. Christopher Nolan  
*Director - Nuclear Regulatory Affairs*

Attachment

RA-15-0056  
Attachment 1

Attachment

Duke Energy Carolinas, LLC (Duke Energy) Comments on 10 CFR Part 50 Proposed Rule,  
American Society of Mechanical Engineers (ASME) Codes and New and Revised ASME Code  
Cases (RIN 3150-A197)

<b>§50.55a (New Proposed Requirements are denoted by Bold Italics)</b>	<b>Existing §50.55a Regulations (As of 09/17/2015)</b>	<b>Proposed Changes to §50.55aRegulations (Draft Rule)</b>	<b>Comments on Existing §50.55a Regulations – Existing and Proposed Changes</b>
<b><i>10 CFR 50.55a(g)(6)(ii)(D)(3)</i></b>	The condition that is in the current § 50.55a(g)(6)(ii)(D)(3) was incorporated into N-729-4 by the ASME Code committees, to be replaced by the new proposed condition.	The NRC proposes to revise § 50.55a(g)(6)(ii)(D)(3) to add a new condition which requires cold head plants (EDY<8) without PWSCC flaws to perform a bare metal visual examination (VE) each outage a volumetric exam is not performed and allows these plants to extend the bare metal visual inspection frequency from once each refueling outage, as stated in Table 1 of N-729-4, to once every 5 years only if the licensee performed a wetted surface examination of all of the partial penetration welds during the previous volumetric examination. In addition, this new condition clarifies that a bare metal visual examination is not required during refueling outages when a volumetric or surface examination is performed of the partial penetration welds.	The new regulation to increase the frequency of bare metal visual examinations for heads categorized as low susceptibility increases the cost, dose, resources, and administrative burden expended by licensees without a commensurate increase in safety. The examination regimen required by Code Case N-729-1 as currently conditioned by 10 CFR 50.55a identified indications in five reactor heads categorized as low susceptibility prior to the occurrence of leakage or through-wall cracking, demonstrating the adequacy of the examination requirements. Concern for detection of a postulated weld flaw which begins leaking during the period between bare metal visual examinations is adequately addressed by VT-2 visual examinations performed under the insulation through multiple access points in accordance with Code Case N-729-4 Note 4 during outages when the bare metal visual is not completed. Finally, Code Case N-729-4 dictates that when unacceptable indications have been identified, a bare metal visual must be performed each refueling outage, which appears consistent with the intent of the new proposed rule 10 CFR 50.55a(g)(6)(ii)(D)(3).
<b><i>10 CFR 50.55a(g)(6)(ii)(D)(4)</i></b>	The condition that is in the current § 50.55a(g)(6)(ii)(D)(4) was incorporated into N-729-4 by the ASME Code committees, to be replaced by the new proposed condition.	The NRC proposes to revise § 50.55a(g)(6)(ii)(D)(4) to add a new condition which clarifies that rounded indications found by surface examinations of the partial-penetration or associated fillet welds in accordance with N-729-4 must meet the acceptance criteria for surface examinations of paragraph NB-5352 of ASME Section III of the current edition and addenda for the licensee's ongoing 10-year inservice inspection interval	This new regulation does not address acceptance criteria specific to the use of eddy current as a surface exam. Dye penetrant testing and eddy current testing respond to surface configurations and defects in different ways, and thus require acceptance criteria specific to each method. Applying the 3/16" acceptance criteria to an eddy current surface exam creates the potential for substantial false calls due to the enhanced sensitivity the examiner needs to apply to the test.
<b><i>10 CFR 50.55a(g)(6)(ii)(F)(13)</i></b>	This is a new condition not addressed in the existing §50.55a Regulations.	The NRC proposes to add § 50.55a(g)(6)(ii)(F)(13) to provide a new condition requiring licensees to perform encoded examinations of essentially 100 percent of the inspection surface area when required to perform volumetric examinations of all non-mitigated and cracked mitigated butt welds in accordance with N-770-2.	This new regulation requires the use of encoded methods for volumetric examination of welds categorized as A-1, A-2, B, and others, which because of the current state of encoding technology, will impose increased costs and administrative burden on licensees without a commensurate increase in safety. Automated encoded and manual volumetric exams of dissimilar metal welds are performed using examiners, procedures, and equipment qualified in accordance with ASME Code requirements and the EPRI Performance Demonstration Initiative. Industry initiatives have been implemented through NEI to improve the

			<p>effectiveness of identifying flaws in dissimilar welds using manual examination techniques.</p> <p>Encoded examinations are typically performed through contracts with vendors using complex, automated equipment, track mounted or otherwise fixed to the plant component. Installation and adjustment can be time consuming, resulting in increased resources and accumulated dose. When piping and component configurations do not lend themselves to existing automated equipment designs, the resulting development costs are often passed to the licensee, in addition to the burden and administrative costs of development, submittal and evaluation of relief requests when adequate coverage is not obtained.</p> <p>The recommendation is that this new regulation be deferred until effective manual encoding technologies are developed so as to be routinely available for licensee use. Until this technology is developed, Duke Energy supports periodic encoded examinations as required by current NEI initiatives.</p>
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