



Regulatory Perspective on 55.46(c) Simulation Facilities

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Topics

- **Plant-referenced simulator use**
- **Continued assurance of fidelity**
- **2014 IP-71111.11 inspections**
- **Understanding our approach**
- **Goal: one industry standard**



Plant-referenced simulator use

- **10 CFR 55.46(c) addresses use of a plant-referenced simulator**
 - for conducting operating tests as described in 55.45(a)
 - for requalification training as described in 55.59(c)(3)
 - for performing control manipulations that affect reactivity to establish eligibility for an operator's license as described in 55.31(a)(5).



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- **Extent of US simulation facilities consisting solely of a plant-referenced simulator that meet the requirements of 10 CFR 55.46(c)**
- **Currently 70 plant-referenced simulators in use**
 - **25 Boiling Water Reactor (BWR) simulators**
 - **45 Pressurized Water reactor (PWR) simulators**



Continued assurance of fidelity

- **10 CFR 55.46(d) addresses continued assurance**
- **Conduct performance testing in a manner sufficient to ensure fidelity and that fidelity is met**
- **Correct modeling & hardware discrepancies**
- **Maintain provisions for license application, examination & test integrity**

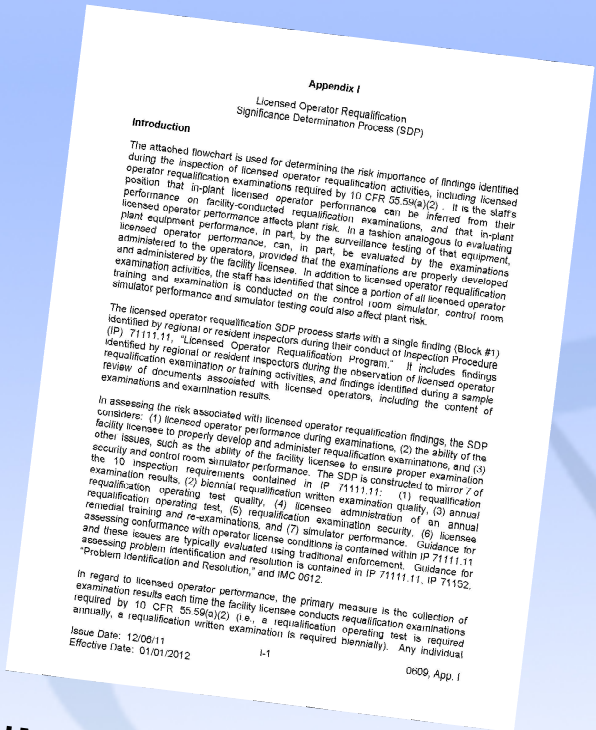


2014 IP-71111.11 inspections

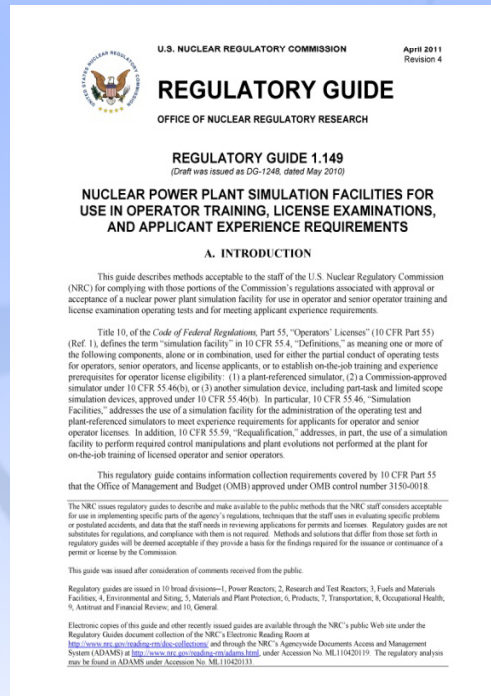
- **IP-71111.11 simulator inspections have not revealed any generic issues of regulatory concern**
- **Overall, discrepancies are being identified and processed in corrective action programs**
- **Exam/Requalification Inspection Schedules are posted on NRC's public web site on the Operator Licensing page**
- **IP reports are in NRC's Agency-wide Document Access and Management System (ADAMS)**



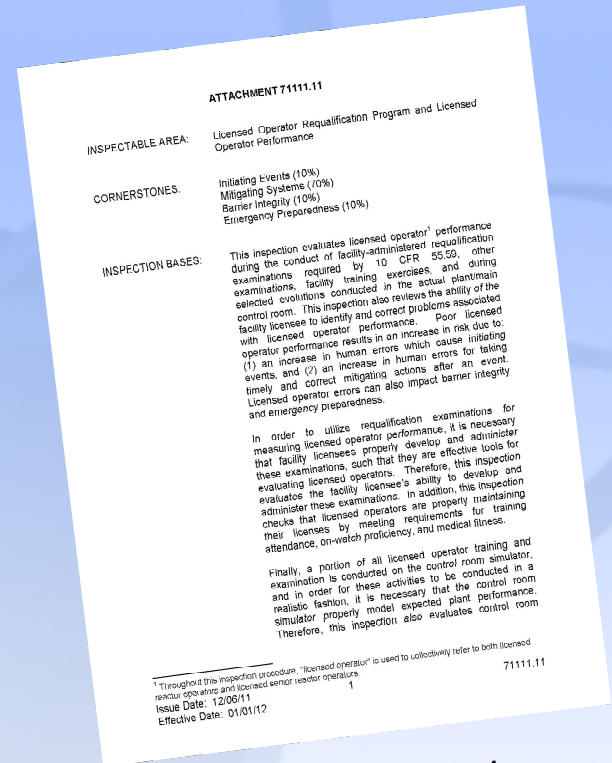
Understanding our approach



IMC 0609, Appendix I



RG 1.149, Rev 4



IP-71111.11



Goal: One Industry Standard

- **Encourage the use of a single industry consensus standard (preferably the most recently adopted standard, ANSI/ANS-3.5-2009)**
- **Use of a single standard facilitates one inspection approach**



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- **US plant-referenced simulator ANSI/ANS-3.5 standard commitments as of Jan 2015**
 - **53 of 70 or 76% on ANSI/ANS-3.5-2009**
 - **5 of 70 or 7% on ANSI/ANS-3.5-1998**
 - **12 of 70 or 17% on ANSI/ANS-3.5-1985**



The End

- **Questions & Comments**