



# U.S Experience: Using the International Nuclear and Radiological Event Scale

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# U.S. Experience - INES

NRC responsible for licensing, inspection & oversight of:

- 104 nuclear power plants
- 32 operating research, test and training reactors
- 2 gaseous diffusion plants
- 8 major fuel cycle facilities
- ~3000 Materials licensees in 13 States
- Began limited participation in INES in 1993
- In 2001, NRC increased INES participation to reporting of all Level 2 events and above

## 37 Agreement States

- Responsible for licensing, inspection & oversight of ~19,500 Materials licensees
- Began participation in INES via NRC in 2002

# U.S. Experience – INES 2004-9

Year	Power Reactor Events	Research Reactor Events	Fuel Cycle Events	Materials Events	TOTAL
2004	0	0	0	6	6
2005	2	0	0	9	11
2006	0	1	1	8	10
2007	0	0	0	3	3
2008	0	0	0	4	4
2009	0	0	0	4	4

## Summary of Materials Events (2004-9)

Year	Radiography	Radiation Sources	Irradiators
2004	2	3	1
2005	8	1	0
2006	6	2	0
2007	2	1	0
2008	3	1	0
2009	3	1	0

# Distribution on INES Scale

## U.S. Experience\* – INES 2004 – 2009

LEVEL	Number of Events
0	1
1	4
2	32
3	1

\* NRC only submits ERFs at Level 2 and above to IAEA, unless a country requests an ERF. Level 0 and 1 events above are from final ERFs that resulted in a rating change.

# Continuously Improving

- About 165 registered users in U.S.
- U.S transmits only Level 2 and above to IAEA
  - Target: ERF to IAEA within 48 business hours
- About 5-10 events per year
- NRC staff draft, finalize, and transmit ERFs from licensee and Agreement State notifications
- Not used in event notifications
- Not used in press releases

# Recent INES Communications

- July 13, 2009, All Agreement State letter
- Nov 13, 2009, NRC Information Notice  
(IN 2009-27)<sup>1</sup>
- March 15, 2010, All Agreement State letter  
with request to share IN 2009-27 with State  
licensees

<sup>1</sup> See <http://www.nrc.gov/reading-rm/doc-collections/gen-comm/info-notices/>  
Click on top of the year 2009 and then IN 2009-27 for details.

# The path forward

- NRC Management Directive 5.12 (Using INES) will be revised in 2011 to incorporate 2008 INES Users Manual
- Will continue to transmit ERFs rated at Level 2 and above
- Will recommend to include “...events attracting international public interest” (p.10, INES Users Manual)
- Initiate training of NRC headquarters staff

*Thank you!*



[www.nrc.gov](http://www.nrc.gov)