



U.S.NRC

UNITED STATES NUCLEAR REGULATORY COMMISSION

Protecting People and the Environment

RIC 2007
Risk Management Standards'
Activities for Today's and
Tomorrow's Plants

C.R. (Rick) Grantom, P.E.

STPNOC/ASME CNRM

March 13, 2007

Nuclear Risk Management Coordinating Committee

- Inter-society coordinating committee, members include ANS, ASME, IEEE, NRC, DOE, and industry groups (NEI, Owners Groups)
- Co-chaired by ASME and ANS
- Committee mission is to harmonize, prevent duplication, and coordinate scopes of work between professional societies

ASME Board on Nuclear Codes & Standards (BNCS) Activities

- Task Group on Risk Management
 - Standards-related activities identified and assigned across entire Board organizational structure
 - Range of activities across several BNCS code committees (Section XI, Section III, etc.)
- Detailed response to Part 53 ANPR performed in 2006

ASME Committee on Nuclear Risk Management (CNRM)

- Activities supporting current plants
 - ASME PRA Standard RA-Sb-2005 published
 - Additional Guidance on PRA Maintenance and Update issued
- Generally, standards' requirements endorsed in regulatory documents (i.e., RG 1.200)

Committee on Nuclear Risk Management (CNRM)

- Joint ANS/ASME development of Integrated PRA Standard
 - PRA Scope is Internal Events (ASME), Internal Fires (ANS), Low Power/Shutdown (ANS), and External Events (ANS)
 - Structure/format complete, mapping of sections completed
 - Coordinating efforts with ANS to ensure guidance expedited for utility pilot efforts
 - Will be submitted for review in 2007 (may not include full scope of ANS standards)
- ASME PRA Standards Training workshops planned for 2007
 - RG 1.200 training also occurring in 2007

Future Plants

- New CNRM Working Group on Advanced LWR PRA
 - Establish standards requirements and guidance for plants licensed under Part 52 or other international equivalent
 - Covers design, construction, procurement, start-up, and operational phases
 - Full-scope PRA implementation

Future Plants

- Strategic decisions are needed on how/when new plants licensed under Part 52 will be risk informed
 - Regulatory Programs
 - Industry Programs

Next Generation Plants

- New CNRM Working Group on Non-LWR PRA
 - Establish standards requirements and guidance non-LWRs under risk informed regulatory framework (Part 53?)
 - Covers design, construction, procurement, start-up, and operational phases
 - Full-scope PRA implementation

Conclusions

- Significant scope of work remains to be done [Level 1 (Integrated version), Level 2, and Level 3 scope, risk informed applications]
- More nuclear sectors need to be represented (e.g. Owners, vendors, AEs)
- Supporting Part 52 efforts is beginning acceleration in efforts
- Decisions on risk informing new plants are needed