PWR Owners Group / BWR Owners Group
NRC K/A Catalog Revision
PA-OSC-0139

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PWR Owners Group

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Objectives

Purpose

- To summarize the results of the Joint Owners Group Program to update NUREG-1122 and NUREG-1123.

- Obtain NEI Licensed Operator Focus Group Endorsement of recommended revision to the Generic Section of the KA Catalog.

Background

January 17, 2006 Meeting

- Meeting with NRC to resolve NRC concerns about KA Catalog program.
  - BWROG endorsed program and announced participation
  - NRC requested additional KA's to be added in Section 4.0
    - JOG Training Group agreed to survey additional KA's

Background

February 16, 2006 Telecon

- NRC requested specific changes
  - additional wording changes to current KA's
  - new KA's relating to chemistry control and conservative decision making, etc.
  - All negotiated changes, including NRC editorial changes have been incorporated.
- NRC endorsed continuation of program and agreed to consider NUREG revision

Method

Second survey administered from April 3, 2006 through June 5, 2006.

- 87 KA's (new and revised) were rated
- 171 participants completed survey
  - Participants were licensed incumbents, training professionals and examiners
    - 101 PWR (23 sites)
    - 59 BWR (20 sites)
    - 11 NRC

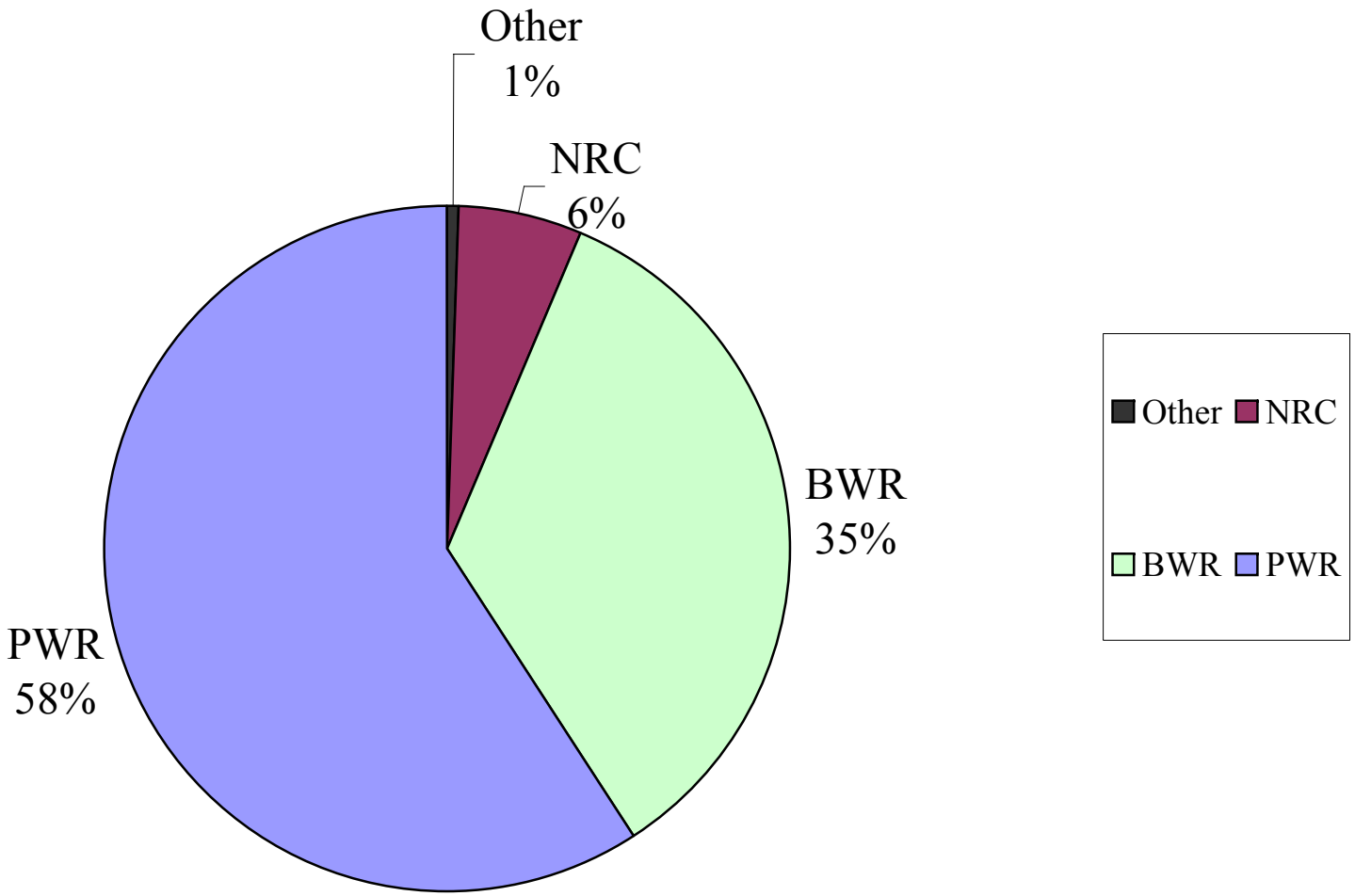
BWR Participating Sites

Browns Ferry (TVA)	6
Brunswick (Progress)	3
Clinton (AmerGen)	3
Columbia (Energy NW)	2
DAEC (FPL)	3
Dresden (Exelon)	3
Fermi (DTE)	4
Grand Gulf (Entergy)	2
Hatch (Southern)	6
Hope Creek (PSE&G)	1
LaSalle (Exelon)	2
Limerick (Exelon)	3
Nine Mile (Constellation)	3
Oyster Creek (Entergy)	3
Peach Bottom (Exelon)	3
Perry (First Energy)	3
Pilgrim (Entergy)	1
River Bend (Entergy)	3
Susquehanna (PPL)	2

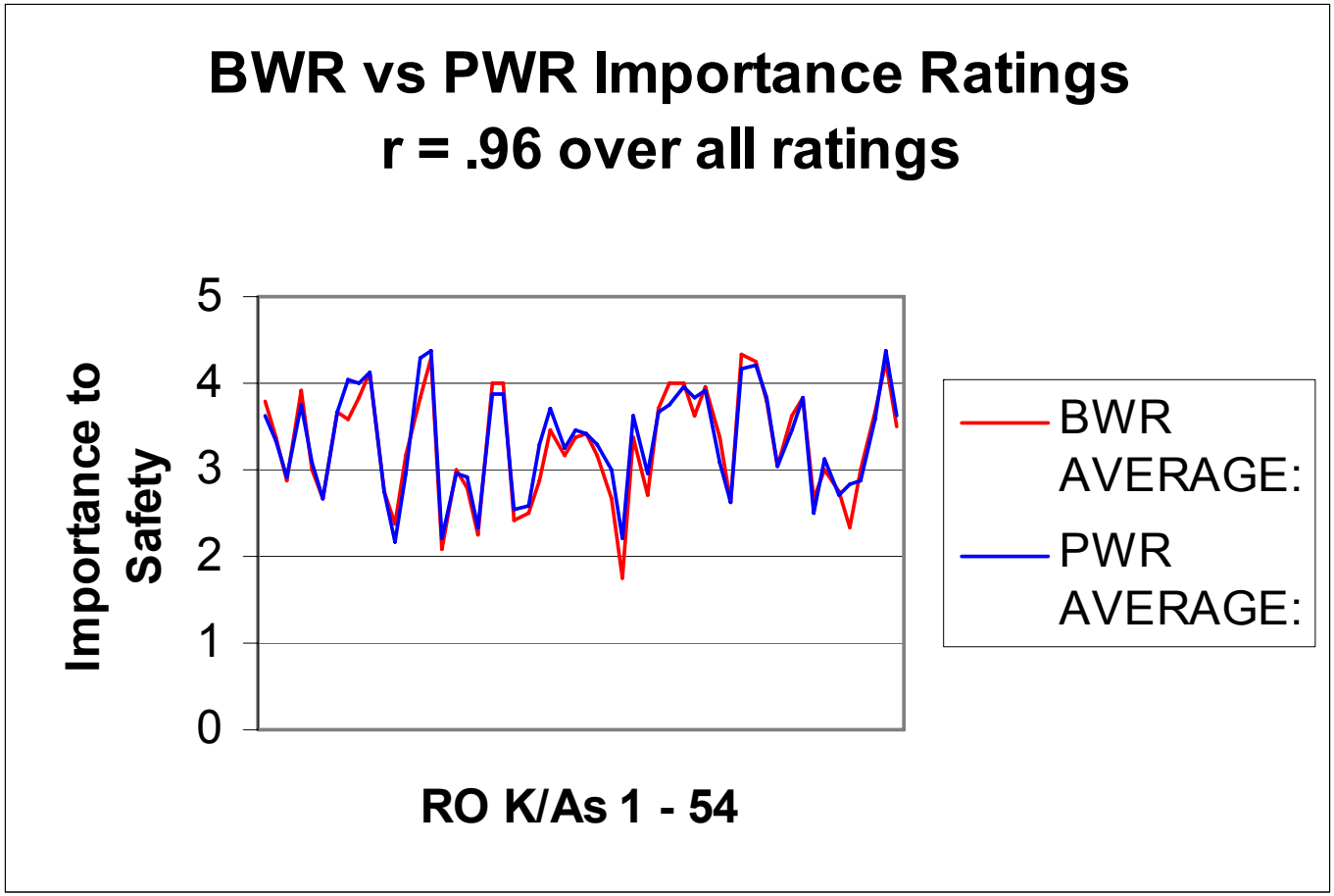
PWR Participating Sites

Beaver Valley (FENOC)	11	Oconee (Duke)	6
Braidwood (Exelon)	4	Palisades (NMC)	3
Callaway (Ameren)	2	Palo Verde (Pinnacle)	3
Catawba (Duke)	3	Prairie Island (NMC)	2
Comanche Peak (TXU)	1	Salem (PSEG/Exelon)	3
Cook (American Electric)	3	Sequoyah (TVA)	1
Diablo Canyon (PG&E)	5	South Texas (STP)	14
Farley (Southern Nuclear)	1	VC Summer (SCANA)	4
Ginna (Constellation)	4	Vogtle (Southern Nuclear)	4
Harris (Progress Energy)	2	Waterford (Entergy)	1
Kewaunee (NMC)	2	Wolf Creek (Wolf Creek)	14
McGuire (Duke)	8		

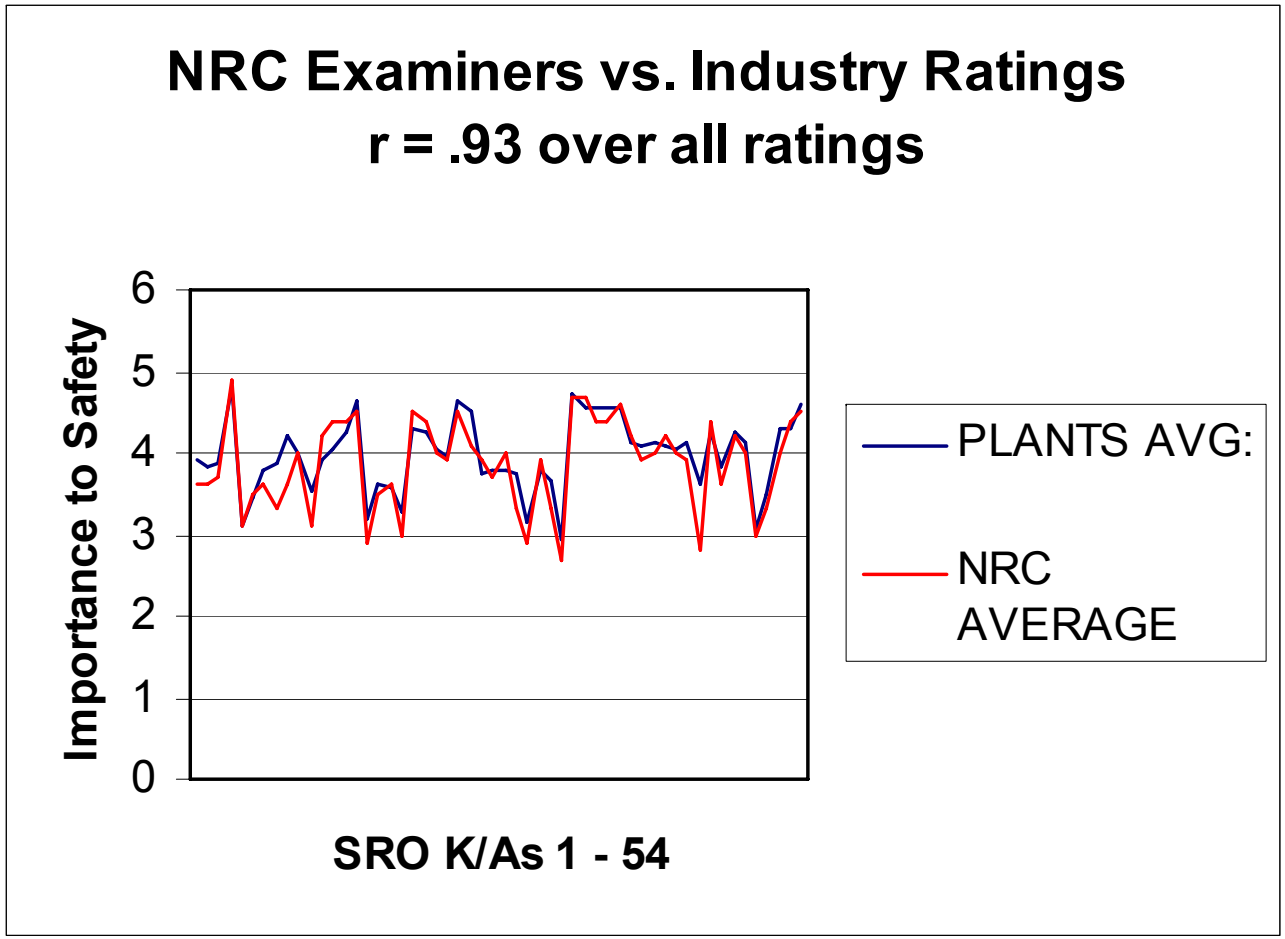
Respondent Distribution



BWR vs. PWR


BWR vs PWR Importance Ratings
r = .96 over all ratings
Importance to Safety
5
4
3
2
1
0
RO K/As 1 - 54
BWR AVERAGE:
PWR AVERAGE:

NRC Examiners vs. Industry Ratings



Importance to Safety Ratings

- Average Importance Ratings Calculated for RO and SRO jobs for 87 K/As
- Four K/As rated less than 2.5 (2.3%)—all were for RO jobs
- Percentage of K/As in Section 2 appropriate for testing on site-specific RO licensing exam would increase to 93% of the K/As versus 70% in the current Section 2
- Five new K/As, in addition to the revised Section 2.3, were added to the catalog.

Importance to Safety Ratings

Current Section 2.0

- 90 out of 129 K/As are testable for Initial License RO exam (70%)
- 129 out of 129 K/As are testable for Initial License SRO exam (100%)
- 56 out of 129 K/As are testable for License Requalification RO exam (46%)
- 114 out of 129 K/As are testable for License Requalification SRO exam (88%)

New Revision to Section 2.0

- 114 out of 121 K/As are testable for Initial License RO exam (94%)
- 121 out of 121 K/As are testable for Initial License SRO exam (100%)
- 95 out of 121 K/As are testable for License Requalification RO exam (79%)
- 120 out of 121 K/As are testable for License Requalification SRO exam (99%)

Importance Ratings Below 2.5

Four K/As had average importance ratings under 2.5 for the RO job, as expected since each of these K/As was revised to address SRO job responsibilities

- K/A 31: Ability to approve release permits.
  - RO Importance Rating: 2.0; RO SD .89
- K/A 16: Knowledge of the process from making design or operating changes to the facility.
  - RO Importance Rating: 2.2; RO SD .73
- K/A 12: Knowledge of the fuel-handling responsibilities of SROs.
  - RO Importance Rating: 2.2; RO SD .94
- K/A 19: Knowledge of the process for controlling temporary design changes.
  - RO Importance Rating: 2.3; RO SD .70

Improvements to Subsection 2.3, Radiation Protection

- The average importance ratings for the revised K/As are substantially higher than the ratings for the K/As in current Subsection 2.3.
- None of the importance ratings for the revised K/As had SDs greater than 1.0.
- Revising Subsection 2.3 adds six testable K/As for Licensed Reactor Operator Requal Exams, whereas, current Subsection 2.3 has no RO K/As ≥ 3.0.

Overall Results

- The demographic characteristics of the respondents to the second survey were very similar to those of the respondents in the first survey.
- Different groups of respondents gave very similar importance ratings. Most importantly, no systematic differences were found in the ratings provided by operations personnel from PWRs and BWRs.
- These results indicate that it is acceptable to use the importance ratings from the two surveys to replace those in Section 2 of both NUREG-1122 and NUREG-1123.

Overall Results– cont'd

- Overall, the results of this second survey demonstrated that the large majority of the revised and new K/As are acceptable for inclusion in revisions to NUREG-1122 and NUREG-1123.
- The majority of importance ratings obtained for the revised and new K/As exceeded 2.5 with little variability in the participants' importance ratings.

Request for Endorsement

- JOG Training Group requests that the NEI LOFG endorse the proposed revision to NUREG-1122 and NUREG-1123

- JOG Training Group also recommends that KA's dealing with site chemistry processes be reworded to remove site specificity and included in the Generic Fundamentals section.

  -- See New KA 50 – 51 in WCAP – xxxx, Attachment B

Questions?