



PVNGS & STARS Meeting with NRC

June, 2008



AGENDA

- Introduction to STARS
- Wolf Creek Model
- Palo Verde Status
- Other STARS Plants
- Discussion



PREVIOUS MEETINGS

- November 2004
- October 2005
- May 2006
- September 2007



STARS PAM COB

- Established March 2004
- Combined utility and contractor staff
- Perform integrated plant assessments in preparation of LRA's
- Establish and apply common methodologies & documentation
- Leverage plant aging management plans
- Realize efficiencies and savings



STARS

PAM COB MEMBERS

- Callaway*
- Comanche Peak
- Diablo Canyon
- Palo Verde
- San Onofre*
- South Texas
- Wolf Creek

*Callaway and San Onofre joined the COB January 1, 2008



STARS LRA STATUS

- Wolf Creek
 - Draft SER issued with Open Items
 - ACRS Subcommittee Meeting held March 5th
 - SER due July 29th
 - ACRS Full Committee Meeting September
 - License issue date November 21st
- Palo Verde
 - Draft application issued for review
 - Letter to NRC May 15th
 - Target submittal ready – 4th Quarter 2008
- Plant #3
 - Feasibility Study Production began beginning 2008
 - Environmental review underway
 - Feasibility Study Complete – 4th Quarter 2009
- Plant #4
 - Readiness Review Completed
 - Data transfer and database preparation in progress
 - Production begins August 2008
 - Target submittal window – 4th Quarter 2010



STARS LETTERS OF INTENT

- Letters of Intent
 - 4th Quarter 2008
 - 4th Quarter 2009
 - 4th Quarter 2010
 - 4th Quarter 2011
 - 4th Quarter 2012
 - 3rd Quarter 2013



STARS PAM COB ACTIVITIES WITHIN THE INDUSTRY

- NEI – Executive License Renewal Working Group
 - License Renewal Task Force
 - Discipline License Renewal Working Groups
- Peer Reviews & Assessments
- Benchmarking, Industry Workshops, Audits, RAI Database
- ACRS meetings



STARS APPROACH TO SUBMITTALS

- Wolf Creek sets standard for follow-on plants
 - Common methodology, documentation and presentation
- Utilize Common utility and contractor staff
- Schedule sequential filings to maximize benefits
- Foster station ownership of product
- Maintain cognizance of industry direction, influence key decisions
 - Provide timely feedback from predecessor plant and other industry submittals into process
- Make NRC's reviews, audits, and inspections easy
- Established License Renewal Oversight Committee to ensure COB objectives are being met



Sept. 25, 2007 NRC Lessons-Learned Meeting - Positives

- Wolf Creek application is a good model
- Enhance; don't rebuild
- Well organized
- Well documented
- Very good drawings
- Excellent interaction between plant staff & COB staff
- Website access a definite strength
- Q&A Database worked well



Sept. 25, 2007 NRC Lessons-Learned Meeting - Recommendations

- Make more environmental docs available on website
- Be more specific in referencing basis documents (page, section, subsection)
- Be as timely as possible in submitting amendments / responses – consider partial submittals
- OE and CAP extremely important; the more, the better
- Follow GALL Rev. 1; Exceptions to NUREG-1801 will require additional review (enhancements are better)
- Continue to monitor other applications and audits
- Ensure internet access for at least one NRC person during audits / inspections



OTHER STARS PLANTS

- Preparations in Progress



PALO VERDE STARS PLANT #2





PALO VERDE



- Three identical CE System 80 PWRs
- Located 26 mi west of the Phoenix metropolitan area
- Licensed power 3990 MWt
- Zero discharge plant cooled by forced draft low profile cooling towers
- All SGs have been replaced
- Reactor heads will be replaced in RF15 (10/09, 4/10 and 10/10)



PALO VERDE STATUS



- Preparation began March 2006
- Production work done
- Completed first LRA draft - April 2008
- Industry Peer Review – May 2008
- Second draft now in review by Plant Review Board and Off-Site Safety Review Committee
- Target Submittal Date – 4th Quarter 2008



APPLICATION OF NUREG-1801



- 39 Aging Management Programs
 - 17 programs will be enhanced
 - 9 programs with exception
 - 9 new programs
- NUREG-1801 Consistency
 - Aging evaluation approximately 95% consistent with NUREG-1801
 - Two Plant Specific Programs
 - Plant specific Nickel Alloy Program
 - RCS supplement for Reactor Internals and Nickel Alloy



APPLICATION OF LESSONS LEARNED



- Wolf Creek sets standard for STARS plants
- Common methodology and documentation
- Common utility and contractor staff
- Timely feedback from predecessor plant NRC reviews
- Industry Participation and Feedback
- Executive Management Engagement and Site Ownership



SPECIFIC ISSUES



- Station Blackout
- Thermal Fatigue TLAA
- Enhanced Website
- Consistency with GALL
- Review and Audit/Inspection Process
- Other Concerns, Expectations, Areas to focus on?



SUMMARY



- STARS Approach
- Industry Participation
- Consistent with NUREG-1801
- Use of Lessons Learned and NRC Feedback
- Interaction between Plant and NRC staff



DISCUSSION