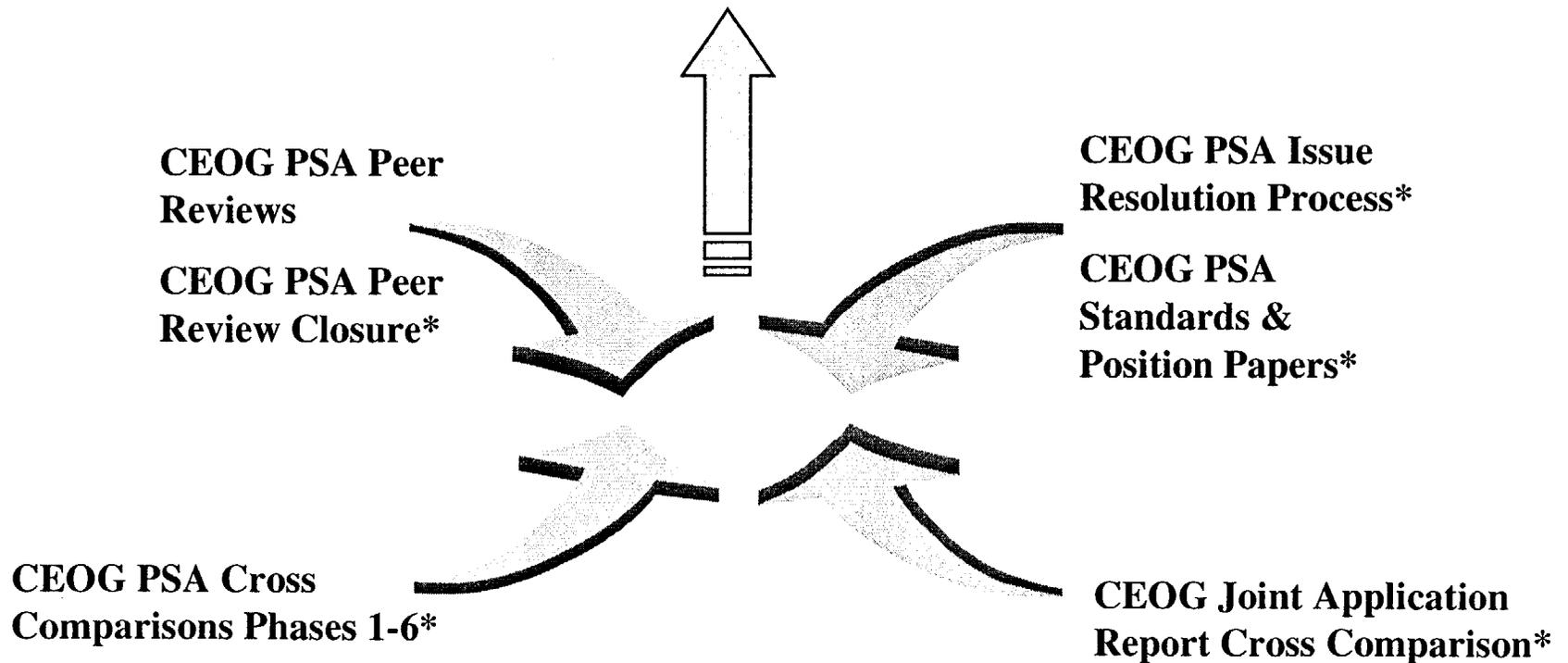

CEOG Approach to PSA Quality and Quality Applications

March 2001



Probabilistic Safety Assessment Subcommittee

Ensures Quality In PSA Applications



* unique to CEOG

Task Objective

- Develop summary report for submittal to NRC describing the CEOG activities towards RI Regulation
- Report will provide additional basis for NRC position on the Quality of CEOG PSA applications



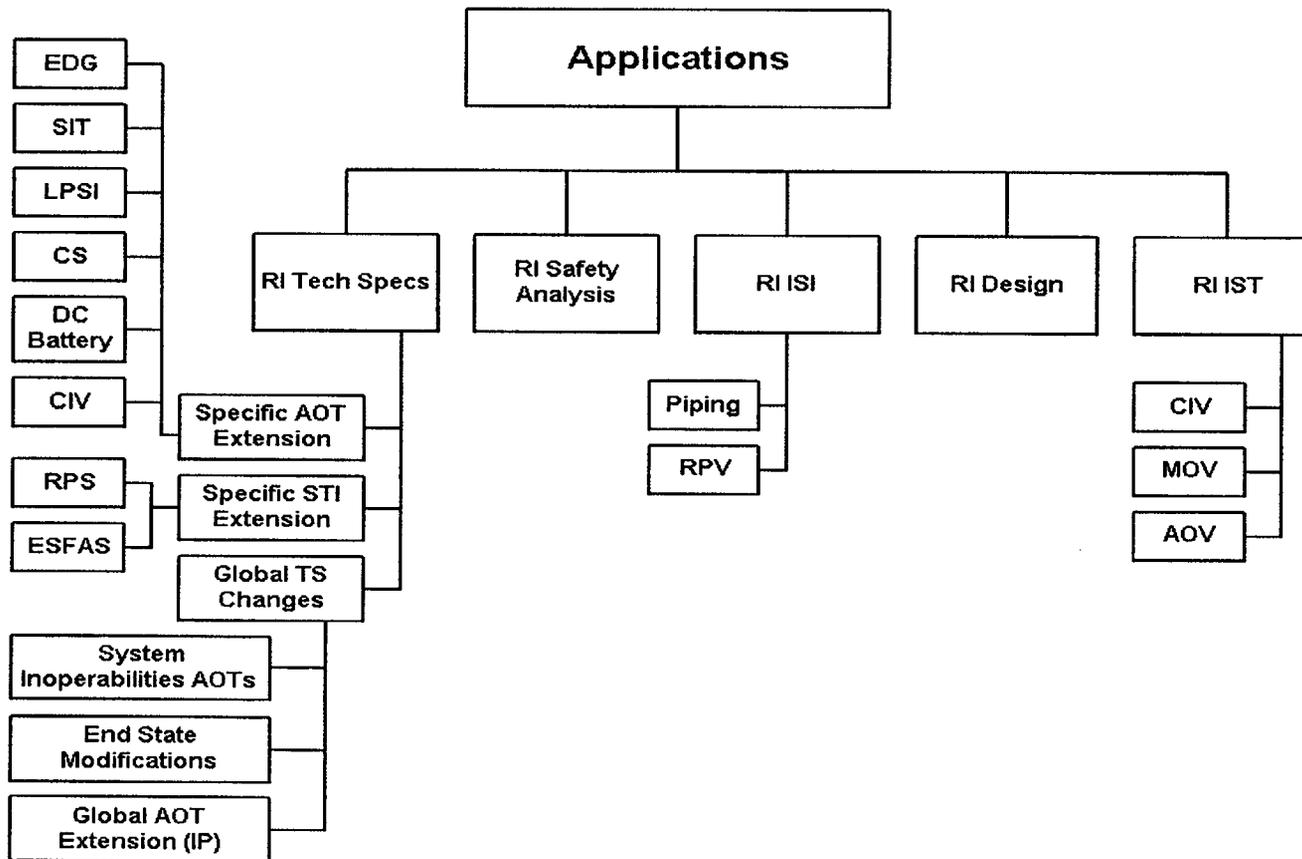
PSA Quality

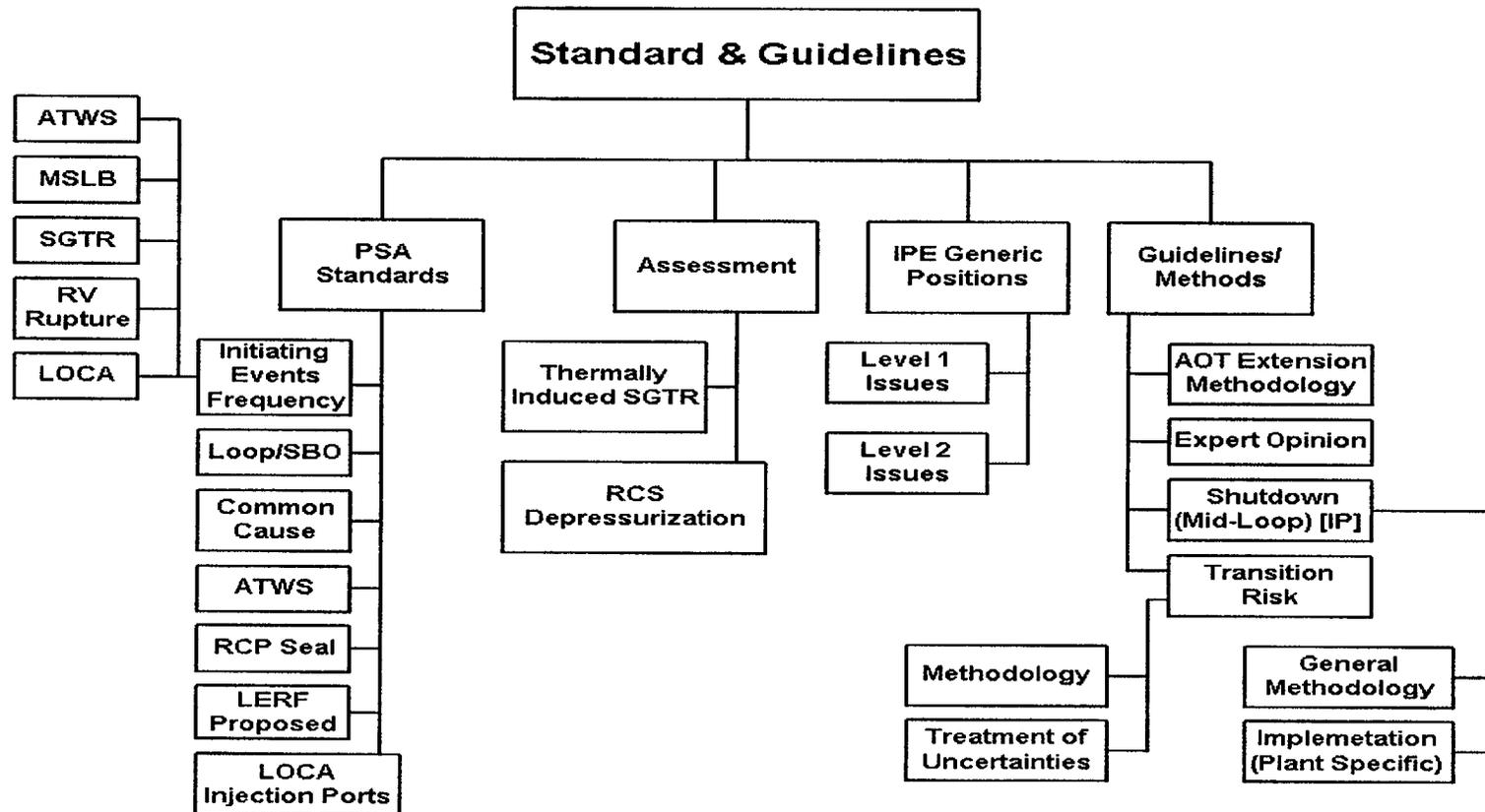
- CEOG process evolutionary and has evolved over a period of 5 years
- Consistent with ACRS vision of “top down”/”bottom up” approach which both supports PSA development and validates specific applications
- Key elements of Quality process include:
 - PSA Insights gained from focused applications
 - Plant-Plant PSA feature comparisons
 - PSA Standards and Guidelines
 - “Peer Review” / Certification process

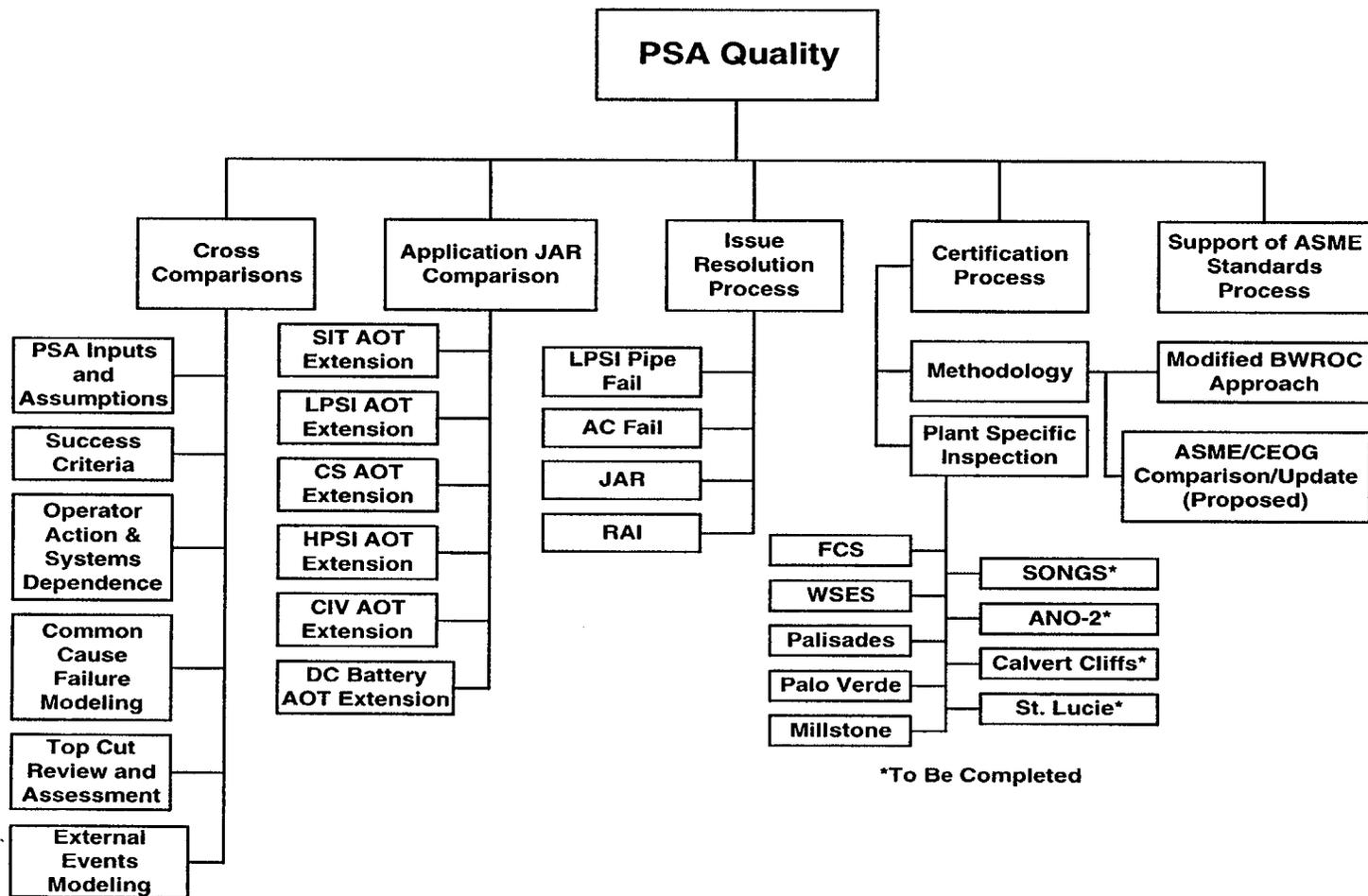
Task Status

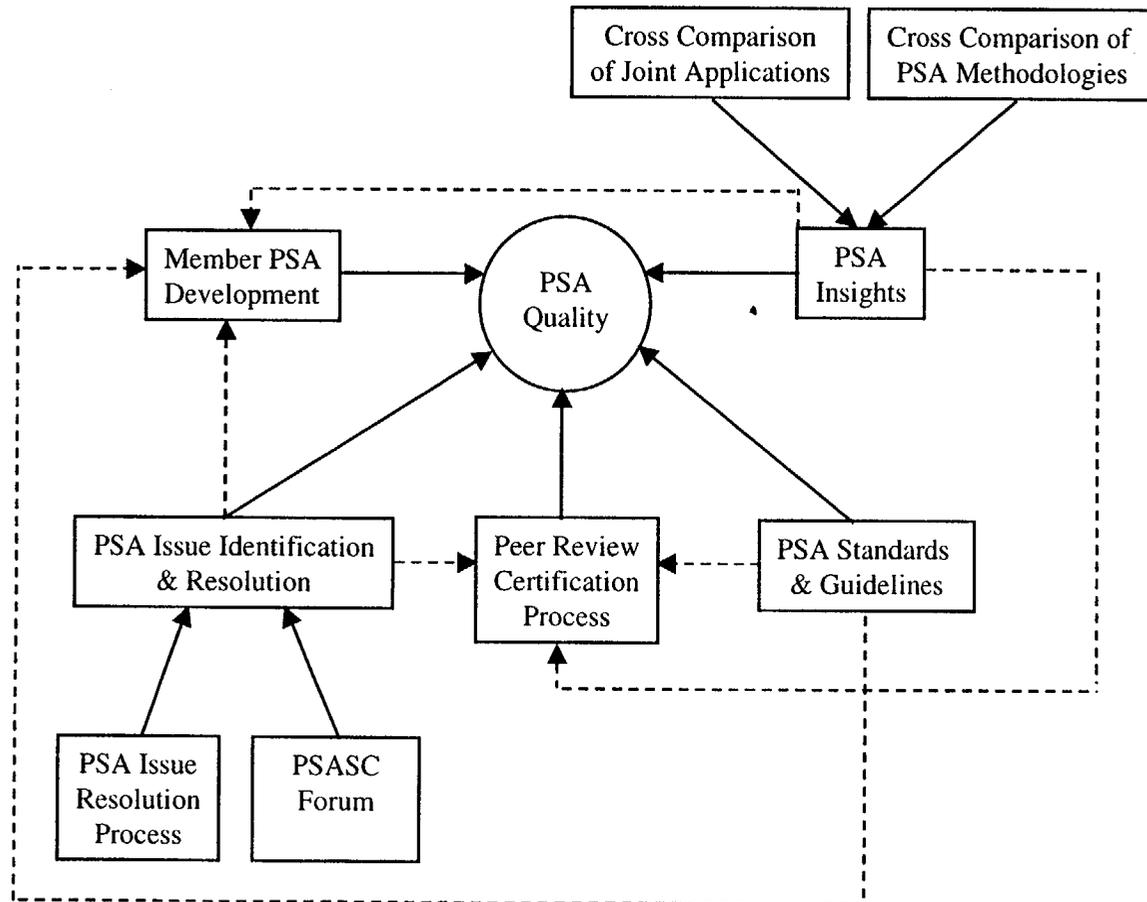
- CEOG report in preparation (CE-NPSD-213)
 - document CEOG processes and their synergy for PSA quality
 - Draft reviewed by PSASC and LSC
 - To be issued by December 31
- Report to be submitted to NRC for reference in SERs
 - staff recognizes the benefits of the CEOG process
 - staff needs a reference document
- Report represents a unique CEOG capstone for PSA quality











Status of CEOG Technical Specification Applications

March , 2001

Review of CEOG Activities to Risk Inform Technical Specifications

| Task ID | Scope | Status |
|---------|---|--|
| 836/849 | TS specific AOT changes | SERs or equivalent obtained for SITs, LPSI, EDGs, CSs & CIVs. NRC review of DC Systems delayed due to SCE fire questions, Draft SER now prepare) |
| 1115 | Global TS changes to <ul style="list-style-type: none"> • End States • Exigent Condition AOTs | End State Report prepared (CE-NPSD-1186) (SER completed) Final Exigent AOT Report (CE-NPSD-1208, NRC review in progress) |
| 1175 | Global RI AOT | Draft Statement of Guiding Principle IP Preliminary discussions with Industry |
| 1181 | Missed Surveillances TS 3.0.4 Relaxation | Process report (NRC approval expected) Report issued (CE-NPSD-1207) |

Status of DC Systems AOT

- Review is complete.
- RAIs centered on SONGS and Waterford Units for a 24 hr AOT extension (More robust DC systems)
- Methodology applicable to other PWRs but benefits will be less
- RAIs completed in November
 - Closure focused on:
 - Confirmation of modeling assumptions
 - Confirm loss of bus will not propagate to adjacent train
 - Impact of increased charger failure rate on CDF
- SER will be specifically applicable to SONGS and Waterford Units

Global Risk Informed TS

- Global Risk Informed TS Initiative includes 7 items
("Magnificent Seven" Plus one)
 - **Implementation of Risk Informed End States (*)**
 - **Grace period on Missed Surveillances (*)**
 - **Relaxation of Mode Restraints (*)**
 - **"Flexible" AOTs (MR controlled AOTs) (*)**
 - Move STIs to Administrative Control (and develop RI STIs)
 - **Extended AOT for exigent conditions (*)**
 - Operability vs. Functionality (Definitions)
 - Relocate selected LCOs to Licensee controlled program (BWROG)

* CEOG Task authorized

STATUS OF TS INITIATIVES

Implementation of RI End State (initiative 1)

- Change ends state from (Mode 5 to Mode 4)
- CE-NPSD-1186 Submitted to NRC (May, 2000)
- RAI responses forward to NRC August 8
- Review included deterministic and PSA branches
- No formal RAIs to be received
- SER to be issued by end of year
- ISTS Markup in Progress
- BWROG follow-on program funded at \$300-400 K Level

STATUS OF TS INITIATIVES

Missed Surveillances (initiative 2)

- TST-358 submitted to NRC via TSTF
- Review in progress
- No additional analyses required
- Missed surveillance process needed for implementation
- SER expected by end of year



STATUS OF TS INITIATIVES

Relaxation of Mode Restraints (Initiative 3);

- TSTF-359 to be submitted to NRC via TSTF
- CE-NPSD-1207 supports Relaxation of TS 3.0.4 for most equipment with specific generic exceptions:
 - AFW, EDGs, HPSI , SDC (when in SDC)
- Similar evaluations prepared by all Owner's groups

STATUS OF TS INITIATIVES

Flexible AOT (Initiative 4);

- Industry looking for common approach to Flexible AOT
- General guidance is emerging (OGs want to engage)
- Strawmen presented by:
 - CEOG (Task 1175)
 - STP
 - EPRI
 - BWROG
- EPRI approach viewed futuristic
- STP, CEOG, WOG, and BWROG looking for a common approach that accomodates key PSA and licensing needs

Extend AOT for Exigent Conditions (Initiative 6b & 6c)

- Report prepared and to be issued (CE-NPSD-1208)
- Industry review resulted in specific changes and delayed submittal. General industry support of approach.
- Intend to submit via TSTF to bypass review fees
- Submittal to NRC as a CEOG ISTS change in December
- WOG to follow.



STATUS OF TS INITIATIVES

- **Risk informed allowed outage times (Initiative 4b) Task 1161**
 - **Task directed at supporting the development of technical and philosophical bases of a MR based AOT.**
 - **Position paper to be reviewed by industry and used to support discussion of an improved TS structure with NRC**
 - **Preliminary Guiding Principle “Strawman”**
 - **Positions to be formalized via CEOG and presented to industry in September**
 - **Structured working paper to be shared with NRC**



Key Elements of the Guiding Principles for RI AOT

- Structure of TS should be familiar to Operating Staff
- AOTs should reflect plant risk and PSA insights
 - consistent with a(4) of MR
- RI AOTs should be implementable via a variety of PSA approaches

Summary

- NRC is actively supporting RI changes to plant Technical Specifications
- By the end of the current efforts most TSs will be Risk Informed with respect to AOTs and End States
- Future work should expand effort to RI STIs