

Nuclear Safety Culture Assessment

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Nuclear Safety Culture Assessment

- NRC and industry dissatisfied with 95003 safety culture Assessment experience at Palo Verde
- NEI volunteered to develop an industry guideline for a third-party assessment
- Established a Nuclear Safety Culture Assessment TF to develop guideline that could be used for self, independent and third party assessments
- All sites perform self assessments on a biennial basis (INPO SOER 02-4)
 - Some use contractors for surveys/assessments
 - No industry-wide consistency
 - USA has a methodology it has used successfully for five years

Creating Guideline Building on USA Nuclear Safety Culture Assessment (NSCA) Process

- USA (Utility Services Alliance) utilities (15 companies, 27 reactors)
- Companies outside the Alliance:
 - Progress Energy, Constellation, Entergy
 - Tecnatom (Spain) (7 reactors)
 - Ontario Power Generation
 - Oak Ridge National Laboratory

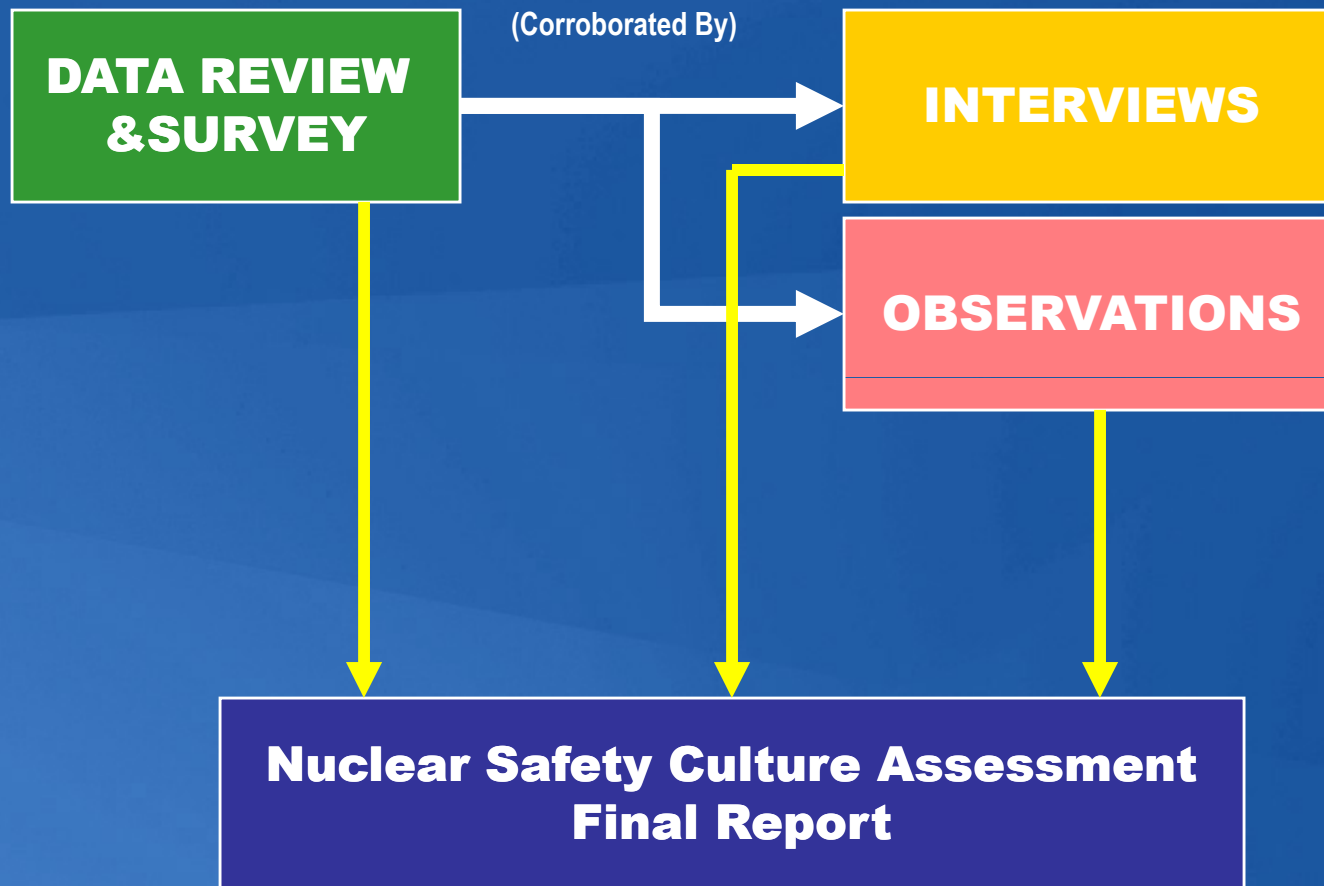
The USA NSCA Process

- Structured on INPO's *Principles and Attributes for a Strong Nuclear Safety Culture*; results are provided in that context
- **Safety Culture:**
An organization's values and behaviors – modeled by its leaders and internalized by its members – that serve to make nuclear safety an overriding priority.
- Process includes:
 - Pre-assessment automated survey and data review
 - Assessment of leadership and worker attitudes, opinions, and perceptions through interviews and behavioral observations

Peer-assisted Self Assessment Process

- Team Leader, 4 evaluators and Executive Sponsor provided by alliance, similar number of host peers
- All interviews and observations done in pairs
- Pre-evaluation survey and data review
- Full week evaluation with Friday exit
- Comprehensive manual to manage data
- Can be scaled up for “independent” or “third party” assessment
 - More team members
 - More independence
 - Additional focus areas

NSCA Assessment Process



What the Process Looks Like

Pre-Work

Sunday

Monday

Tuesday

Wednesday

Thursday

Friday

Developed a Pre-Survey to given 2 Weeks prior to assessment

For Example: *Expectations and standards are well defined and effectively communicated.*

	Strongly Disagree	Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Agree	Strongly Agree	Don't Know
	1	2	3	4	5	6	7	8
1. Workers understand and demonstrate buy-in to expectations and standards.								
2. Procedures, policies and other documents that define expectations and standards are clearly written.								
3. Expectations and standards are realistic for implementation.								
4. Expectations and standards are consistent with best industry practices.								
5. Expectations and standards are consistent with and support business plan goals and objectives.								
6. Departments and workgroups use progressively detailed expectations and standards to link worker performance to higher tier goals.								
7. Self-assessments are used effectively to identify shortcomings (such as conflicts or lack of clarity) in defined expectations and standards.								
8. Operating experience is used as input when defining expectations and standards.								

Pre-Survey & Discussion

Plant Records - CAP
Bus. Plan Indicators
Prior Assessments,
Prior NSCA Focus Areas
Equipment History etc.



Travel to Site



Training & Schedule

Individual Contributor Interviews



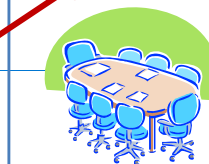
Multiple Meeting Observations



Field Observations



Supervisory Interviews



Final Consolidation Discussion



Recommendations

Exit Meeting



Travel Home



Data Consolidation Meetings

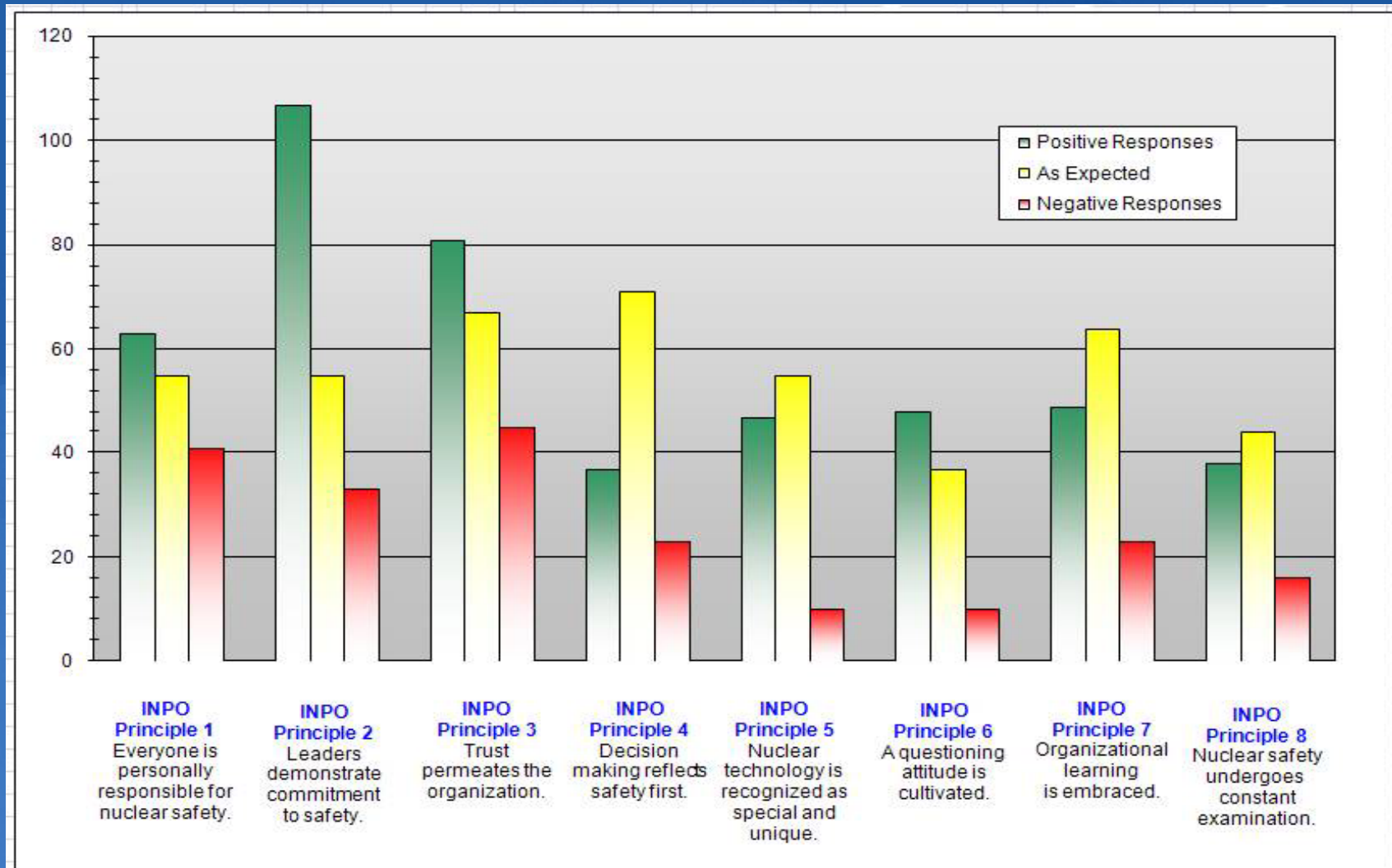
Typical Coverage Pattern

- Start with individual contributors before moving into supervision
- Generally have around 60 interviews of individuals or small groups
- Typically attend 10-15 different types of meetings
- Typically make 10-12 formal Field Observations
- Provides varying levels of coverage for 250-300 employees on site
- Typically over 1000 data points go into profile

Assessment Results

- Presented at exit meeting followed by written report
- Can include other areas of Site VP interest
- Includes both descriptive and graphic results
- Strengths, weaknesses, recommendations
- Follow-up of weaknesses from previous assessment
- Entered in the CAP and/or improvement plan
- Wide communication of results

Typical Summary Graphic of Assessment



NSCA is Being Upgraded

- Modified to reflect three levels of assessment (self, independent and third party)
- Upgrade survey to distinguish between departments and levels in the organization
- Conduct validation of survey
- Reviewed against revised 95003

In conclusion

- Industry is completing a guideline and manual for conducting third party, independent and self assessments
- USA is conducting about a dozen assessments this year
- Industry will provide the guideline and manual to NRC and invite NRC to observe
- After industry training/workshops, industry will implement the assessment approach