

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

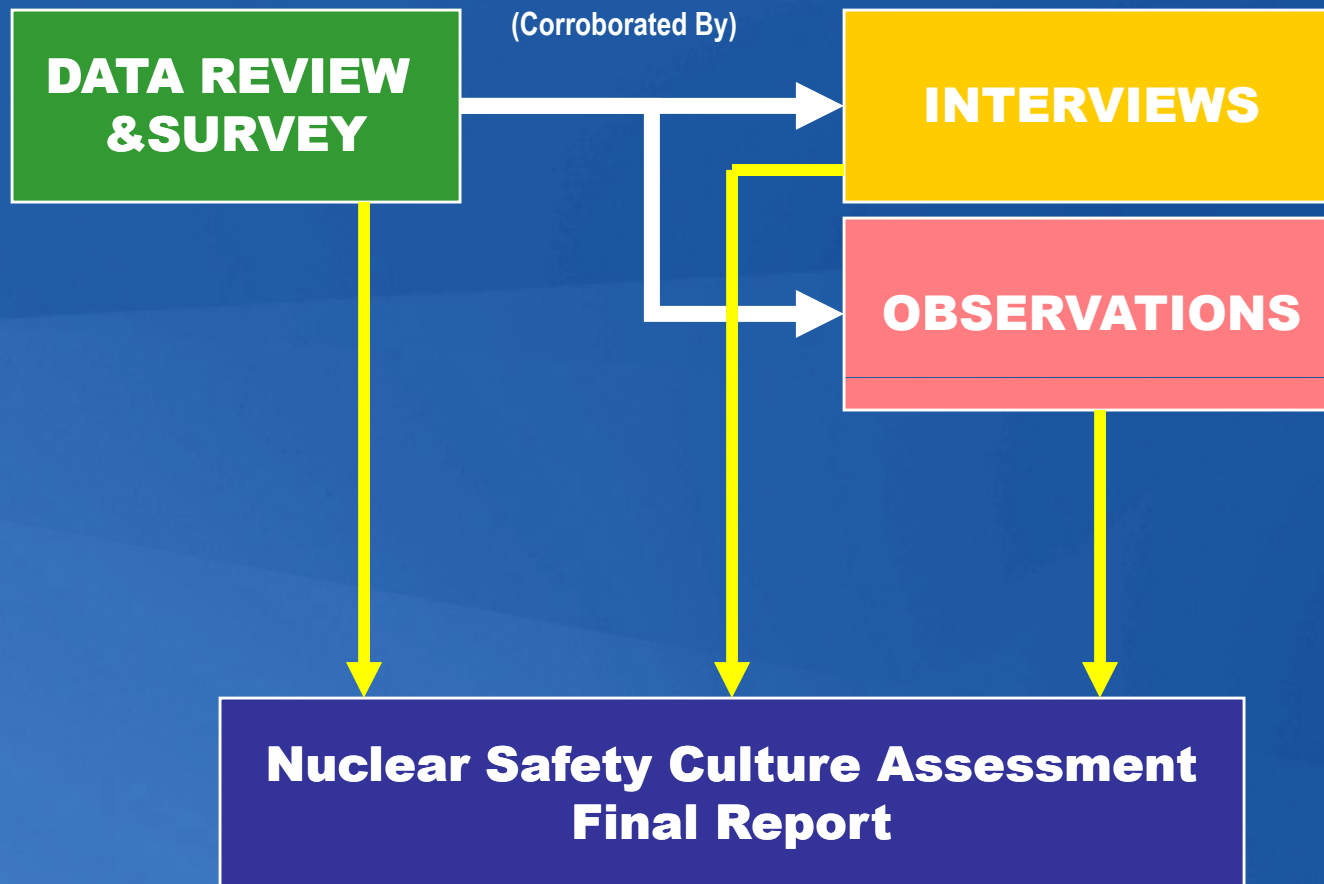
The USA NSCA Process

- 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. _____								
2. _____								
3. _____								
4. _____								
5. _____								
6. _____								
7. _____								
8. _____								

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

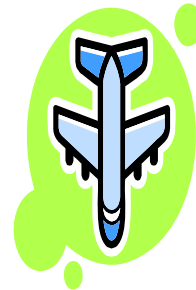


Data Consolidation Meetings

Exit Meeting



Travel Home



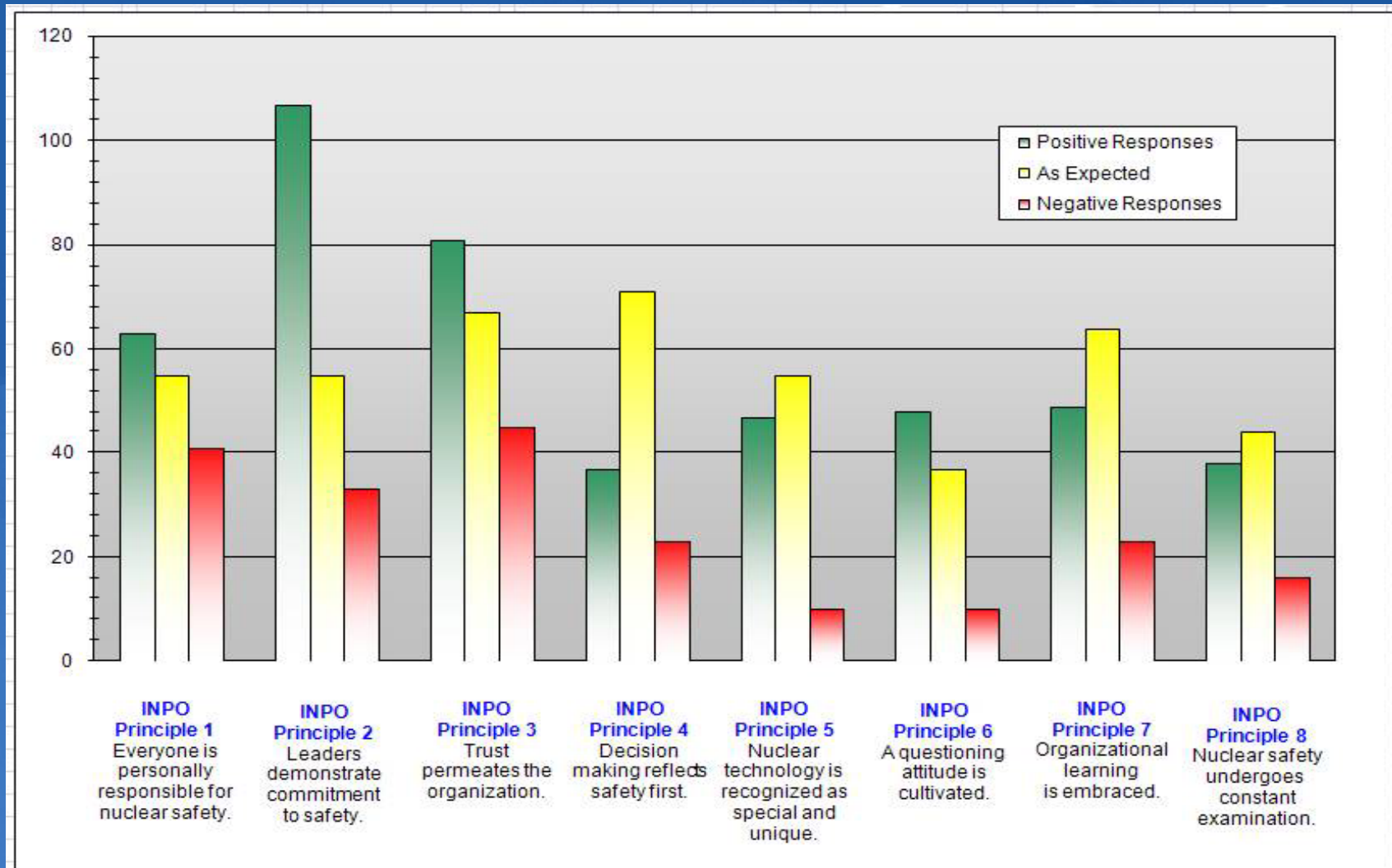
Typical Coverage Pattern

- 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