



Construction Reactor Oversight Process (cROP)

Performance Indicators

**Thomas Kozak
NRO/DCIP/CAEB**



Objective and Understandable

- PIs should be “fact based”, not subjective. They should be “what happened” not “what might have happened.”
- PIs should be capable of being clearly and unambiguously defined.
- PIs should be easily reportable and not require FAQs to understand.



Risk-Informed Thresholds

- PIs should allow users to differentiate performance by risk level or outlier status.
- PIs should remain “green” when variations in PI inputs are random.
- PIs should turn “white” only when they become non-random and provide an indication of declining performance.



Representative Sample

- PIs should be based on data that is easy to collect and report.
- PIs should not conflict with the data INPO collects.
- PIs with the same names used by NRC and INPO should not have different definitions.



Valid Indication of Performance

- PIs should measure outcomes or be clearly linked to outcomes.
- PIs should not measure intermediate conditions upstream of observable outcomes.
- PIs should reflect behaviors and outcomes within the control of management.



Verifiable Indication of Performance

- PIs should be based on data that is auditable.
- A single failure, or a single failure above baselines used in PIs should not cause a threshold to be crossed.



Appropriate Actions

- PIs should permit defining performance bands that are consistent with the risk bands assigned to inspection and be commensurate with the importance of crossing an inspection finding threshold.
- PIs should be transparent and understandable.
- PIs should provide actionable intelligence.
- PIs should not encourage inappropriate actions on the part of the licensee.



Timely Feedback

- PIs should be predictive or leading indicators.
- PIs should change slowly, not discontinuously, as performance changes, so management has time to act.
- PIs should reflect current, not past performance.



Risk-Informed and Predictable

- PIs should cover areas that inspections do not. If a PI is added, there should be a reduction in inspection hours in the area the PI covers.
- PIs should provide a benefit to safety that is commensurate with the burden added.
- PIs should provide a basis for modulating the NRC's inspection effort in the target area of performance.