

Engineering Graded Approach

Definition

Graded Approach: A flexible selection process that allows the project manager and lead engineer to choose a more or less rigorous application of project control or engineering elements. This flexibility permits customizing project control/engineering needs to the specific project and focus's the team's efforts.

The graded approach is a process for determining that the appropriate level of analysis, controls, documentation and actions necessary are commensurate with an item's or activities potential to:

- Create an Environmental, Safety or Health hazard.
- Incur a monetary loss due to damage, or to repair/rework/scrap costs.
- Reduce the availability of a facility or equipment.
- Unfavorably impact the public's opinion of Fermilab's/DOE's mission.

Risk Based Graded Approach: A "Graded Approach Worksheet" identifies and documents values for predetermined risk elements. Identification of a total risk score denotes the probability of any potential impacts on project deliverables cost / schedule baselines during project execution. Identification of project risk qualifies the possibility of baseline impacts (e.g., not meeting intended technical functions, internal or external schedule commitments, cost thresholds, et al)

Chapter 2 of the Fermilab Engineering Manual provides a Graded Approach Worksheet to aid in determining the needed level of control in each of the sections of the manual.