

Risk-Informed Decision Making

Workshop

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Benefits for Owners

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Traditional Decision Making.

A problem comes begging for a solution. We perform our analysis/design per FERC Guidelines, congratulate ourselves and our consultants, grimace at the conclusions, reread 18 CFR Part 12, re-read the appropriate FERC Guideline, hire a new consultant, do the analysis differently, and eventually proceed thru the internal and external approval process.

If the answer is not acceptable – look to sensitivity, etc.

Somewhere along the path, the questions arise: would this event ever happen? And what about the consequences?

What to do with those questions is the subject of this new quest – risk informed decision making.

New Ideas Emerge

- The “rote process” of arriving at a solution based on the Guidelines, handbook(s) to solve a problem assumes much and ignores much.
- Worst of all it provides a false sense of confidence – that there is but one solution.
- It does not answer the question of what is the likelihood of the “event ever happening”?
- **WHAT RISK ARE WE AVOIDING?**

Risk Assessment

- What is the likelihood of this event?
- What are the consequences if this event happened?
- Risk Assessment is emerging as a new method to evaluate a situation, solutions and consequences.
- Also known as a probabilistic or consequence driven system.

Owner's External Drivers

Tolerable risk, acceptable risk, as low as reasonably practicable risk are driven by multiple rationales:

- Regulatory requirements
- Public perception
- Environmental issues
- Stakeholders (regulators, community, special interest groups)

Owner's Internal Drivers

- Capital projects approval process
- Corporate risk management strategy and position
- Dam safety decision making process
- Relationship of the dam to corporate loss financing
- Business criticality
- Competition for funds
- Contractual obligations
- Organization, mission, goals and values.

Owner Risk Decision making is “already” in place

- Avoid the risk – decommissioning the dam
- Reduce (prevent) the probability of occurrence – structural measures, dam safety management activities (e.g. monitoring, surveillance, periodic inspections).
- Reduce (mitigate) the consequences – effective emergency evacuation plans and notification systems or relocate exposed populations.
- Transfer the risk – sell the asset
- Retain (accept) the risk – additional risk financing (i.e. insurance)

So, why this RIDM emphasis?

PSE's mission is to serve our customers and the communities by providing safe, dependable and efficient energy solutions.

Risk Informed Decision Making methodology and underlying philosophy support our corporate goals.

The RIDM methodology assesses economic [property damage, environmental impacts and costs associated with loss of use of the resource] and loss of life consequences. RIDM is applicable to less wide range of events – it promotes creative stewardship of our resources.

We support the recognition of risk by our regulators. It brings a sense of reality, a new dimension into our evaluation of our project's improvements, operations and quality of our decision making.