

Adequate Design for a Construction License

When is enough, enough?

Ryan Marcum June 20th, 2023 TRTR-IGORR Conference



Context

Construction License Approval

To gain approval for a construction license, the application (PSAR) requires enough initial design information to lay the groundwork to ensure the safety of people and the environment.

Lack of Adequate Design Cost

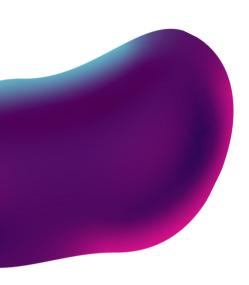
Each review cycle costs milestone delays and personnel churn for both the licensee and review staff.

Objective

Examine the causes of extended review cycles and propose a framework for improving the PSAR application process.

I thought I understood, but quickly realized that my hypothesis was WRONG.

(The Explorer in the Cave theory)



Applicant:

Inadequate grasp of how the applied design criteria translate into complete design bases.

Staff: Sometimes uses hyperbole to make a point.

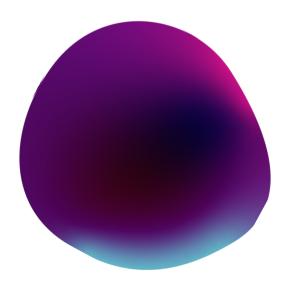
Incomplete design basis information which causes review comments that use exagerated language to drive home the point.

A New Schema Materialized

...which causes the licensee to answer in guarded, sometimes condescending statements that only worsen the situation.



This in turn exacerbates defensiveness and a decreases faith in the reviewer's grasp of the content.





Suggestions Applicant

1) Adapt design criteria to the unique needs of your reactor.

2) Apply only those criteria.

3) Describe the design bases systems derived from those criteria in enough detail for the uninitiated to understand coverage.

Staff

 Trust the comment to rest on its own merit without driving the point home.

2) Identify "just curious" questions as such.

Crucial Conversations

Have the %@&\$! Conversation

- Many conversations between Staff and Applicants can be informal/"preliminary".

- Review the questions before the chat, but don't bias your answers by writing them.

Meeting with the intent to primarily understand first and to be understood secondarily will alleviate most of the work to complete the review cycle.





That's All, Folks

Questions?

A sincere thank you to the Applicants and Staff who graciously supported my research.

(p.s. - Steve Reese is still handsome.)



