Future Meeting Plans, Schedule, Objectives, Project Management

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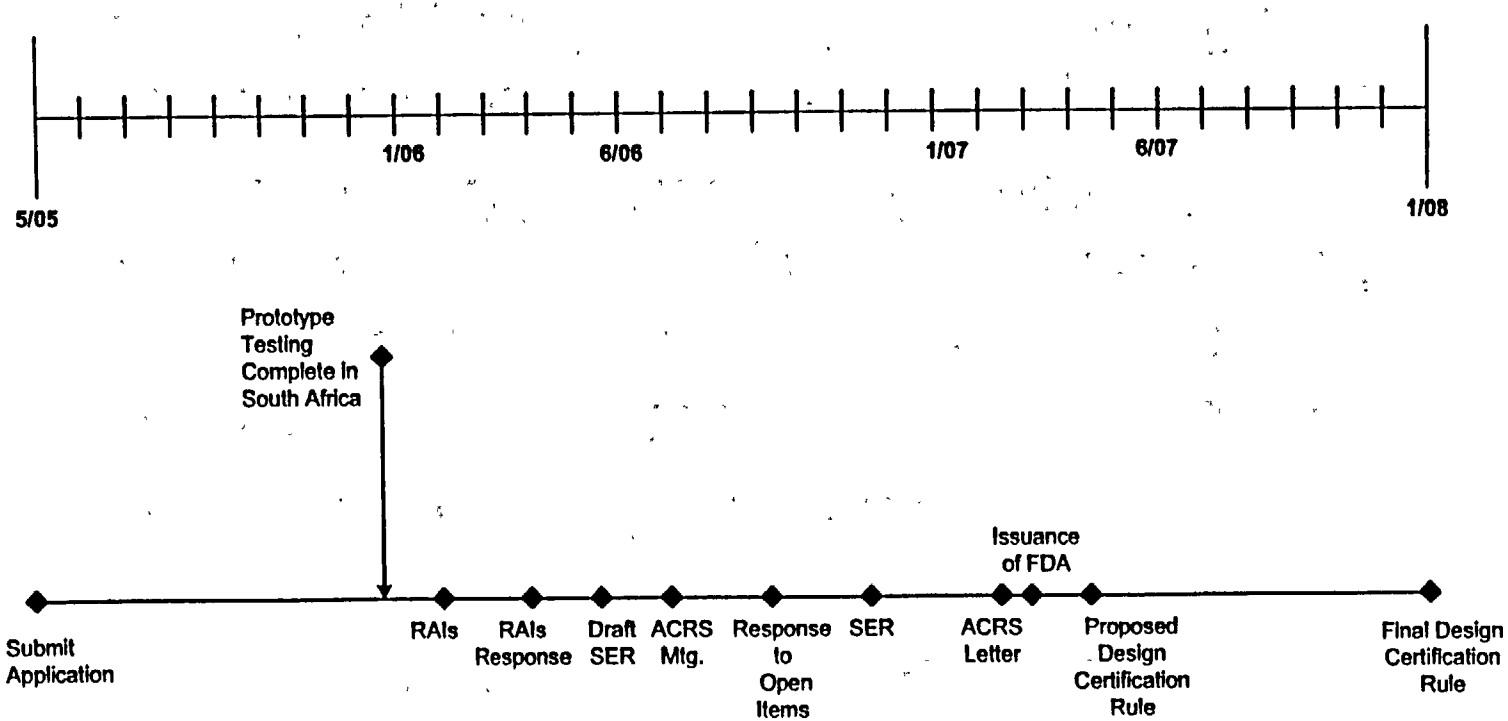

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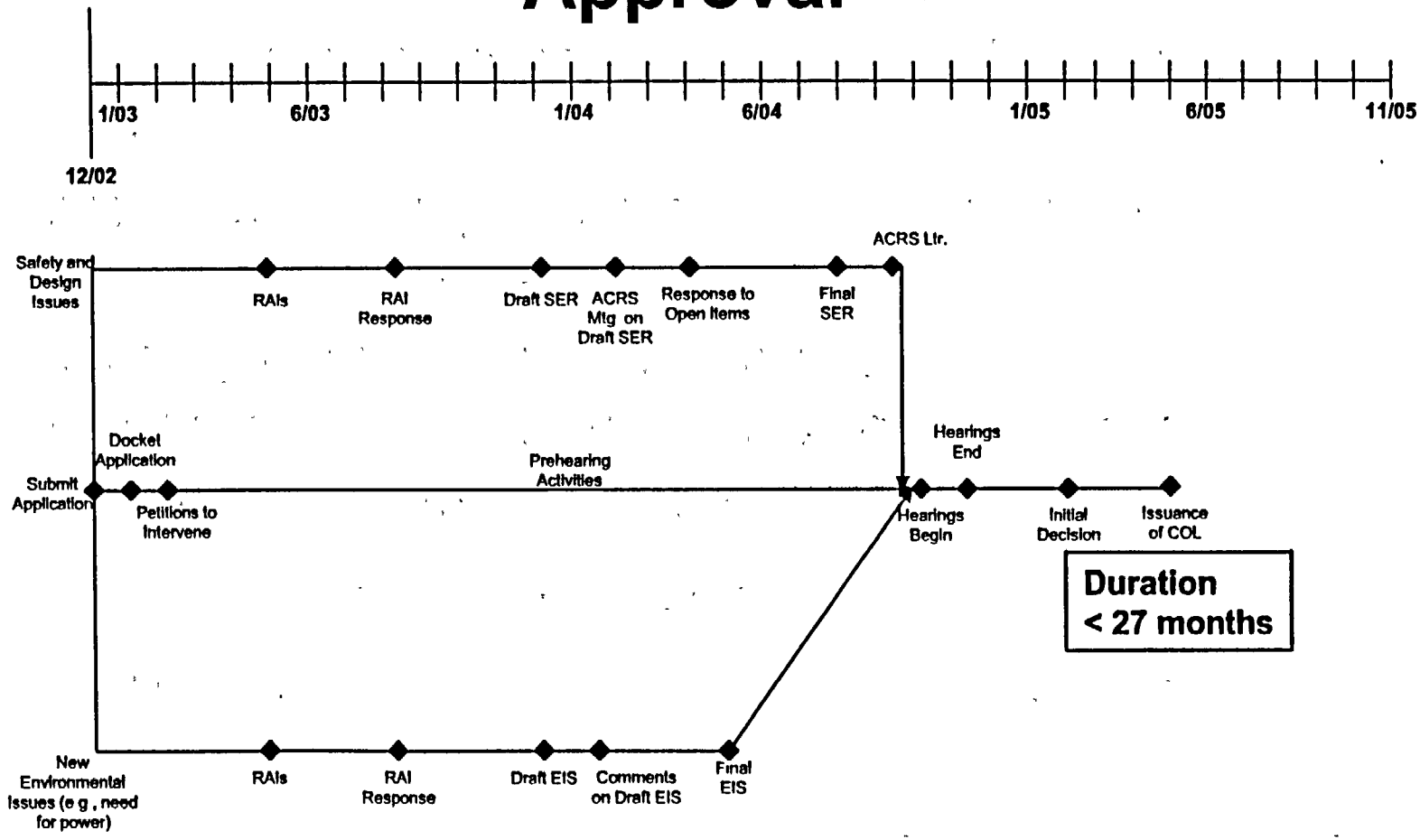

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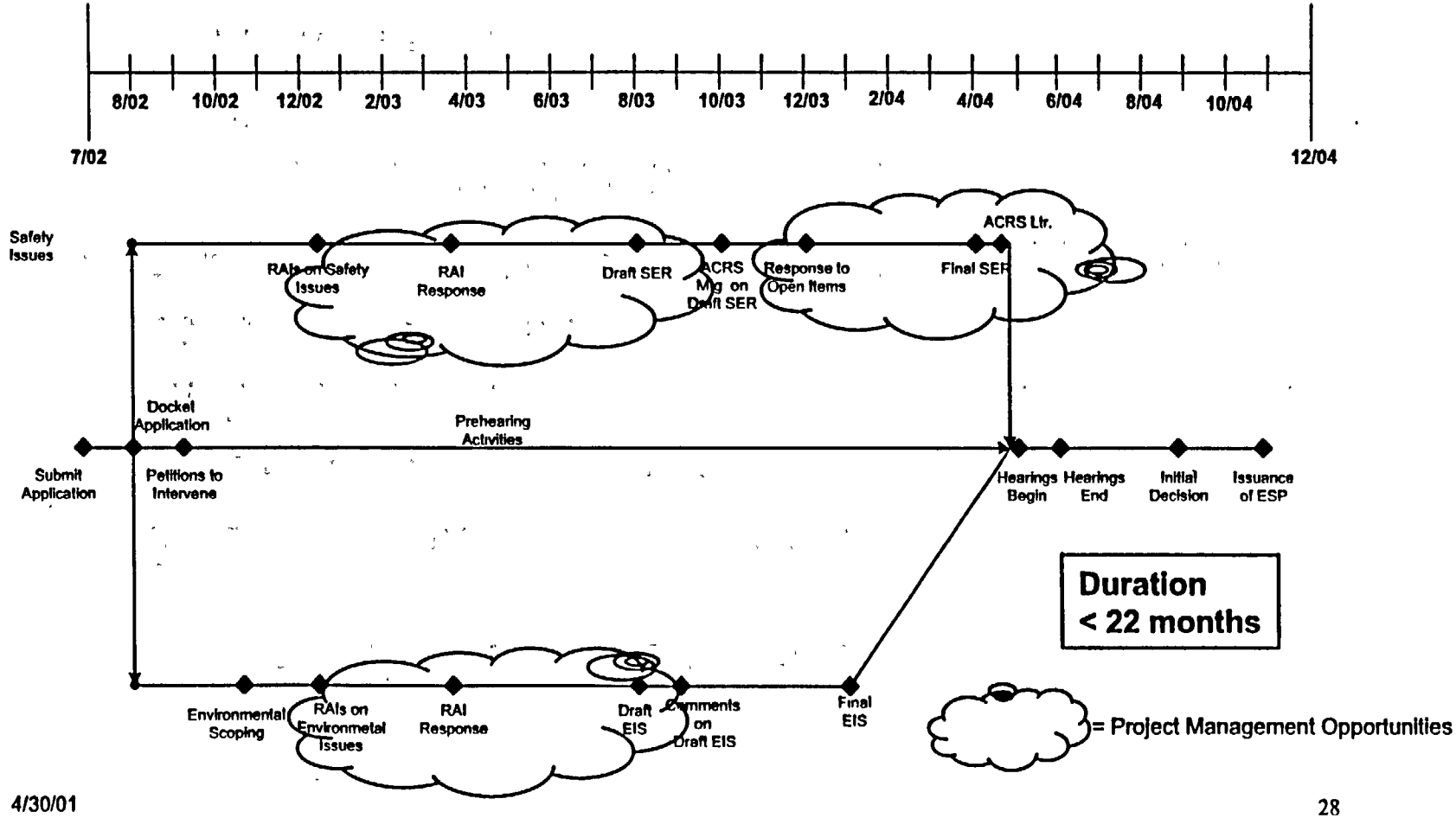

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PBMR Part 52 Process Plan

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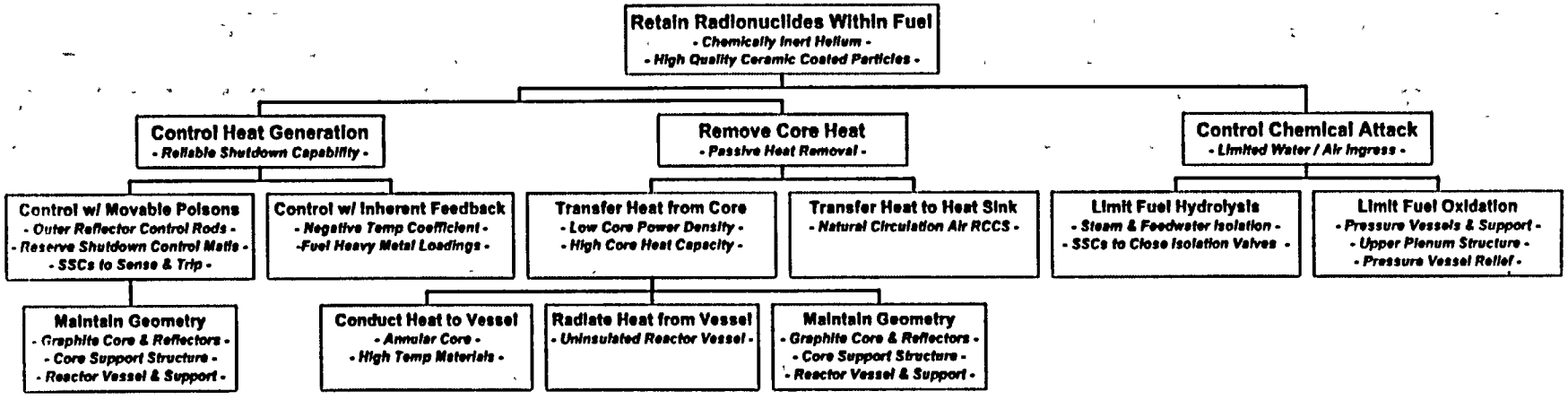

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Example: MHTGR Method for Equipment Safety Classification

- Identify radionuclide retention functions required for DBEs to meet 10CFR100 doses
- For each required function, select from candidate SSCs a set as safety related that over the spectrum of DBEs assures consequences are in compliance with 10CFR100

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  - providing extra attention for equipment that would be required to operate for accidents in order to protect offsite public
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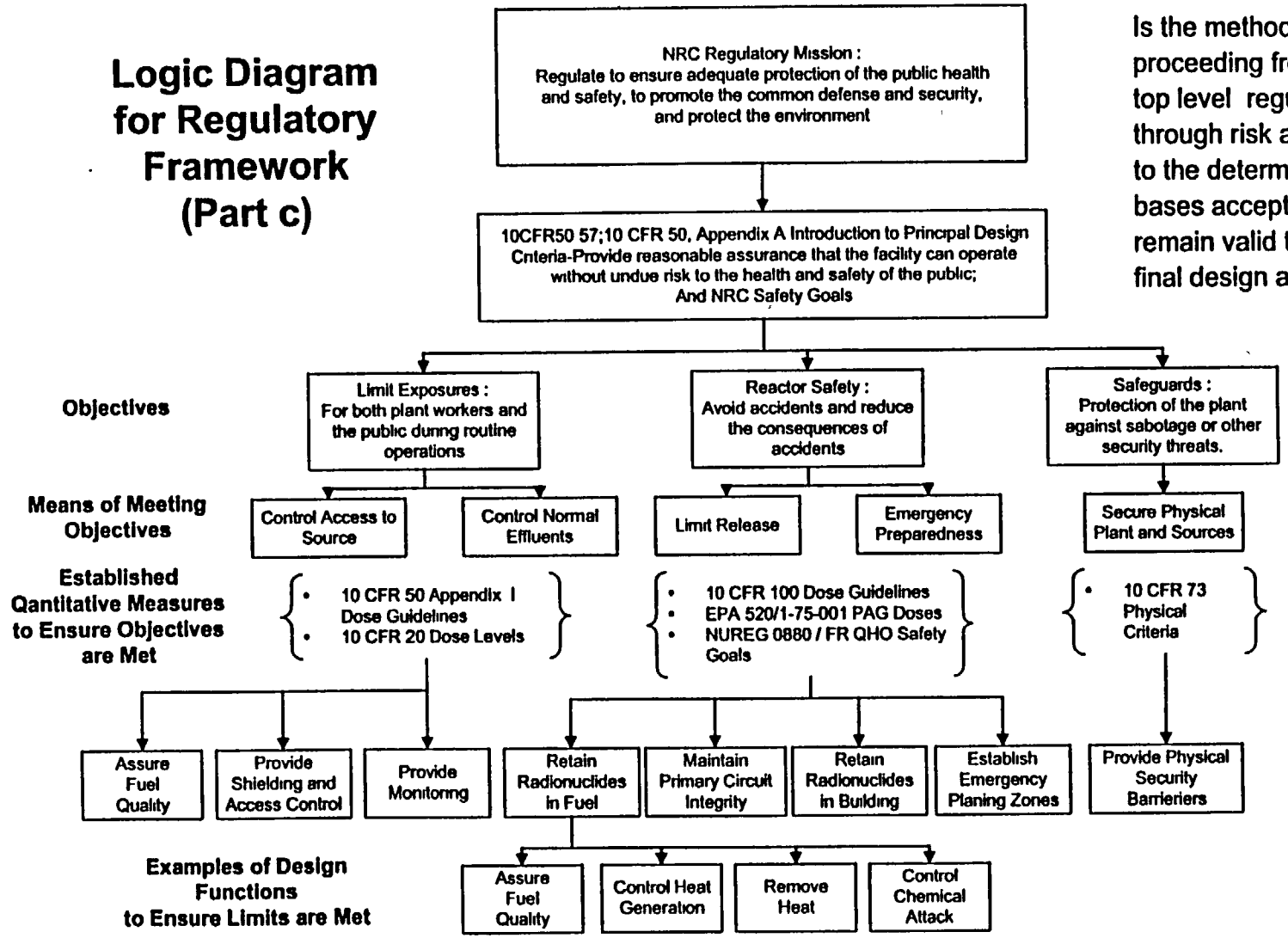
MHTGR Identified Safety Functions

Logic Diagram for Regulatory Framework (Part c)



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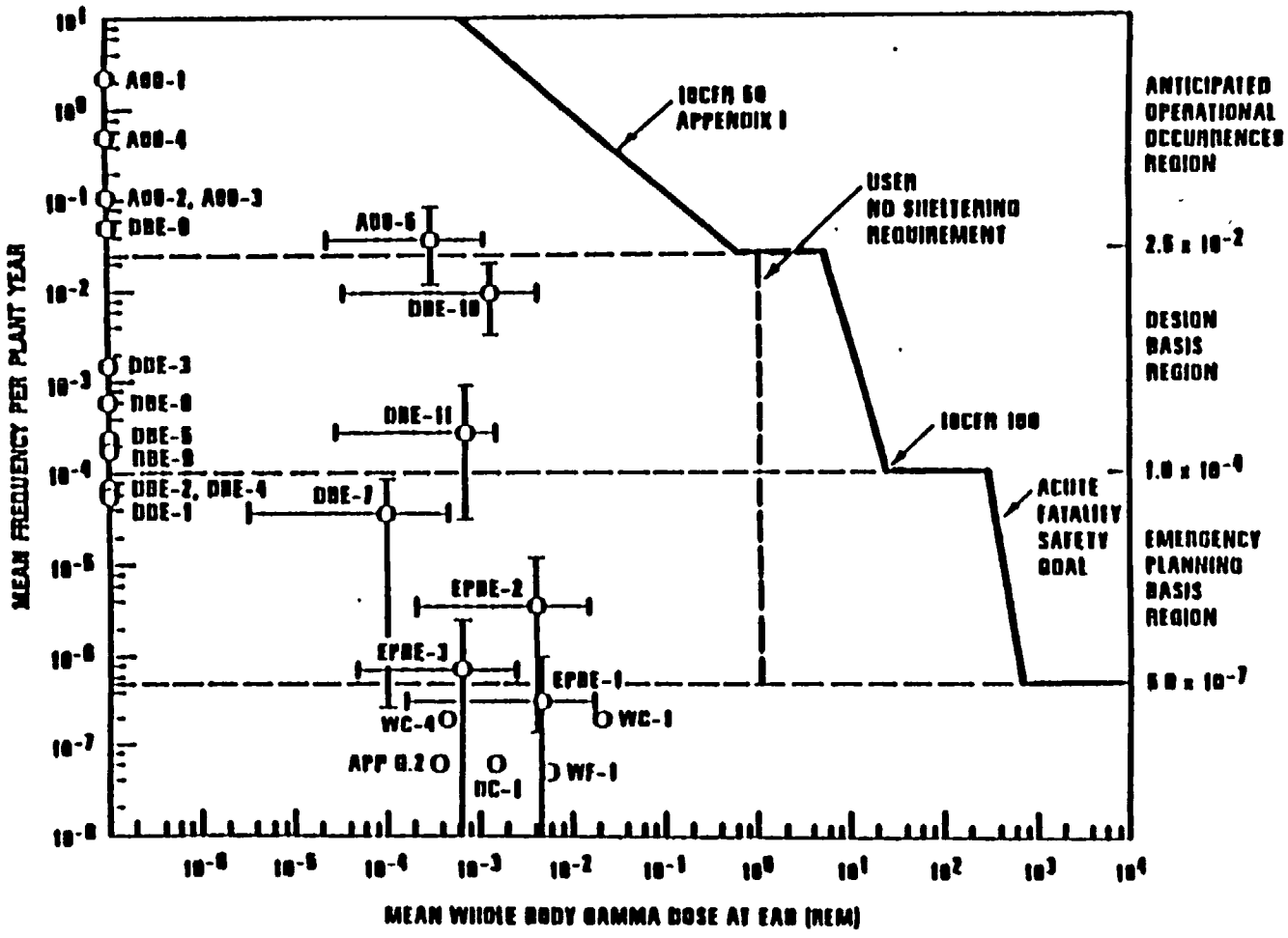

MHTGR Licensing Basis Event Selection Method (continued)

- Identify as DBEs families of events with upper or lower bound frequency in DBE region
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- Define region boundaries
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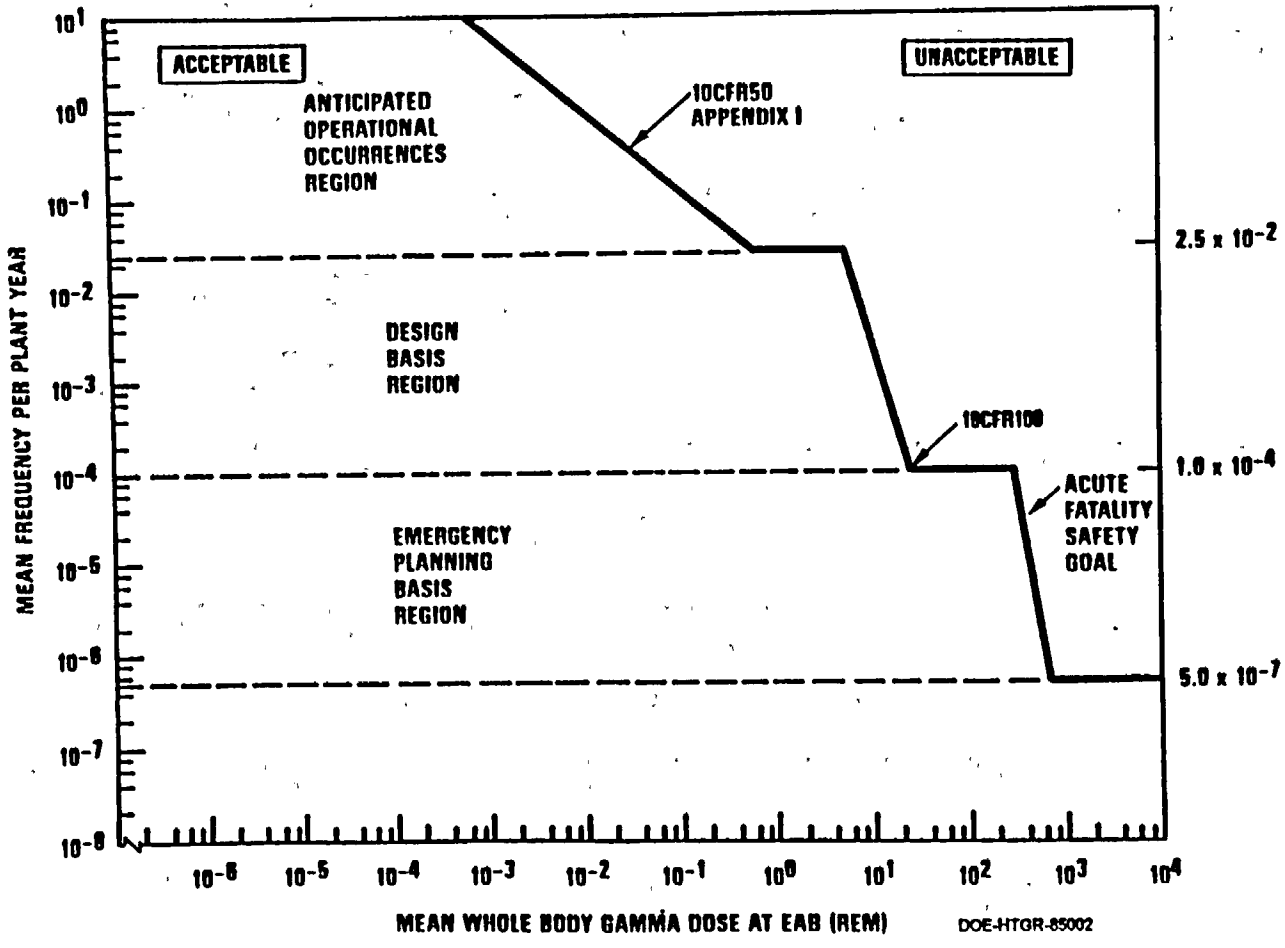
MHTGR Frequency Ranges



Can the relationship between criteria and acceptable ranges provide the acceptance goals for gas reactor approval?

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- Off-normal or accident events used for demonstrating design compliance with the Top Level Regulatory Criteria
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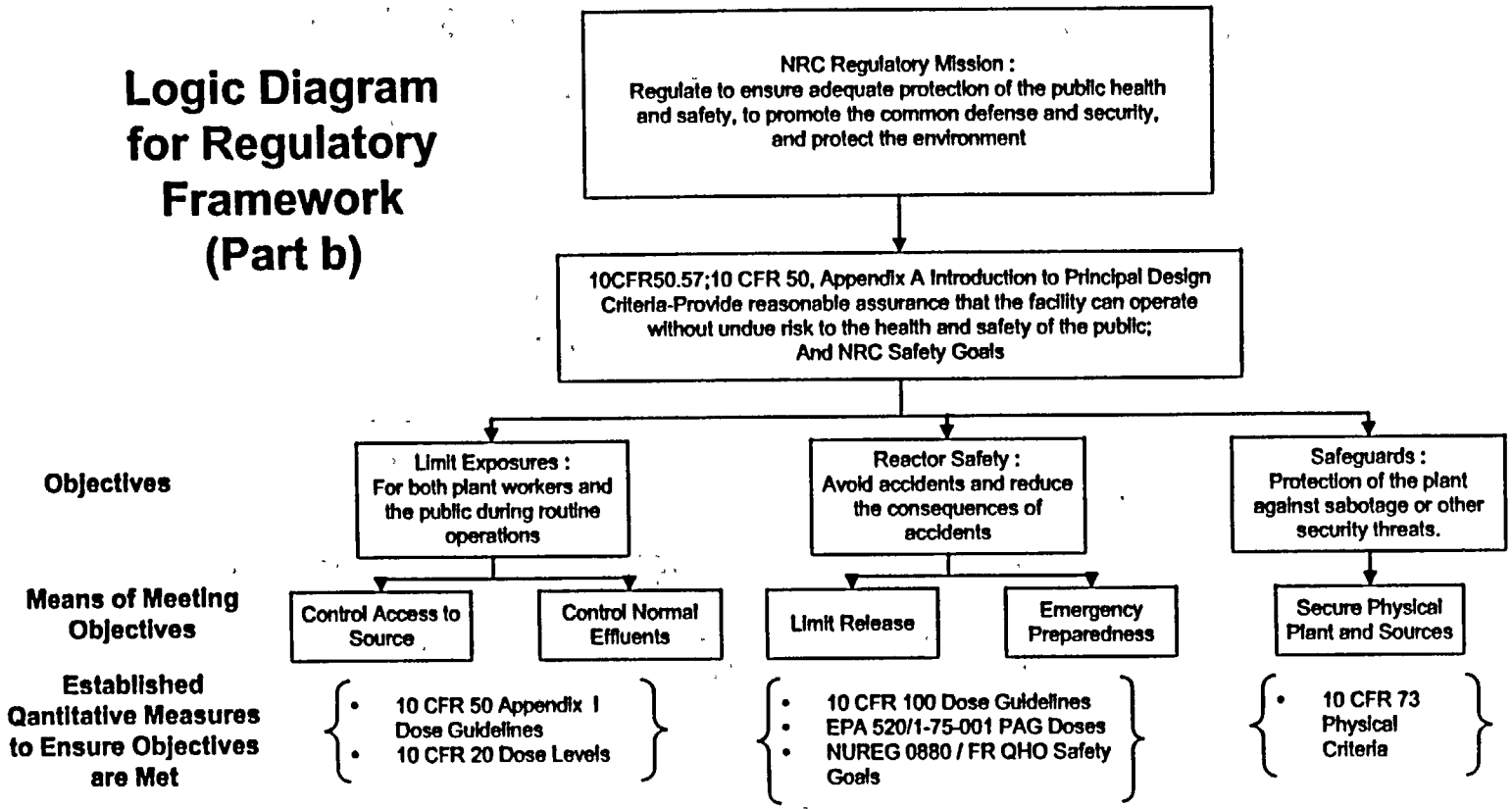
MHTGR Top Level Regulatory Criteria

Logic Diagram for Regulatory Framework (Part b)



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MHTGR Consequence and Risk Criteria

- Top Level Regulatory Criteria
  - Direct statements of acceptable consequences or risks to the public or the environment
  - Quantifiable
  - Independent of plant design
- Applicable Frequency Range
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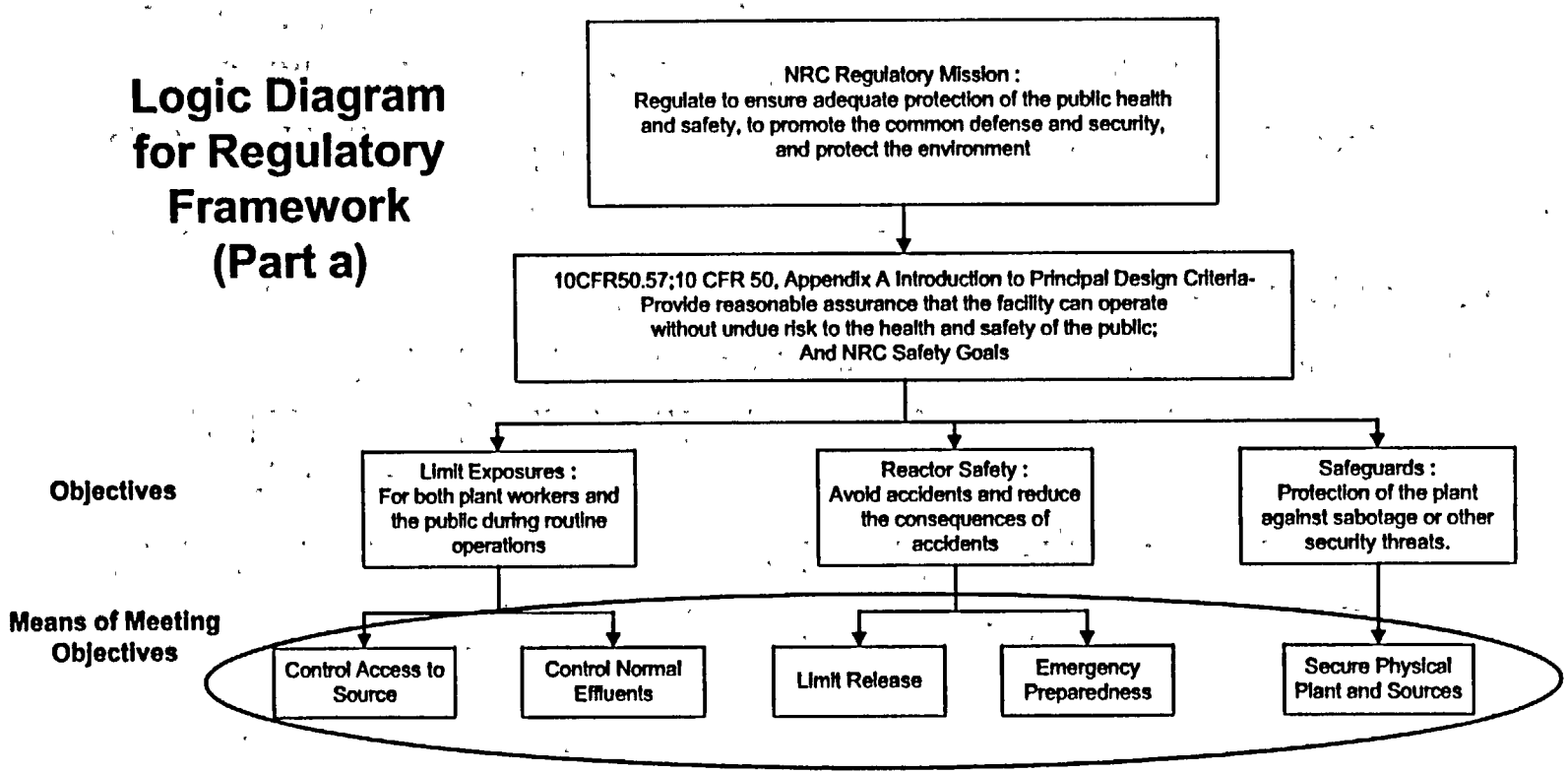
MHTGR Regulatory Mission Linkages

Logic Diagram for Regulatory Framework (Part a)



Are the regulatory mission linkages appropriate and acceptable for a HTGR design?

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- The DOE MHTGR program in the mid-80's utilized a "clean sheet of paper," integrated approach to their conceptual design
  - Utilized participant experience in PRA's of HTGRs
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- Build Upon MHTGR Approach
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Gas Reactor Regulatory Framework

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- PBMR Project Team
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PBMR Pre-application Meeting

April 30, 2001

NRC Headquarters, White Flint, Md.

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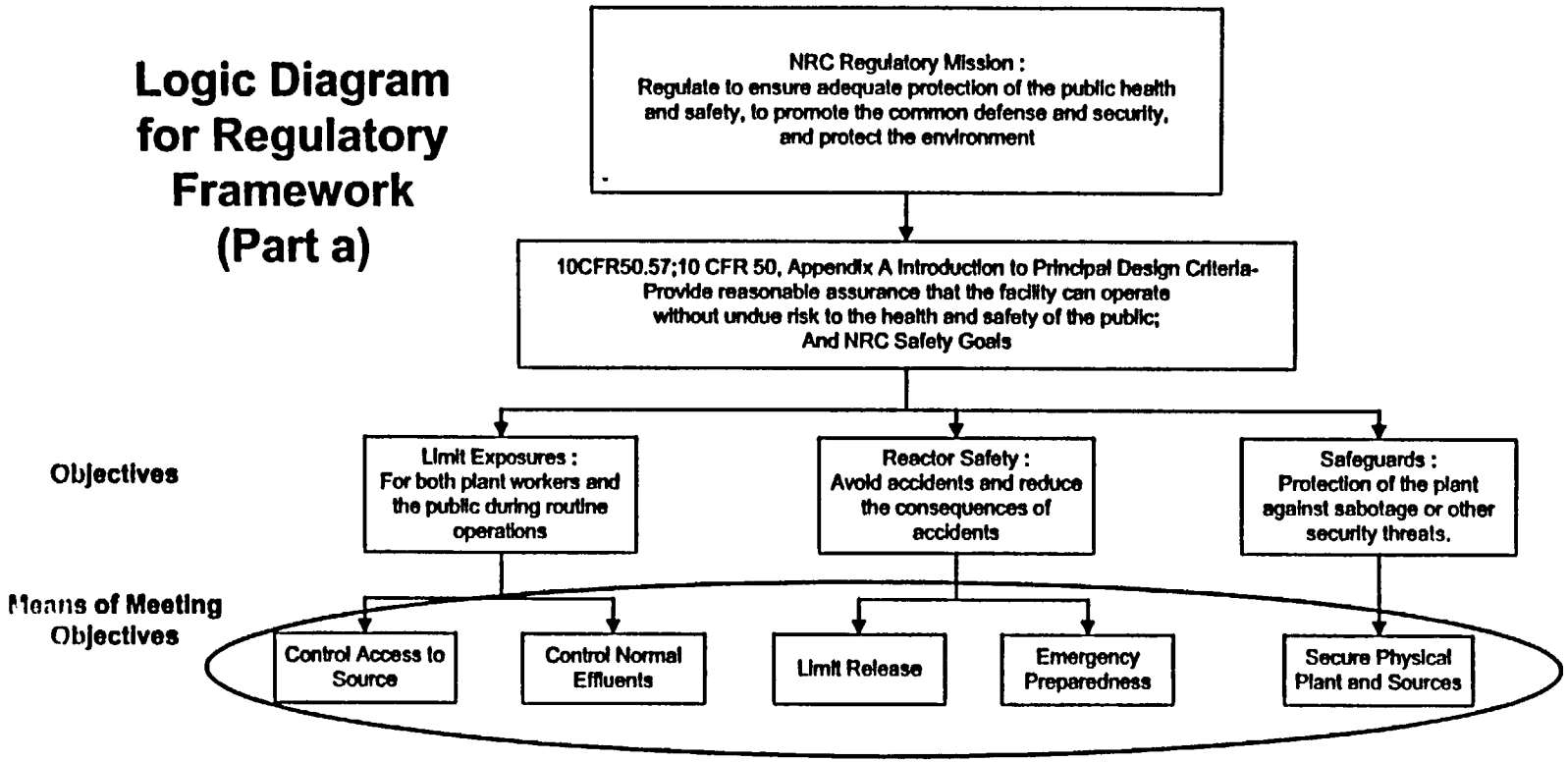

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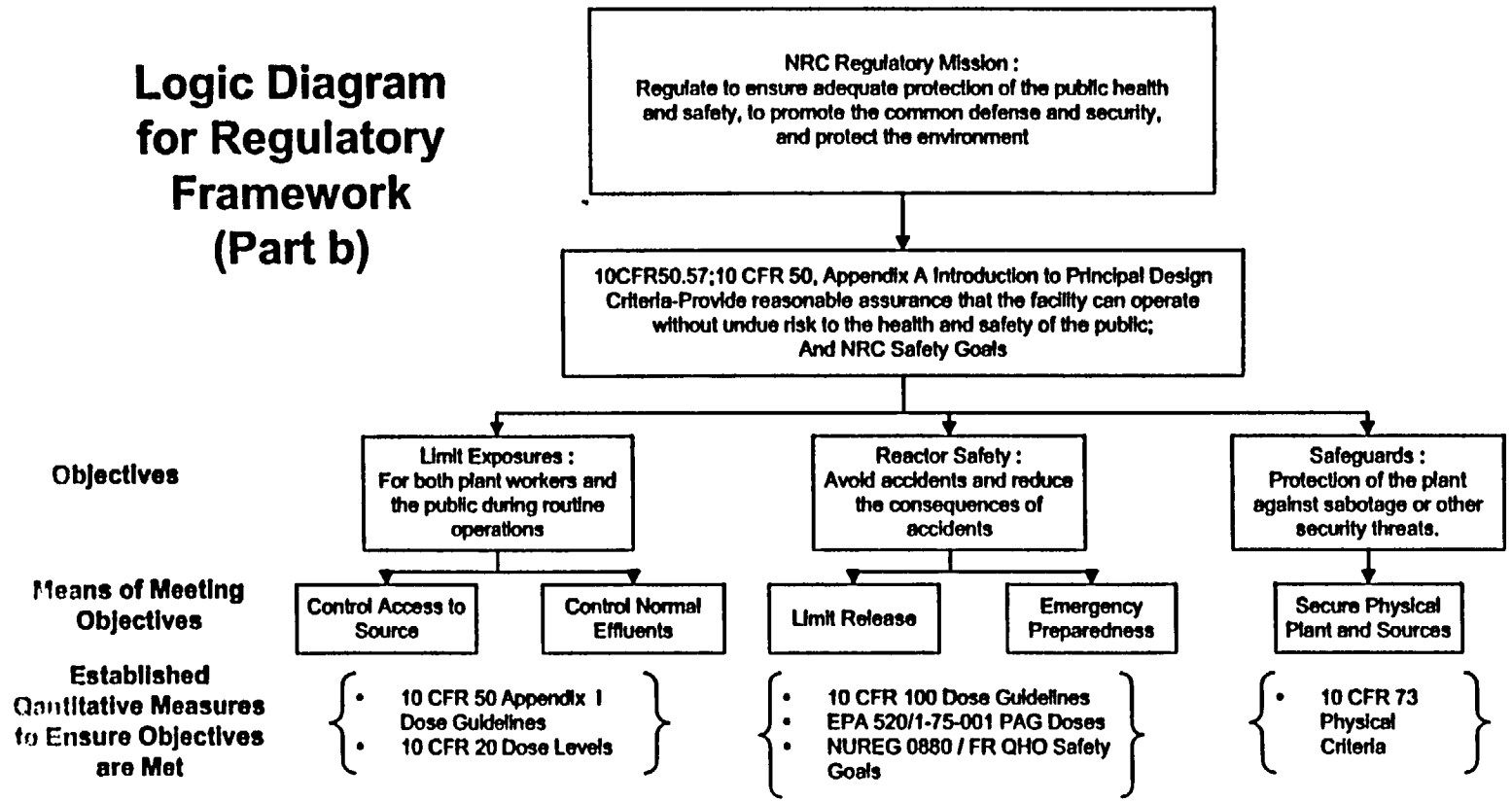

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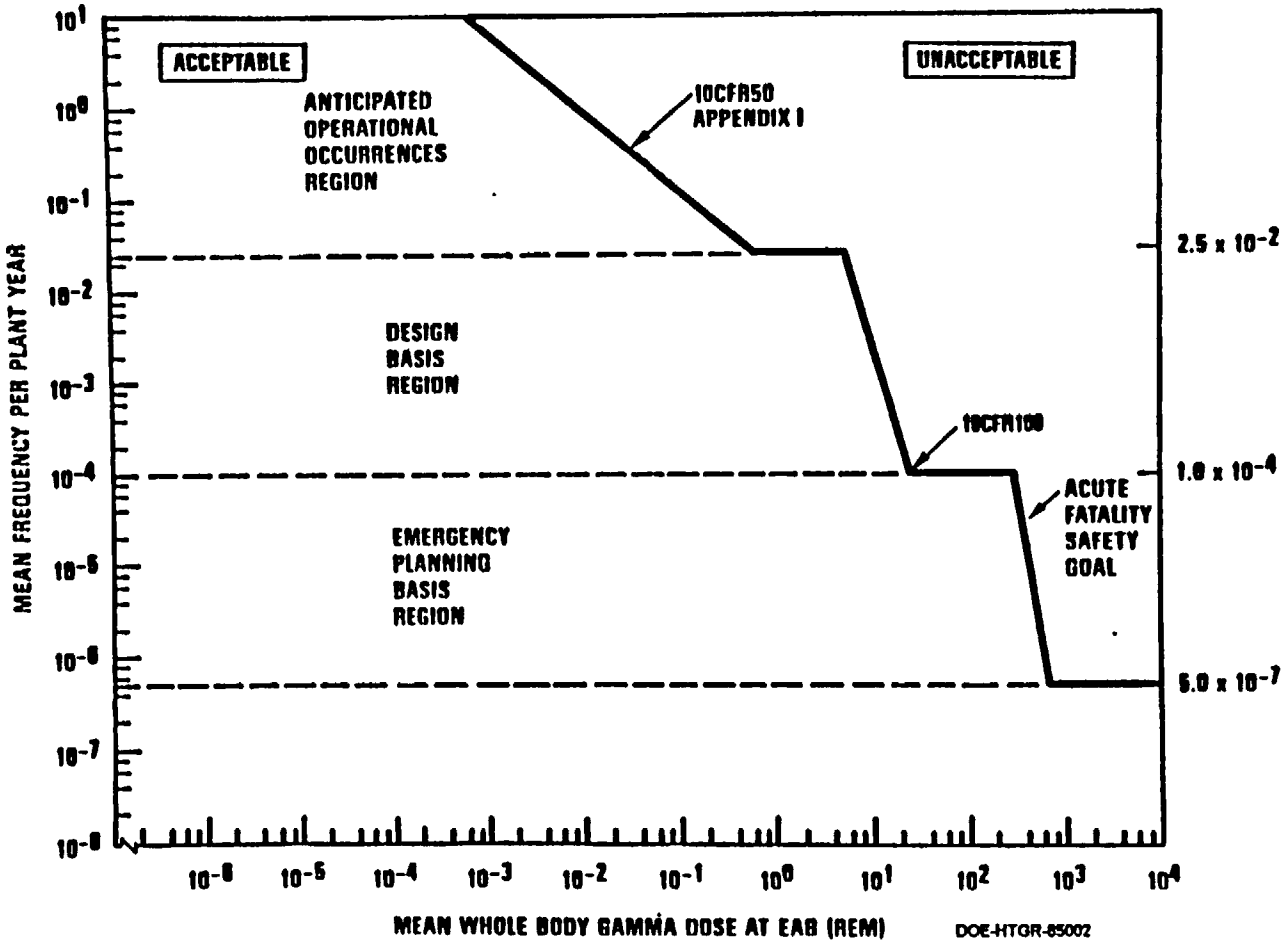

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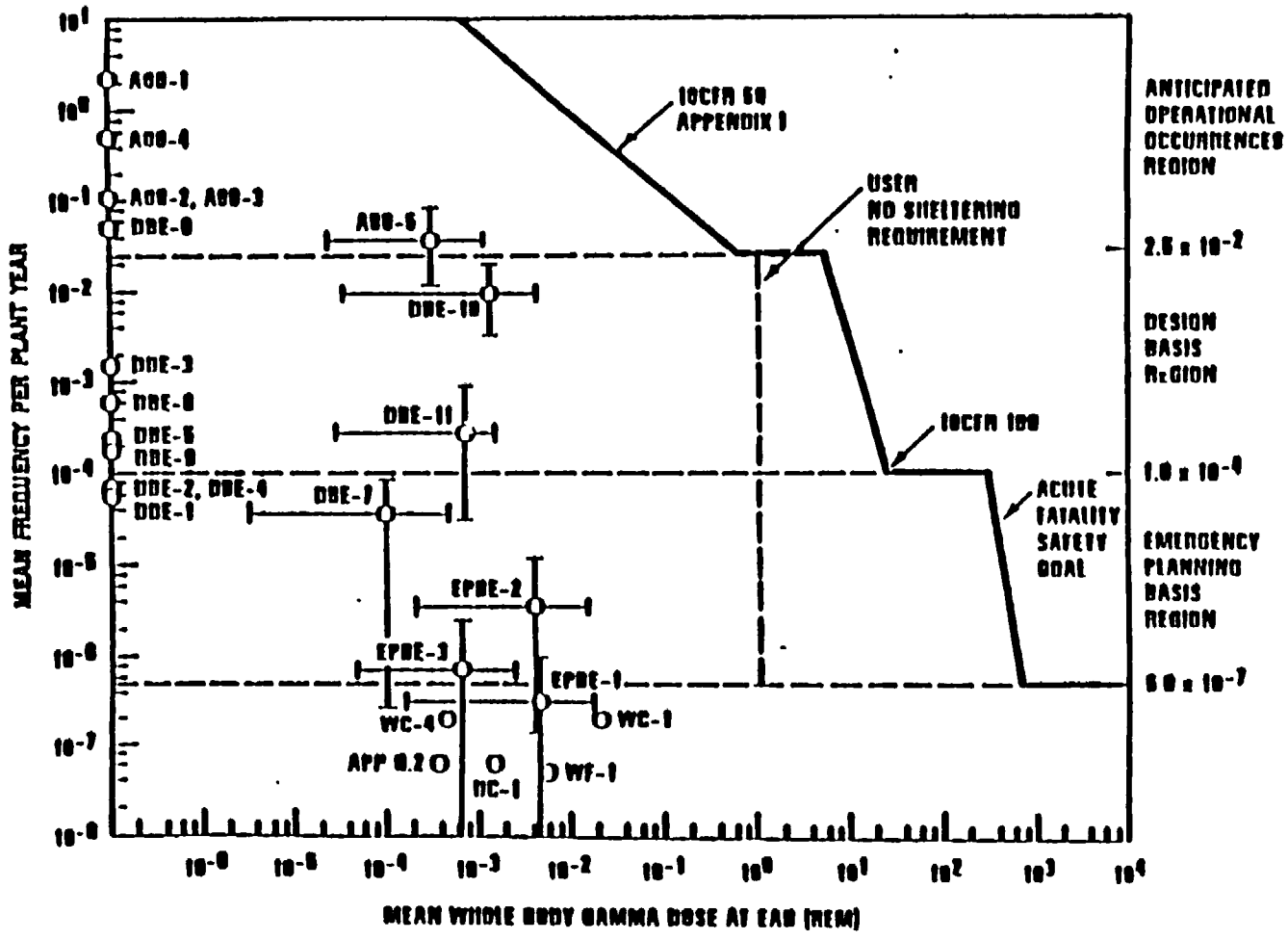

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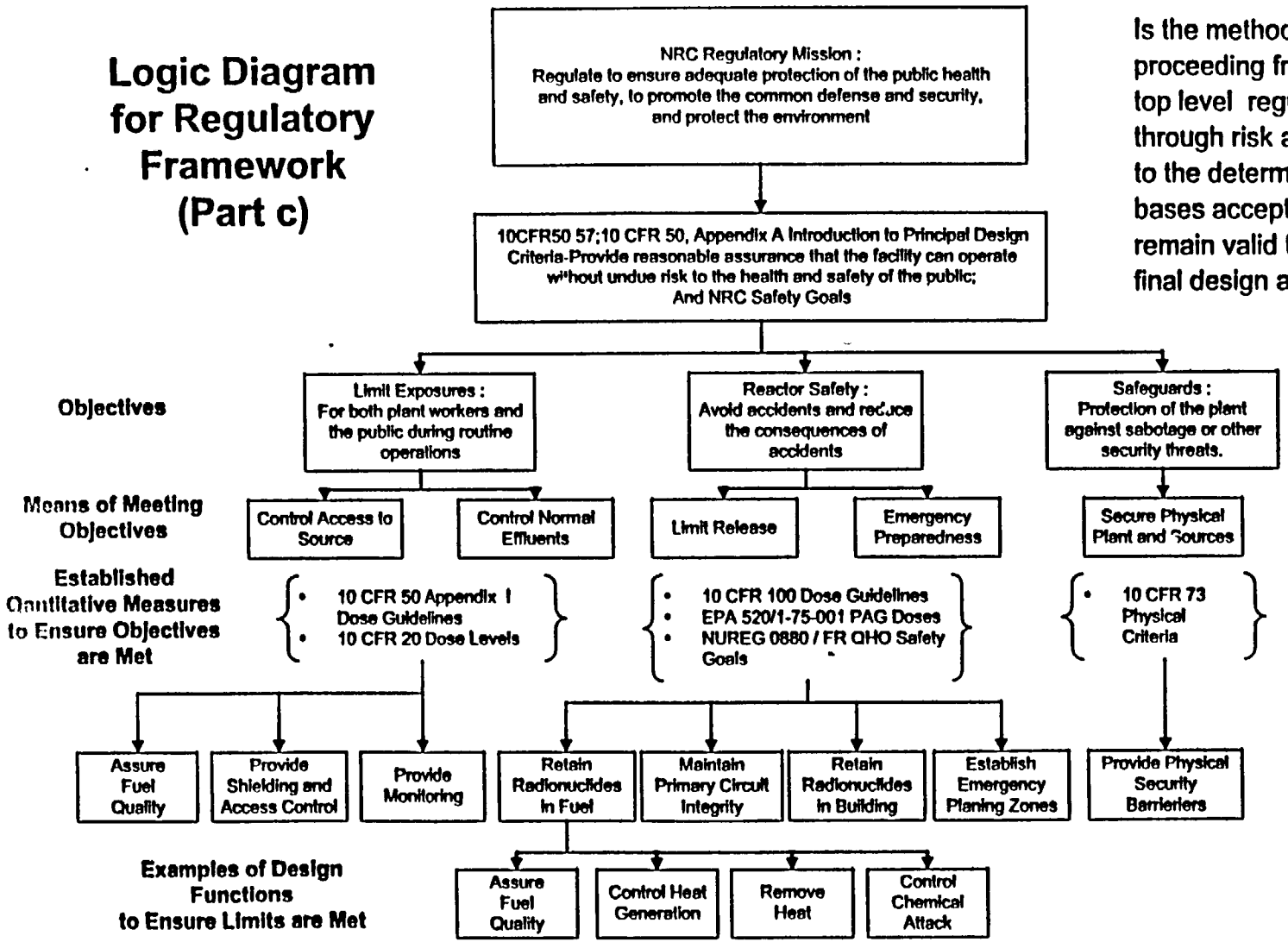

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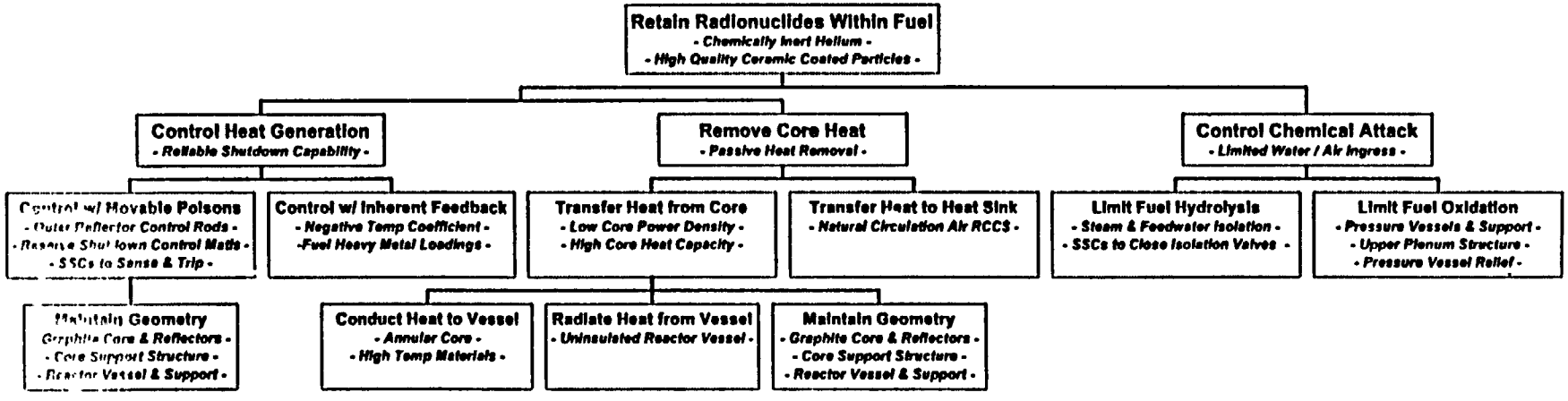

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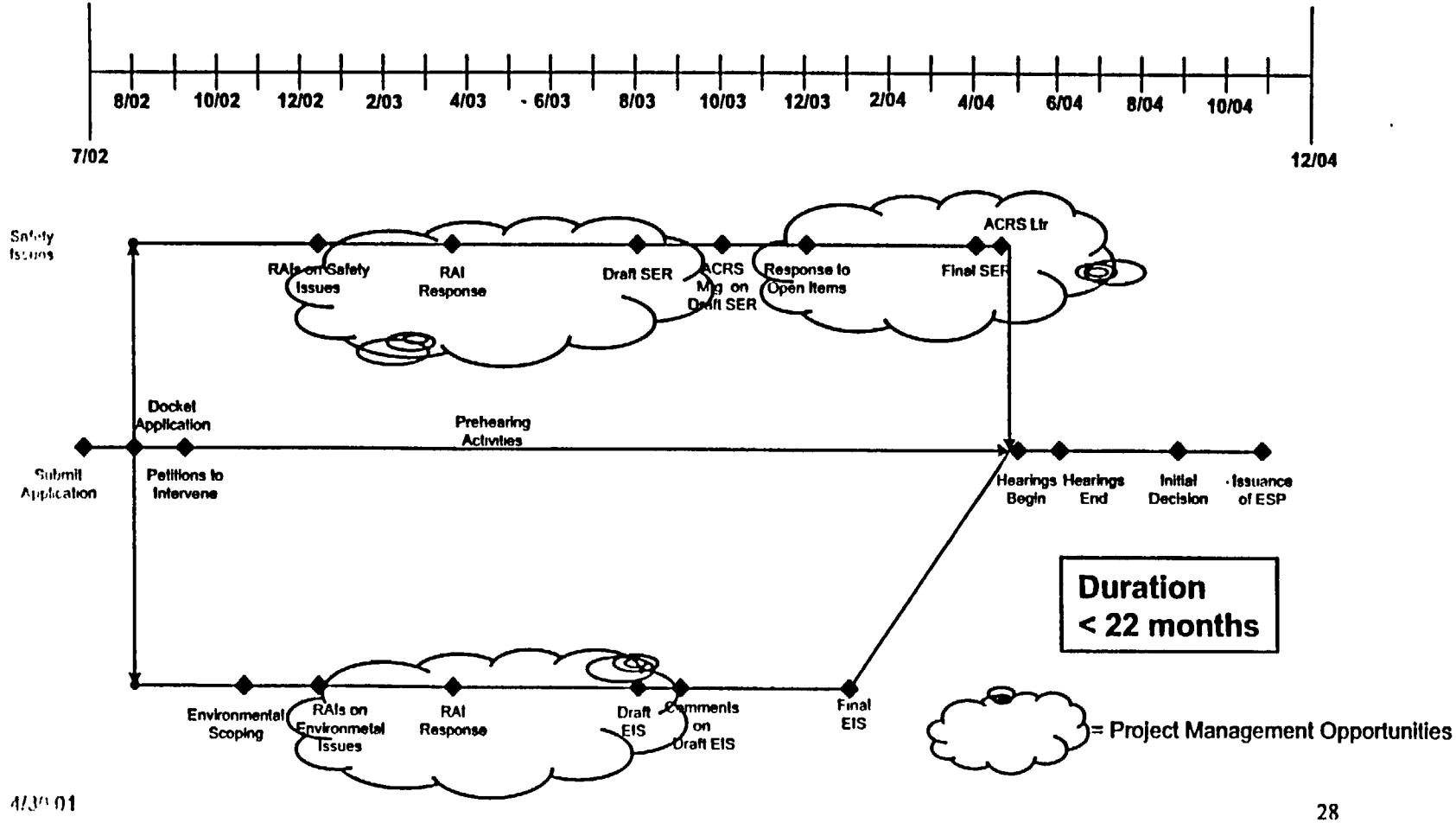

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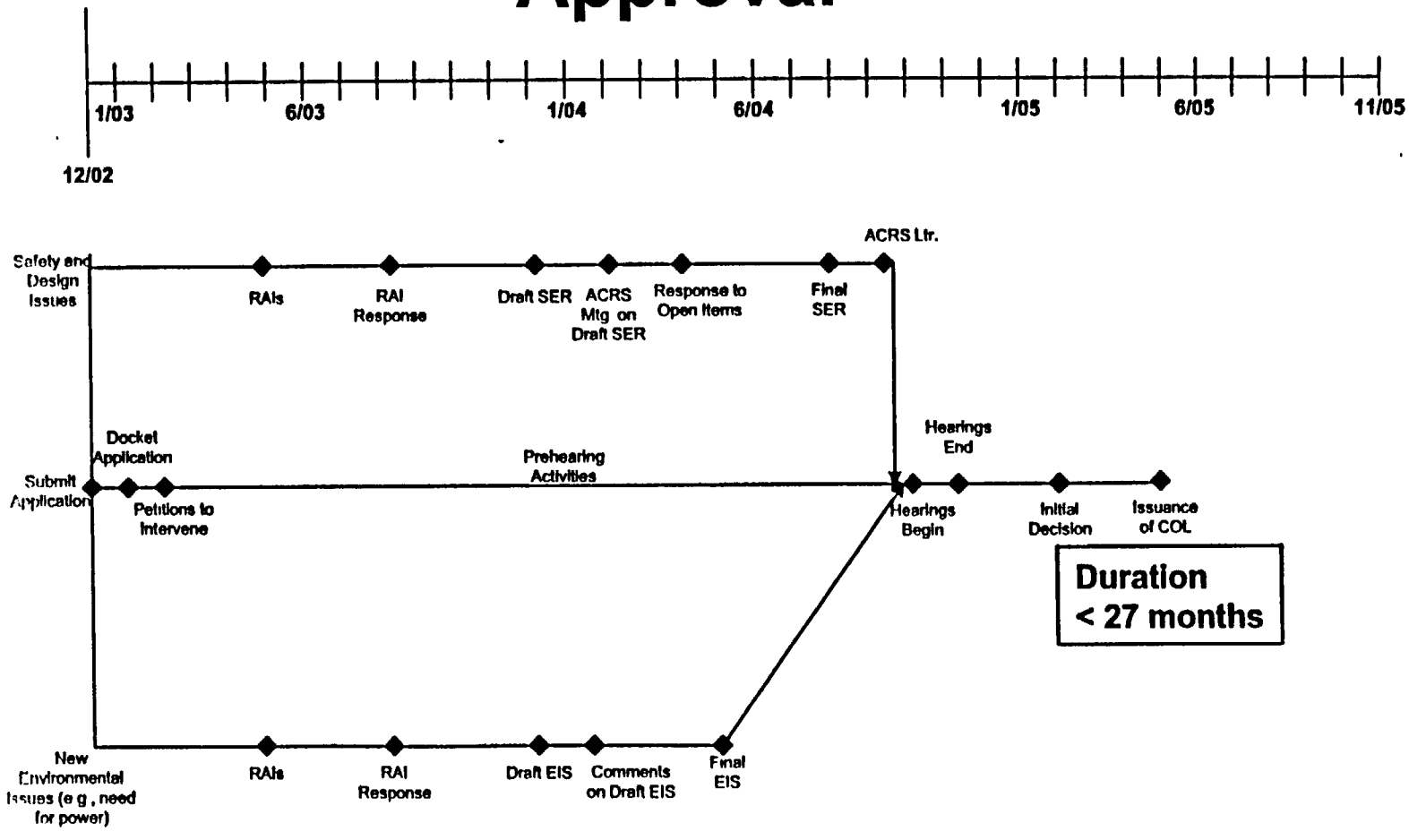

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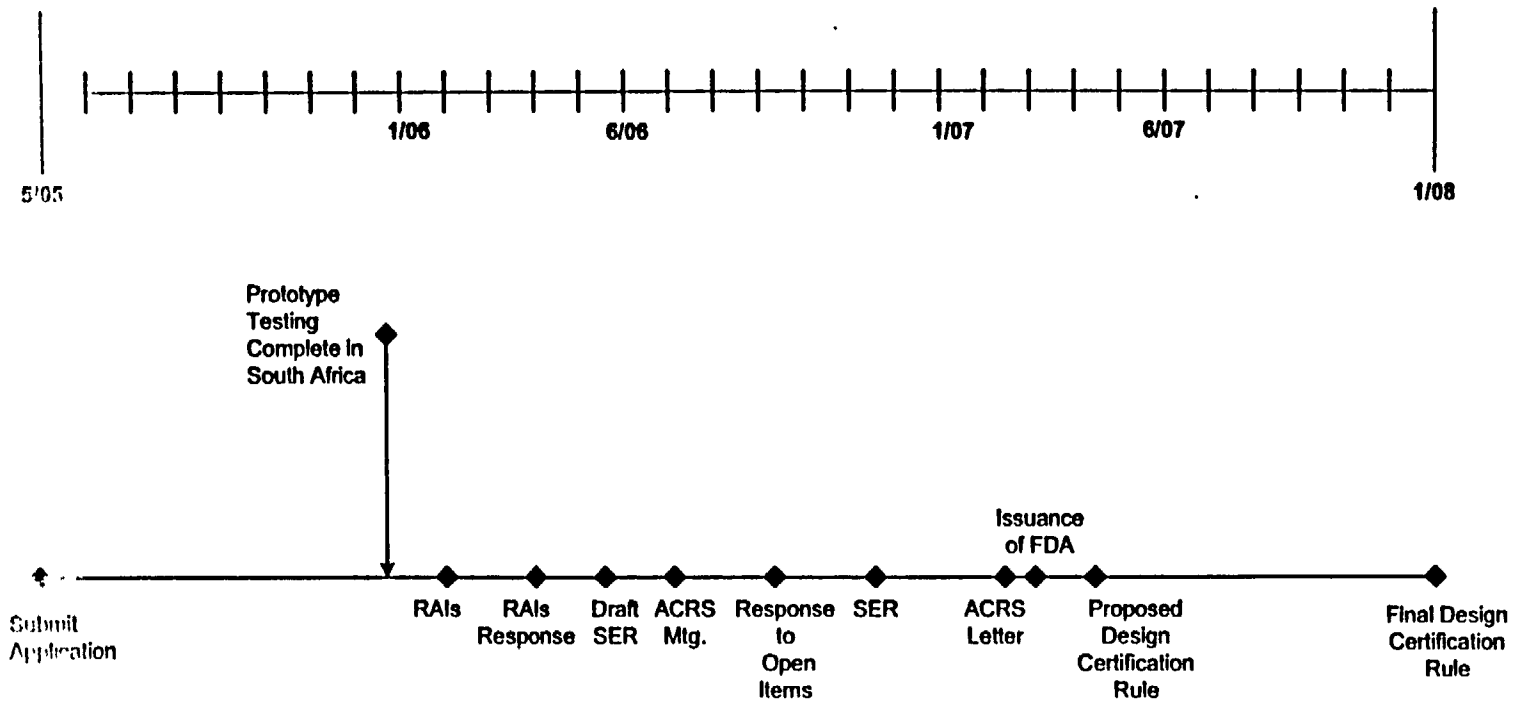

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