

# Examination Process

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Mike Ernstes

# Examination Process

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## Examiners

Principal Examiner - point of contact with facility for routine questions.

Chief Examiner - Lead examiner responsible for coordinating a particular examination.

# Examination Process

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## Principal Examiners

Gerry Laska: Catawba, McGuire, Oconee

Steve Rose: Farley, Hatch, Vogtle

Ron Aiello: Crystal R., St. Lucie, Turkey Point

Kathleen O'Donohue: Brunswick, Harris,  
Robinson

Lee Miller: North Anna, Surry, Summer

Tim Kolb: Browns Ferry, Sequoyah, Watts Bar

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## Chief Examiners

12/03 Turkey Point - Ron Aiello (Tim Kolb UI)

2/04 Harris - Kathleen O'Donohue (Gerry Laska UI)

2/04 Surry - Edwin Lea (Steve Rose UI)

4/04 Browns Ferry - Ron Aiello

4/04 Summer - Rick Baldwin

6/04 Sequoyah - George Hopper

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## Chief Examiners

6/04 Oconee - Kathleen O'Donohue

6/04 North Anna - Lee Miller

7/04 Watts Bar - Edwin Lea

8/04 St. Lucie - Rick Baldwin

8/04 Robinson - Kathleen O'Donohue

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## Planning Guide

- The Chief Examiners Planning Guide breaks the examination process into 77 tasks.
- The Chief Examiner consults with the assigned examiners and facility staff to establish a time line for completion of the various tasks.

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## Planning Guide

- The Planning Guide notes who is responsible and targets a completion date for each task.
- A key aspect of this process for all stakeholders is to ensure that resources are available to meet the agreed upon schedule.

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## Written Examination Results by Author

<u>Author</u>	<u>Average Score</u>	<u>FailureRate</u>
NRC	87.1%	5.9%
Facility	89.6%	4.4%

# Examination Process

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## Lessons Learned

- Licensee did not have enough time to review the written examination.
  - NRC did not deliver the examination materials early enough for a thorough review.
  - Facility did not have adequate resources available during the scheduled review time.
  - Initial review was not thorough resulting in many issues being identified just before the examination.

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## Lessons Learned

- Major overhaul of Operating Exams occurred during prep week
  - < Licensee did not have an understanding of the criteria for acceptable malfunctions.
  - < Licensee had not reviewed the exam materials prior to the prep week.
  - < NRC examiners had not reviewed the exam materials prior to the prep week.

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## Lessons Learned

- Licensee had only one individual to review the examination.
  - < Unable to work on written and operating test concurrently.
  - < Licensee had no one in reserve for prep week when the principal become unavailable.

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## Lessons Learned

- NRC was not specific in material request resulting in sending more than we needed.
- Adequate indexes were not provided with exam materials.
- No point of contact was available on security agreement.

# 25 Point Written??

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Calculated the binomial probabilities of scoring less than 80% for various test sizes and applicant knowledge.

Assumed three different types of applicants, ones that could correctly answer 90%, 85% and 80% of the questions correctly.

# 25 Point Written??

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## Failure Rates

% Knowledge	100 pts.	75 pts.	25 pts.
90	.08%	.32%	3.5%
85	6.4 %	8.9 %	17.1 %
80	45.1 %	43.1 %	38.3 %