

# Licensed Operator Medical Requirements and Guidelines



Fred Guenther, Senior Examiner  
Operator Licensing and Human Performance  
Branch  
Division of Inspection and Regional Support  
Office of Nuclear Reactor Regulation  
[[sxg@nrc.gov](mailto:sxg@nrc.gov) // 301-415-1056]

# Preview

---

- The Bottom Line
- Regulatory History
- Regulatory Requirements
- Guidance Documents
- Other Documents and References
- Responsibilities
- Diagnosis / Prescription
- Review

# The Bottom Line

---

An operator's general health and medical condition must not...

- ... adversely affect the performance of assigned operator job duties ...
- ... or cause operational errors endangering public health and safety.

# “Ancient” History

---

- 1956 - Part 55 created
  - Exams & reports every 2 years
  - Documented on Form AEC-396
  - Licensees report disability w/in 15 days
- 1963 - Part 55 rule change
  - Disqualifying conditions listed in the rule
  - License conditions may accommodate deficiency
- 1983 - KMC, Inc., petitioned to simplify the review of applicant medical status
- 1987 - Part 55, pretty much as we know it today

# The 1987 Part 55 Rule Change

---

- ❑ Subpart C created
- ❑ RG 1.134 endorsed ANSI/ANS-3.4-1983, with exceptions
- ❑ When applicants (new or renewal) meet medical requirements, facility licensees will certify health on simplified Form 396
- ❑ Medical exams remain every 2 years, but license term stretched to 6 years
- ❑ Facility licensees must retain documentation
- ❑ All unusual cases must be presented to the Commission with evidence and recommendation
- ❑ Facility licensees must report disabilities within 30 days of learning diagnosis

# “Modern” History

---

- 1991 - Part 55.53(j & k) added fitness-for-duty as a license condition
- 1998 - RG 1.134, Revision 3, endorsed ANSI/ANS-3.4-1996, with exceptions
- 2005 - NRC Form 396 revised during triennial OMB clearance update

# NRC Form 396: Then and Now

---

- ❑ Pre-1987: “Certificate of Medical History”
- ❑ Post-1987: “Certification of Medical Examination by Facility Licensee”
- ❑ 2005 Revision
  - Added more common conditions, including “take medication as prescribed”
  - Response to enforcement action
  - Added instructions
  - No feedback during public comment period
  - Special reports not required; update conditions during next license renewal

# Why “Take Your Medicine?”

---

- ❑ Many people (not just operators) stop taking their meds when they feel better or because of unpleasant side-effects
- ❑ NRC sensed that operators did not understand their responsibility regarding fitness for duty
- ❑ A Region II enforcement case highlighted the issue
- ❑ Lots of internal debate and disagreement
- ❑ No comments on the OMB clearance information collection or the Form 396 changes
- ❑ Generally, considered innocuous

# Regulatory Requirements

---

- Part 55, Subpart C - Medical Requirements
  - 55.21 - Examinations
  - 55.23 - Certification
  - 55.25 - Incapacitation
  - 55.27 - Documentation
- 55.31(a)(6) & (c) - Provide certification & additional information
- 55.33(a)(1) & (b) - Disposition: health & conditional licenses
- 55.53(d), (g), (i), (j), & (k) - License conditions
- Pete will discuss many of these in more detail later during the enforcement session

# Guidance Documents

---

- ❑ ANSI/ANS-3.4
- ❑ Regulatory Guide 1.134
  - Revision 1 endorsed 3.4-1976, w/ clarifications
  - Revision 2 endorsed 3.4-1983, w/o exceptions
  - Revision 3 endorsed 3.4-1996, w/ exceptions
  - All versions are in use
- ❑ ANSI/ANS-15.4-1988 (non-power reactors)
- ❑ NUREG-1021 (Examination Standards)
  - ES-202, Preparing Initial License Applications
  - ES-204, Eligibility Waivers
  - ES-605, Maintaining and Renewing Licenses
- ❑ NUREG-1262 (1987 Rule Questions 78 – 94)

# Other Documents & References

---

- NRC Information Notices (INs)
  - IN 04-20, "Recent Issues Associated With NRC Medical Requirements for Licensed Operators;" November 24, 2004
  - IN 94-14, "Failure to Implement Requirements for Biennial Medical Examinations and Notification to the NRC of Changes in Licensed Operator Medical Conditions;" February 24, 1994, and its Supplement on April 14, 1997
  - IN 91-08, "Medical Examinations for Licensed Operators;" February 5, 1991
  
- NRC Operator Licensing Program Web Page
  - <http://www.nrc.gov/reactors/operator-licensing.html>
  - Links to all applicable INs
  - Link to OL Program Feedback Summary (Gen.19-28)
  - Link to "Contact Us About Operator Licensing"

# Responsibilities: The Operator

---

- ❑ Be familiar with the applicable regulations and medical requirements
  - Part 55, "Operators' Licenses"
  - Part 26, "Fitness For Duty Programs"
  - ANSI/ANS-3.4
- ❑ Report changes in medical status to the facility licensee
- ❑ Comply with doctor's orders and license conditions
- ❑ Do not perform work when physically or mentally impaired

# Responsibilities: The Doctor

---

- ❑ Be familiar with the physical and mental demands of the operators' job duties
- ❑ Evaluate the operators' mental and physical fitness for the job vis-à-vis the health requirements and disqualifying conditions outlined in ANSI/ANS-3.4
- ❑ Recommend restrictions, as appropriate, to compensate for disqualifying conditions
- ❑ Administer practical tests, as necessary, to demonstrate complete capacity to perform duties and justify a waiver of the requirement

# Responsibilities: The Facility

---

To quote ANSI/ANS-3.4, Section 3.1 ...

“The primary responsibility for ensuring that on-duty personnel are medically and psychologically capable of fulfilling their duties rests with the facility licensee.”

# Responsibilities: The Facility

---

- ❑ Ensure that the operators and doctor fulfill their responsibilities
- ❑ Report work performance, attendance, and behavioral changes to the physician prior to examinations
- ❑ Evaluate medical examination results and concur in doctor's recommendations
- ❑ Ensure that impaired operators are not permitted to stand watch without adequate compensation
- ❑ Certify applicants' health on Form 396, and include medical evidence to support any recommended conditions
- ❑ Report permanent physical or mental conditions that fail to meet ANSI/ANS requirements on Form 396 with medical evidence within 30 days
- ❑ Document and maintain medical records (for inspection)

# Responsibilities: NRC

---

- ❑ Review and approve (or deny) license applications and restrictions
- ❑ Implement the inspection and enforcement programs to ensure that...
  - Facility medical programs comply with regulations and requirements
  - Operators comply with their license conditions/restrictions
- ❑ Adhere to principles of good regulation: independence, openness, efficiency, clarity, and reliability

# Responsibilities: Industry

---

- ❑ Develop and maintain clear consensus standards
- ❑ Participate in the regulatory process (rulemaking, guidance development, OMB clearance / information collections)
- ❑ Support the Focus Group on Operator Licensing

# Diagnosis / Prescription

---

- ❑ All the players need to fulfill their responsibilities for the system to work efficiently and effectively
- ❑ The industry's standards and the NRC's rules are not always as clear as they could be
- ❑ Clarity does not necessarily ensure compliance (Pete will discuss examples)
- ❑ If something is unclear, do not hesitate to seek clarification by...
  - Writing your questions down and handing them in
  - Calling your Regional OL contact
  - Clicking on "Contact Us About Operator Licensing"
- ❑ NRC examiners and Licensing Assistants are not medically qualified, so all specific medical questions are relayed to a consultant physician retained by the NRC to evaluate medical evidence and provide advice on medical conditions
- ❑ Watch the OL website for generic questions and answers

# Review: The Bottom Line

---

An operator's general health and medical condition must not...

- ... adversely affect the performance of assigned operator job duties ...
- ... or cause operational errors endangering public health and safety.