

Transition of ODCM from  
Chemistry Procedure to  
NUREG-1301 Format

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# Overview

- **Generic Letter 89-01 provided guidance for relocation of RETS from Technical Specifications to ODCM.**
- **Supplement No. 1 to GL 89-01 provided NUREG-1301, “Offsite Dose Calculation Manual Guidance: Standard Radiological Effluent Controls For Pressurized Water Reactors”**
- **Key words: “Guidance” & “Standard”**

# Issues

- “Guidance” implies no requirement.
- “Standard” implies a good practice - (like the oft used phrase “Industry Standard Practice”).
- Prior to implementation of standard Technical Specifications at Ginna in 1996, a chemistry procedure directed implementation of the RETS and REMP requirements which were specified in the tech specs.

# Issues

- After implementation of standard tech specs, all of the requirements were relocated to the ODCM. (See Table 5 of License Amendment 5/26/95)
- The ODCM, however, became Attachment I to CHA-RETS-ODCM, a chemistry department administrative procedure
- This is where the ODCM resided until 2001
- RETS and REMP functioned adequately during this period

# Issues

- “Adequate” function in RETS/REMP was due primarily to the skill and experience of the previous station Radiochemist - an elder statesman of nuclear power.
- “Adequate” function did coexist with negative comments from the NRC RETS inspector - these comments included criticism of the procedure format and the visibility of the ODCM within Ginna Station.

# So what?

- Late in 1997 the previous Radiochemist abruptly retired, and shortly thereafter suffered an untimely demise.
- The Station had planned to retain his expertise after retirement as a consultant.
- In its nonstandard format the ODCM was a “challenge” for newly assigned personnel to follow. (See page 43 of old ODCM)

# So what?

- Vague guidance like “well within 10 times the applicable effluent release concentration” and “then each day’s dose increment should be approximately the same” led to unrealistically conservative decisions.
- An LER for Containment Vent Noble Gas monitor alarm in Fall 1997 outage was due to a grossly conservative setpoint.
- Comparisons of the ODCM verbiage to **NUREG 0472** was another “challenge”.

# So what else?

- **RETS Inspection at Ginna in Spring 2000 included a visit from Region I Chief of Radiation Safety and Safeguards.**
- **He related how his group had pulled all Region I PWR ODCM's during the Indian Point 2 tube rupture for review. He said: "Out of the entire group assembled to review the ODCM's, only one person could follow Ginna's ODCM" .**
- **"If we can't follow it, who can?"**



# I can't tell you what to do, but...

- “I strongly suggest that you convert your ODCM to the standard format and terminology of NUREG-1301.”
- “Furthermore, I strongly suggest that your ODCM be taken out of chemistry procedure and put into Technical Specification Supporting Documentation.”
- (These suggestions had been made by the Inspector several times over the years.)

# I can tell you what to do...

- Senior Corporate VP, now President, was in attendance at the REITS exit meeting.
- “Thou shalt do exactly what the Regulator has suggested, and report back to me in six months. The only time we want to be an outlier is when we are better than expected.”

# What has changed

- When Operations opens the Tech Specs they see the ODCM.
- Its in a format familiar and useful to the Control Room
- It used to be a chemistry procedure that the Control Room called down to the lab about. (They called it “black magic” , among other names.)
- Now Operations “owns” it as Tech Specs, not chemistry procedure.

# What has changed

- **Chemistry personnel are better able to interpret the rules, (see before and after examples on effluent monitors and ventilation operability).**
- **Subjectivity has been replaced with objectivity.**
- **We improved our design analyses for radiation monitors to reflect realistic fractions of release rate limits in setpoints.**

# What did we learn?

- If the documents are correct and standardized, we will have less trouble with personnel turnover.
- Gross conservatisms are not required if the limits are clear
- Do what Jason says. He is right.