

UNITED STATES
NUCLEAR REGULATORY COMMISSION
OFFICE OF NUCLEAR REACTOR REGULATION
WASHINGTON, DC 20555-0001

January 28, 2021

**REGULATORY ISSUE SUMMARY 2000-11, SUPPLEMENT 2:
NRC EMERGENCY TELECOMMUNICATIONS SYSTEM**

ADDRESSEES

All holders of operating licenses for nuclear power reactors under the provisions of Title 10 of the *Code of Federal Regulations* (10 CFR) Part 50, "Domestic licensing of production and utilization facilities."

All holders of, and applicants for, nuclear power plant construction permits under the provisions of 10 CFR Part 50.

All holders of, and applicants for, combined licenses under the provisions of 10 CFR Part 52, "Licenses, certifications, and approvals for nuclear power plants."

All holders of licenses for independent spent fuel storage installations (ISFSIs) under the provisions of 10 CFR Part 72, "Licensing requirements for the independent storage of spent nuclear fuel, high-level radioactive waste, and reactor-related greater than Class C waste."

INTENT

The U.S. Nuclear Regulatory Commission (NRC) is issuing Regulatory Issue Summary (RIS) 2000-11, Supplement 2, to inform addressees about impending changes to the currently installed NRC Emergency Telecommunications System (ETS) and the removal of the NRC Operations Center local area network (LAN) line (OCL).

BACKGROUND

Based on lessons learned from the March 1979 accident at Three Mile Island Nuclear Station, Unit 2, the NRC provided reliable long-distance telephones, using direct access lines, to nuclear power plant sites and remote emergency operations facilities for the following essential telecommunication functions:

- Emergency Notification System—Normal circuit for event reporting. Used to communicate information related to reactor safety during event response.
- Health Physics Network—Used to communicate radiological and meteorological information during event response.
- Reactor Safety Counterpart Link—Used for communication among the NRC reactor safety team personnel at the site, the regional office, and NRC Headquarters. The NRC Resident Inspector will normally communicate on this circuit.

- Protective Measures Counterpart Link—Used for communication among the NRC protective measures team personnel at the site, the regional office, and NRC Headquarters.
- Management Counterpart Link—Used for communication among the site team leader (Director of Site Operations), the Headquarters Executive Team, and the regional Base Team Manager.
- OCL—Analog phone line made available for accessing the NRC Operations Center LAN.
- Emergency Response Data System (ERDS)—One analog phone line per reactor unit for establishing the links between licensee computer systems and the NRC ERDS.

The NRC issued RIS 2009-13, “Emergency Response Data System Upgrade from Modem to Virtual Private Network Appliance,” on September 28, 2009 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML092670124), to inform licensees and applicants of the upgrade of technology to transmit plant data to the ERDS from modem-based lines to a virtual private network solution. Following this upgrade, the ERDS analog lines were no longer needed and have been disconnected.

Since the NRC issued RIS 2000-11, “NRC Emergency Telecommunications System,” on June 30, 2000 (ADAMS Accession No. ML003727812), some power reactor sites have shut down permanently and many of the NRC--supplied circuits have been removed, with the exception of the Emergency Notification System, which was left in service to support licensee reporting of notifications related to the onsite ISFSI as required by 10 CFR 72.75, “Reporting requirements for specific events and conditions.”

The NRC provides the ETS functions related to communication among the NRC and nuclear power plant control rooms and emergency response facilities using dedicated circuits that are independent of the local telephone switching office. Verizon currently provides these circuits using Digital Signal 0 (DS0) lines that correspond to a single analog voice channel using copper-based lines.

As discussed in RIS 2000-11, ETS functionality can be provided over corporate networks at minimal cost to licensees. This measure eliminates large recurring costs associated with the NRC’s dedicated circuits. Licensee costs would be limited to costs associated with rerouting the ETS circuits to the licensee’s network. The Federal government would continue to pay all long-distance charges for ETS calls.

SUMMARY OF ISSUES

1. Discontinuation of OCL

The OCL was made available for accessing the NRC Operations Center LAN using a modem. This technology is no longer used due to the following:

- Modems inherently introduce cybersecurity vulnerabilities to the systems to which they are attached.
- The NRC Operations Center no longer allows the use of modems.

Based on this, the NRC has decided to discontinue the use of this analog line.

2. DS0 Line Phase Out

Verizon has informed the NRC that many of the local exchange carriers (LECs), which provide last-mile service to the sites, are phasing out copper-based lines. For example, the LEC that provides service to the Salem Nuclear Generating Station and Hope Creek Generating Station sites has informed Verizon that it is planning to end support for DS0 circuits soon. As the NRC anticipates other LECs to discontinue DS0 support in the future, the NRC is notifying licensees so that they are aware this service is becoming obsolete.

Verizon is evaluating several options to provide similar functionality; however, the most viable option is to replace these individual lines with a single T1 trunk and then demultiplex them into individual lines at the site. The T1 lines will connect directly to the Verizon long-distance network switch, bypassing the local telephone switch, and providing similar diversity as the current implementation of the ETS.

If Verizon or the LEC informs the NRC staff that DS0 support to a specific site will be discontinued, the NRC will contact the licensee; however, licensees may also be contacted directly by Verizon or the LEC. If this occurs, the NRC asks licensees to communicate with the NRC contact for this RIS supplement to inform the NRC of this development. Once a replacement is scheduled, Verizon will coordinate directly with the LEC and licensee to install the necessary equipment and T1 trunk line at the site.

ALTERNATE APPROACH

The NRC staff continues to support the optional use of licensee communications networks to provide long-distance access to ETS circuits when the licensee's network can route ETS calls to long-distance service independent of the local telephone switch. Attachment 2 to RIS 2000-11 details this alternative approach. Licensees that desire to implement this option should contact the NRC technical contact listed at the end of this RIS to coordinate the transition to the alternate communications network.

EMERGENCY PLAN REVISIONS

In 10 CFR 50.54(q)(3), the NRC allows a licensee to make changes to its emergency plan if it can demonstrate through analysis that the changes do not reduce the plan's effectiveness and that the plan, as changed, continues to meet applicable regulations. Changes made to a licensee's emergency plan to reflect the changes made to licensee's emergency telecommunications systems as a result of this supplement may or may not need to be submitted to the NRC for prior approval by license amendment. Licensees may use the discussion contained within this RIS supplement as a part of their analysis when making that determination.

BACKFIT DISCUSSION

This supplement requires no action or written response, and the staff is not imposing any new positions on licensees. This supplement does not provide any new regulatory requirements; it only conveys the NRC's plan to remove the OCL and provides other related information. No action is required on the part of any licensee; therefore, this document does not constitute a

backfit under 10 CFR 50.109, "Backfitting," nor 10 CFR 72.62, "Backfitting." Consequently, the staff did not perform a backfit analysis.

FEDERAL REGISTER NOTIFICATION

This supplement is informational and does not represent a departure from current regulatory requirements; therefore, a notice of opportunity for public comment on this supplement was not published in the *Federal Register*.

CONGRESSIONAL REVIEW ACT

This RIS supplement is not a rule as defined in the Congressional Review Act (5 U.S.C. §§ 801-808).

PAPERWORK REDUCTION ACT STATEMENT

This supplement does not contain new or amended information collection requirements that are subject to the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 et seq.). Existing requirements were approved by the Office of Management and Budget (OMB) under approval numbers 3150-0011 and 3150-0151.

Public Protection Notification

The NRC may not conduct or sponsor, and a person is not required to respond to, a request for information or an information collection requirement unless the requesting document displays a currently valid OMB control number.

CONTACT

Please direct any questions about this matter to the technical contact listed below.

/RA/

Christopher G. Miller, Director
Division of Reactor Oversight
Office of Nuclear Reactor Regulation

Note: NRC generic communications may be found on the NRC public Web site, <https://www.nrc.gov>, under NRC Library/Document Collections.

Technical Contact: Omar Khan, NSIR
301-287-3725
E-mail: omar.khan@nrc.gov

REGULATORY ISSUE SUMMARY 2000-11, SUPPLEMENT 2, "NRC EMERGENCY TELECOMMUNICATIONS SYSTEM," DATE: January 28, 2021

ADAMS Accession No.: ML20118C661

EPID - L-2020-GEN-0003

OFFICE	ERC:OB:NSIR	Tech Editor	C:OB:NSIR	DD:DPR:NSIR	MA:MPS:NRR	OCIO
NAME	RStransky	JDougherty	SKennedy	CJohnson	LHill	DCullison
DATE	07/10/20	07/21/20	10/02/20	10/05/20	10/02/20	12/31/20
OFFICE	OE	OGC	LA:IOEB:DRO	PM:IOEB:DRO	BC:IOEB:DRO	D:DRO:NRR
NAME	JPeralta	JMcManus	IBetts	MLintz	LRegner	GSuber for CMiller
DATE	10/06/20	10/19/20	01/11/21	10/20/20	1/19/21	1/28/21

OFFICIAL RECORD COPY