

June 3, 2005

MEMORANDUM TO: File

FROM: John Lehning, General Engineer */RA/*
Plant Systems Branch
Division of Systems Safety and Analysis
Office of Nuclear Reactor Regulation

SUBJECT: PUBLIC RELEASE OF "NUREG/CR-6224 CORRELATION AND
DEAERATION SOFTWARE PACKAGE" VIA NRC PUBLIC DOCUMENT
ROOM

On April 13, 2005, contractors for the Nuclear Regulatory Commission (NRC) completed a software package to assist in the analysis of pressurized-water reactor (PWR) recirculation sump performance. This package, entitled "NUREG/CR-6224 Correlation and Deaeration Software Package," was created as part of the NRC's regulatory efforts to resolve Generic Safety Issue 191, "Assessment of Debris Accumulation on PWR Sump Performance." Specifically, this software package may be useful in the computation of head loss and air bubble generation across a PWR recirculation sump screen that has been covered by a debris bed. The software package contains FORTRAN/JAVA source code, executables, sample problems, a theory manual, and user guidelines.

The NRC has made the "NUREG/CR-6224 Correlation and Deaeration Software Package" publicly available through our Public Document Room for a fee. Interested members of the public may contact our Public Document Room at 1-800-397-4209 or pdrc@nrc.gov.

The code used in this software package was originally developed by **ARES** Corporation under NRC contract to Los Alamos National Laboratory during the resolution of the boiling-water reactor strainer clogging issue. The present software package, which was created under NRC contract by **ISL, Inc.**, updates the original code to make it applicable for analyzing PWR sump performance.

This software is not to be distributed to third parties without the express consent of the NRC. All rights reserved.

**** Disclaimer of Liability Notice ****

The U.S. Nuclear Regulatory Commission, Los Alamos National Laboratory, ARES Corporation and ISL Inc. provide no express warranties and/or guarantees and further disclaim all other warranties of any kind whether statutory, written, oral, or implied as to the quality, character, or description of products and services, its merchantability, or its fitness for any use or purpose.

CONTACT: John Lehning, NRR/DSSA
415-1015

Further, no warranties are given that products and services shall be error free or that they shall operate on specific hardware configurations. In no event shall the U.S. Nuclear Regulatory Commission, Los Alamos National Laboratory, ARES Corporation or ISL, Inc. be liable, whether foreseeable or unforeseeable, for direct, incidental, indirect, special, or consequential damages, including but not limited to loss of use, loss of profit, loss of data, data being rendered inaccurate, liabilities or penalties incurred by any party, or losses sustained by third parties even if the Nuclear Regulatory Commission, Los Alamos National Laboratory, ARES Corporation and ISL Inc. have been advised of the possibilities of such damages or losses.

For additional information, contact:

Shanlai Lu
Mail Stop O11A11
11545 Rockville Pike
Rockville, MD 20852-2738
(301) 415-2869
SXL2@nrc.gov

For technical support, contact:

Vesselin Palazov
ISL, Inc.
11140 Rockville Pike,
Suite 500
Rockville, MD USA 20852
(301) 468-6425
vpalazov@islinc.com

Further, no warranties are given that products and services shall be error free or that they shall operate on specific hardware configurations. In no event shall the U.S. Nuclear Regulatory Commission, Los Alamos National Laboratory, ARES Corporation or ISL, Inc. be liable, whether foreseeable or unforeseeable, for direct, incidental, indirect, special, or consequential damages, including but not limited to loss of use, loss of profit, loss of data, data being rendered inaccurate, liabilities or penalties incurred by any party, or losses sustained by third parties even if the Nuclear Regulatory Commission, Los Alamos National Laboratory, ARES Corporation and ISL Inc. have been advised of the possibilities of such damages or losses.

For additional information, contact:

Shanlai Lu
Mail Stop O11A11
11545 Rockville Pike
Rockville, MD 20852-2738
(301) 415-2869
SXL2@nrc.gov

For technical support, contact:

Vesselin Palazov
ISL, Inc.
11140 Rockville Pike,
Suite 500
Rockville, MD USA 20852
(301) 468-6425
vpalazov@islinc.com

DISTRIBUTION: ADAMS SPLB/rf SLu RArchitzel DSolorio
JHannon

NRR-106
ADAMS Accession #ML051590366

E:\Filenet\ML051590366.wpd

OFFICE	SPLB:DSSA:NRR	SPLB:DSSA:NRR	SC:SPLB:DSSA	BC:SPLB:DSSA
NAME	JLehning	SLu	DSolorio	JHannon
DATE	06/ 03 /05	06/ 03 /05	06/ 03 /05	06/ 03 /05

OFFICIAL RECORD COPY