

Editorial Staff

PUBLISHER
Jon Payne

EDITOR-IN-CHIEF
Gregg M. Taylor

INTERNATIONAL EDITOR
Dick Kovan

SENIOR EDITOR
Elizabeth S. Tompkins

SENIOR ASSOCIATE EDITOR
Richard A. Michal

ASSOCIATE EDITOR
Patrick Sinco

PRODUCTION EDITOR
Deborah S. Nall

DESKTOP EDITOR
Chris Salvato

EDITORIAL ASSISTANT
Nancy Slove

CONTRIBUTING COLUMNIST
Bill Minkler

Advertising Staff

SALES MANAGER
Jeffery R. Mosses

ADVERTISING/PRODUCTION ASSISTANT
Patricia Fairchild

CIRCULATION ASSISTANT
Bess Weglarz

Editorial Advisory Committee

Ramon Ashley, Sam K. Bhattacharyya,
Annick Carnino, Doug Stickney,
Roger Tilbrook, and Paul Turinsky

ANS Headquarters

GENERAL NUMBER
708/352-6611

Facsimile 708/352-0499

Web site <www.ans.org>

NUCLEAR NEWS ADVERTISING
708/579-8226, 800/NUC-NEWS
Facsimile 708/352-6464

Web site <www.ans.org/advertising>
e-mail <advertising@ans.org>

NUCLEAR NEWS EDITORIAL
708/579-8245

Facsimile 708/352-6464

e-mail <nucnews@ans.org>

INTERNATIONAL EDITOR
(DICK KOVAN)

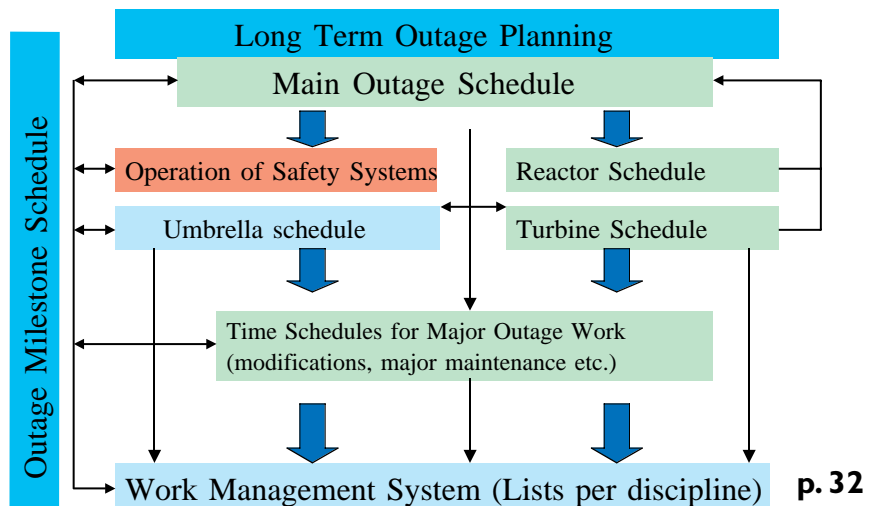
011-44-1737-842687

e-mail <100444.3711@compuserve.com>

Nuclear News

April 2002

Volume 45, Number 4



SPECIAL SECTION: OUTAGE MANAGEMENT

31

Outage strategy well covered at Forsmark

BY DICK KOVAN 32

From red to green: Pre-outage work-order planning
at Diablo Canyon

INTERVIEW BY RICK MICHAL 40

Nuclear plant upratings—Enhancing implementation
while reinforcing the viability of nuclear power

BY JOHN FASNACHT 44

FEATURE ARTICLE

26

The DOE's initiatives for the future of nuclear power
and America's energy security

BY SPENCER ABRAHAM

POWER

20

Backers, opponents of Indian Point go toe-to-toe over New York plan. Report: Nuclear recognized for clean air contribution. Entergy Nuclear's Vermont Yankee offer worth \$250 million to ratepayers. Retirement calls to Exelon Corporation's PBMR-backer Corbin McNeill. Cook-2 records briefest refueling outage in site history. Status of license renewal applications in the United States. Nuclear power plants receive review documents. Safety, enforcement activities described in NRC reports. NRC issues orders formalizing site security. (See also Call for Papers, p. 83, for the ANS 2002 Winter Meeting and Embedded Topical Meetings, November 17–21, in Washington, D.C.)

INTERNATIONAL

46

U.K. energy review promises little help for nuclear. Westinghouse AP1000 put on new U.K. plant option list. Return of MOX fuel from Japan to U.K. cleared. Changes in nuclear safety, rad protection in France spelled out. French government names safety heads. China's Ling Ao-1 nuclear plant connected to grid. German states of Hesse, Bavaria lose cases against BMU. Russia releases IAEA's INPRO funds for reactor research. IAEA assessing real potential of P&T. European Union environment ministers to ratify Kyoto Protocol.

WASTE MANAGEMENT

53

Agreement signed for Hanford accelerated cleanup, funding increase. New Mound contract to be awarded; other pacts. Report: Missing Millstone-1 spent fuel rods likely in LLW facility. Program review results in reassignment of DOE Environmental Management executives.

INDUSTRY

55

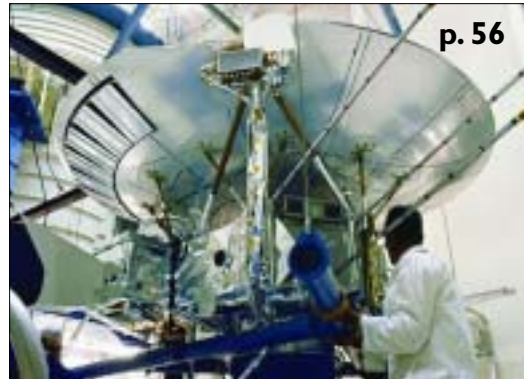
Hitachi, MHI collaborate; other company news. License renewal, security, other contract work awarded.



p. 58



p. 40



p. 56

SPACE APPLICATIONS 56

Pioneer 10 is on the job in deep space.

APPLICATIONS 58

Controllable automated welding of spent fuel canisters.

ISOTOPES & RADIATION 59

Pest control: Campaign started to eliminate tsetse fly. FDA approves first radioimmunotherapy drug. PET better at finding recurrent breast cancer. C-11 PET tracer detects early prostate cancer. In-111 agent detects rare bone disease. Report: Food safety will always be a problem. SureBeam expands irradiation technology to New Zealand. NRC submits report on revised medical rules.

RESEARCH 65

Compounds of noble gases and uranium fuel created. LBNL nears completion of Spallation Neutron Source front-end system. DOE to award \$3 million for licensing project under Nuclear Power 2010 program.

STANDARDS 68

Comments requested on proposed draft standards.

FUEL 69

Megatons to Megawatts: U.S.-Russian program settles on new contract.

DEPARTMENTS

ANS Membership Application	75	87	Literature from Suppliers
Backscatter	88	79	People
Calendar	6	15	Quoting at Random
Calls for Papers	10	10	Recently Published
Equipment & Services	81	12	Retrospective
Index to Advertisers	73	4	Setpoint
Late News in Brief	17	10	Short Courses and Seminars
Letters	14		

ANS Officers

PRESIDENT

Gail H. Marcus

VICE PRESIDENT/PRESIDENT-ELECT

Harold Ray

TREASURER

Kyle Turner

CHAIRMAN, ANS PUBLICATIONS

STEERING COMMITTEE

Robert W. Hess

Administrative

EXECUTIVE DIRECTOR

Harry Bradley

Coming up ...

June—Special Section on Health Physics

Cover: Outage work at the Forsmark-3 nuclear power plant in Sweden. For a feature article about outage management at the plant, see page 32. (Photo: Odd Hedberg/Forsmark)



Nuclear News (ISSN: 0029-5574), Volume 45, Number 4. Published monthly (except during the month of April when issued twice monthly) by the American Nuclear Society, Incorporated, with business, executive, and editorial offices at 555 N. Kensington Ave., La Grange Park, Illinois 60526; telephone 708/352-6611. Subscription rate is \$290 for 2002; overseas subscribers add \$51 per year for postage and handling. Single copy price is \$25; \$10 additional for overseas

postage and handling (except for the Buyers Guide issue, which is \$91; \$10 additional for overseas postage and handling). Individual ANS members receive *NN* as part of membership (up to \$48 of dues allocated to *NN*). Replacement copies may be obtained at the single copy price, as long as copies are available. Inquiries about the distribution and delivery of *Nuclear News* and requests for changes of address should be directed to the American Nuclear Society. Allow six weeks for a change to become effective. POSTMASTER: Send change of address orders to *Nuclear News*, American Nuclear Society, 555 N. Kensington Ave., La Grange Park, Illinois 60526, or <nucnews@ans.org>.

Nuclear News is printed in New Richmond, Wis. 54017, by St. Croix Press, Inc. Nonprofit periodicals postage paid at La Grange, Illinois, and at additional mailing offices. Copyright © 2002 by the American Nuclear Society, Inc. Trademark registered in USA and Canada.

Opinions expressed in this publication by the authors are their own and do not necessarily reflect the opinions of the editors, the American Nuclear Society, or the organizations with which the authors are affiliated, nor should publication of author viewpoints or identification of materials or products be construed as endorsement by this publication or by the Society.

Texts of most *Nuclear News* articles are available on the NEXIS data base, from Mead Data Corporation.