#### **Editorial Staff**

EDITOR & PUBLISHER Gregg M. Taylor

MANAGING EDITOR Elizabeth S. Tompkins

INTERNATIONAL EDITOR
Dick Kovan

SENIOR ASSOCIATE EDITOR Richard A. Michal

ASSOCIATE EDITOR

Patrick Sinco

PRODUCTION EDITOR
Patricia A. Matas

PRODUCTION CONSULTANT Susan E. Gallier

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, 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>

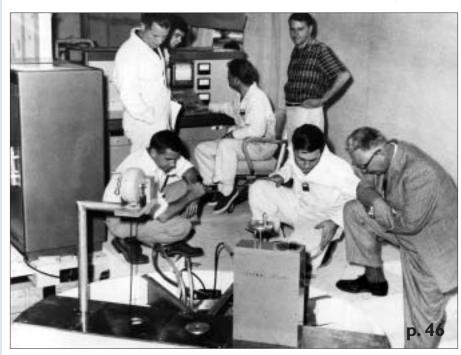
NUCLEAR NEWS EDITORIAL 708/579-8240 Facsimile 708/352-6464 e-mail <nucnews@ans.org>

INTERNATIONAL EDITOR
(DICK KOVAN)
011-44-1737-842687
e-mail <dkovan@compuserve.com>

# **Nuclear News**

November 2003

Volume 46, Number 12



### SPECIAL SECTION: ATOMS FOR PEACE

"Atoms	for	Peace"	speech
--------	-----	--------	--------

Nuclear News Forum: A historic date
Much of the vision has become reality
The ideal of "Atoms for Peace"

Years of progress—Past and future Great promises, fast expansion, slowdown

"These are not idle words. . . ."
Atoms for Peace after 50 years

Clean air and dependable electricity
For the benefit of all mankind

Bilateral efforts aided Atoms for Peace

Meeting energy needs of the next 50 years Poised for another half-century of success <u>CE 37</u>

38

BY SPENCER ABRAHAM 42
BY MOHAMED ELBARADEI 42

BY ANDREJ STRITAR 43

BY HAJIMU MAEDA 43
BY NILS DIAZ 44

BY JOHN L. SKOLDS 44
BY LUIS E. ECHÁVARRI 44

BY ALEXANDRE RUMYANTSEV 45
BY J. MICHAEL EVANS 45
BY JOE F. COLVIN 45

TRIGA research reactors: A pathway to the peaceful applications of nuclear energy By Douglas M. Fouquet, Junaid Razvi, and William L. Whittemore 4

## POWER

Exelon, Dominion are first to test early site permit waters. NRC denies petition for rule-making for ESP/COL amendment. Abraham relays Bush support for nuclear energy to Senate. Wisconsin Rep. Huebsch: Let's reconsider nuclear. St. Lucie license renewals approved for two Florida Power & Light nuclear units. NEI financial study says that Mill-stone is big benefit to Connecticut. FENOC plan stresses safety culture at Davis-Besse. Status of license renewal applications in the United States. Power uprate approved for Palo Verde's Unit 2.

#### SECURITY

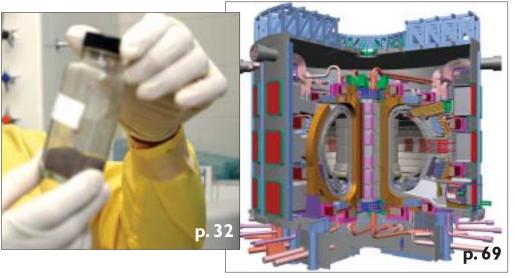
26

GAO reports: Plant security needs to be strengthened; sealed source security needs improvement. Method developed at Los Alamos National Lab for dirty bomb isotope identification.

#### **OPERATIONS**

34

Oconee starts refurbishment work to operate to 2030s.



#### INTERNATIONAL

**58** 

IAEA: 2003 General Conference opens on Iran. Scientific Forum 2003 looks at nuclear innovation. Russia/Iran negotiations ongoing regarding Bushehr. U.S. will provide additional KEDO funding for North Korean power reactors. "Wise men" give verdict on French energy debate. Cogema defends its transparency policy. Contracts signed to build fossil plants to replace weapons Pu reactors in Russia. Updated fuel market report from World Nuclear Association provides details on Russia. Synchrotron facility for early cancer diagnosis to be built in China. Consultations start on LLW options for U.K.'s Dounreay. Final stage of decommissioning reached at Dounreay MTR.

#### **WASTE MANAGEMENT**

68

BNFL completes removal of components from ETTP's K-31. Transnuclear, SGN signed for used fuel work. Big Rock Point's reactor vessel transported to Barnwell.

RESEARCH 69

Report: U.S. should participate in ITER fusion project. *R&D Magazine* names top technology developments.

#### **ISOTOPES & RADIATION**

77

Researchers find genetic traits for sensitivity to radiotherapy. Math tool can help physicians figure radiation dose to be administered. PET scans used to detect disease in HIV patients.

FUEL 79

116 workers at USEC's Portsmouth plant keep jobs; other news. Court rules on lawsuits challenging duties on imported LEU.

EDUCATION 80

DOE mini-grant provides school with funds for nuclear science studies.

INDUSTRY 81

ICN sells dosimetry division; other business developments. Shaw Group signed by Entergy; other contracts.

#### **DEPARTMENTS**

ANS Membership Application	75	87	Literature from Suppliers
Backscatter	88	82	People
Calendar	6	10	Proceedings Available
Calls for Papers	8	8	Recently Published
Employment	87	4	Setpoint
Equipment & Services	85	_	•
Index to Advertisers	<b>73</b>	8	Short Courses and Seminars
Late News in Brief	17	86	Software/Databases Available

#### **ANS Officers**

PRESIDENT Larry R. Foulke

VICE PRESIDENT/PRESIDENT-ELECT
James Tulenko

TREASURER William Naughton

CHAIRMAN, ANS PUBLICATIONS
STEERING COMMITTEE
Steven A. Arndt

#### Administrative

EXECUTIVE DIRECTOR
Harry Bradley

Cover: President Dwight D. Eisenhower gives his "Atoms for Peace" speech before the United Nations General Assembly on December 8, 1953. The text of his speech is included in a special section in this issue, commemorating the speech's fiftieth anniversary. Also in the special section are statements of commemoration by nuclear leaders, and an overview of the history and technology of TRIGA reactors, which have contributed to the peaceful use of nuclear technology. (UN photo, courtesy of the Dwight D. Eisenhower Library)





Nuclear News (ISSN: 0029-5574), Volume 46, Number 12. 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 \$325 for 2003; overseas subscribers add \$53 per year for postage and handling. ABC applied for. Single copy price is \$27; \$10 additional for overseas postage and handling (except for the Buyers Guide issue, which is \$100; \$10 additional for overseas postage and handling). Individual ANS members receive NN as part of membership. 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 © 2003 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 database, from Mead Data Corporation.

3