Editorial Staff

EDITOR & PUBLISHER Betsy Tompkins

INTERNATIONAL EDITOR
Dick Kovan

SENIOR EDITOR
Rick Michal

SENIOR ASSOCIATE EDITOR E. Michael Blake

ASSOCIATE EDITOR
Phyllis Ruzicka

PRODUCTION EDITOR
Patricia A. Matas

DESKTOP EDITOR
Chris Salvato

EDITORIAL ASSISTANTS
Susan Gallier

Sarah Wells

CONTRIBUTING COLUMNIST
Bill Minkler

Advertising Staff

ADVERTISING AND CIRCULATION SALES MANAGER

Jeff Mosses

ADVERTISING/PRODUCTION ASSISTANT

Erica McGowan

CIRCULATION ASSISTANT
Bess Weglarz

Editorial Advisory Committee

Ramon Ashley, Sam K. Bhattacharyya, Roger W. Tilbrook, and Paul Turinsky

ANS Headquarters

GENERAL NUMBER 708/352-6611 Fax 708/352-0499 Web site <www.ans.org>

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

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

NUCLEAR NEWS EDITORIAL 708/579-8245 Fax 708/352-6464 e-mail <nucnews@ans.org>

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

Nuclear News

August 2006 Volume 49, Number 9

Joseph Oat Corp. Corp. • Morris Ma	aterial Handli	· Proto-Powe	r Corpora
Corp. ORTEC	Petersen III.	Shaw Group I	ic Compa
Joseph Oat Corporation of the Co	s Inc. Westing	gnough Electr	bricating
ermar Vend	or/Col	ntract	Or.
Profile	Specia	al Sec	tion
Dade Moeller	npany • EXCEL	Service Systems	. Joseph C
Flow Control Col	onal • IST Nuc	lear Systems Miller Pipe	line p. 39

TWELFTH ANNUAL VENDOR/CONTRACTOR PROFILE SPECIAL SECTION 39

FEATURE ARTICLE

How sand and science can solve a ubiquitous international security threat

BY JOHN R. COCHRAN AND LAURA L. PRICE 32

PERSPECTIVE

The nuclear renaissance: Facing the challenges, maintaining safety

BY WILLIAM CAVANAUGH III 10

SPECIAL REPORT: 2006 ANS ANNUAL MEETING 115

ANS Annual Meeting: Developing a nexus of public support

115
Embedded Topical: Advances in Nuclear Power Plants (ICAPP '06)

125
Embedded Topical: Nuclear fuels and structural materials: Looking to the future

129

POWER 13

National Research Council reports on evidence of global warming, likely effects of early closure of Indian Point. Point Beach plant may be sold or a new operator brought in. Mitsubishi to apply for APWR certification in 2008. Justice Department okays Exelon-PSEG merger, with conditions. NRC renews licenses for both Brunswick reactors. The Reactor Marketplace: An update on acquisitions and mergers affecting ownership and operation of power reactors. Klein takes office as NRC chairman; commissioners Jaczko and Lyons also sworn in. Draft supplemental EIS issued for North Anna early site permit request. Open letter to the nuclear industry: Backing needed for Nuclear PE. DOE seeks interested parties to participate in design of NGNP. Quad Cities is issued white finding for inadequate pre-uprate valve check.

OPERATIONS 24

Progress Energy, Exelon, others receive Top Industry Practice awards.

SECURITY 29

New nuclear security initiative established at Texas A&M.

INTERNATIONAL 106

Task force to study expansion of uranium mining, potential for nuclear power in Australia. Turkey's prime minister calls for building three nuclear plants. Thirteen firms/consortia qualify to join Cernavoda project. Centrifuge enrichment joint venture gets under way in Europe. IAEA extends safety and security measures for radioactive sources. U.K. regula-



INTERNATIONAL—CONTINUED

tor confident of dealing with new power reactors. China's CNNC creates architect-engineering firm. Canadian Nuclear Safety Commission extends Point Lepreau's license for five years. AMEC Nuclear, UKAEA sign agreement with South Korean firm. Chirac, Blair agree to create nuclear forum. IAEA conference on spent fuel focuses on management.

WASTE MANAGEMENT

133

House Science Committee passes energy legislation, including GNEP. Sellafield vitrification melters break records. Sellafield sludge retrieval project reaches milestone. Radioactive sludge from Hanford Site's K Basins treated for disposal. Demolition of Hanford Site's former Pu incinerator is completed. Segmentation of Rancho Seco's PWR internals is completed.

FUEL 137

NRC issues license for LES's uranium enrichment plant. USEC's data-transfer delays hinder DOE's oversight of decontamination agreement. Cameco buys share of uranium exploration firm.

INDUSTRY 148

Ceradyne, Alcan signed for B_4 C-Al matrix work; other business developments. AECL contracts for work in Korea, BNG in Russia.

ISOTOPES & RADIATION 150

INL seeks to produce Ac-225, Cs-131 for cancer therapy.

RESEARCH 153

ITER schedule delayed about six months.

STANDARDS 154

ANS, NEI to respond to proposed new NRC ruling.

DEPARTMENTS

EDITORIAL		People	155
ANS Membership Application	145	Proceedings Available	8
Backscatter	156	Recently Published	8
Calendar	6	Short Courses and Seminars	7
Calls for Papers	7	ADVERTISING	
Late News in Brief	17	Direct Answer	142
Letters	9	Index to Advertisers	141
Nuclear Notes	4	Employment Ads Begin	136

ANS Officers

PRESIDENT Harold F. McFarlane

VICE PRESIDENT/PRESIDENT-ELECT Donald C. Hintz

TREASURER
William F. Naughton

CHAIRMAN, ANS PUBLICATIONS
STEERING COMMITTEE
Roger W. Tilbrook

Administrative

EXECUTIVE DIRECTOR
Harry A. Bradley

Coming up ...

September—INL's Richard Holman on construction/plant startup testing engineers: Will there be enough?

October—Special Section on Plant Maintenance





Nuclear News (ISSN: 0029-5574), Volume 49, Number 9. 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 \$365 for 2006; overseas subscribers add \$56 per year for postage and handling. Single copy price is \$35; \$10 additional for overseas postage and handling (except for the Buyers Guide issue, which is \$110; \$12 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

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 © 2006 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.