Nuclear News



March 2018 Volume 61, Number 3

DEPARTMENTS

EDITORIAL	
ANS Membership Application	87
ANS Technical Journals	12
At the ANS Nuclear Cafe	13
Backscatter	100
Calendar	6
Late News	17
Nuclear Notes	4
People	98
Recently Published	12

ADVERTISING

Direct Answer	86
Index to Advertisers	85
Employment Ads Begin	99

Coming up . . .

May-Special Section on Decommissioning

June—Special Section on Health Physics and Isotopes & Radiation

July—Special Section on Operations

Members: View Nuclear News online!

At <www.ans.org>, click on Member Center at the upper right of your screen. Log in with your email address and password (if you haven't already, you can create a password at <account. ans.org>). Click on the heading for the current issue of Nuclear News.

Cover photo: NASA/GSFC/ Craig Mayhew and Robert Simmon

p. 64 Kingdom Belgum	5-
Tax tax	\$
130 130 130 100 100 100 100 100 100 100	
13a 13a 24a Hungary	
Romania 224	P
133	
Bulgaria Bulgaria	5

Reference Section	39
Notes on the 2018 World List of Nuclear Power Plants	40
World List of Nuclear Power Plants	41
Abbreviations Used in the World List	60
Power Reactors by Nation; Power Reactors by Type, Worldwide	61
Nuclear Power Plants No Longer in Service	62
Maps of Commercial Nuclear Power Plants Worldwide	64
U.S. Power Reactor License Renewal	70
New Power Reactor Projects in the United States; U.S. Power Reactor Ownership/Operator Changes	71
Feature Article	31

Feature Article

Breathing new life into a former research reactor building BY COLIN BARRAS

Power

Georgia Power customers to pay \$139 million less for Vogtle expansion project. House subcommittee spotlights nuclear industry challenges. SCANA-Dominion merger clears key condition. Maximizing the Assets: A status report on license renewal and power uprates. Report concludes that Millstone will remain profitable through 2035. Industry groups press for streamlining of licensing process for advanced reactors.

Security 24

2018 Doomsday Clock set at two minutes to midnight. New report rates national export control systems. Federal Energy Regulatory Commission proposes new cybersecurity rules to protect supply chain for U.S. bulk electric system. Radiopharmaceutical firm converts to low-enriched uranium.

Policy & Legislation

President Trump signs \$400-billion budget deal, temporary funding bill. South Carolina House of Representatives passes legislation related to Summer project. Georgia Senate bill seeks to amend Vogtle cost recovery law. New Jersey legislators reintroduce subsidy bills. Challenges to zero-emissions credit program progress in New York State Supreme Court.

28



International

73

French regulator clears Framatome to resume fabrication of nuclear components at Creusot Forge. Reactor pressure vessel installed at China's Fuqing-5. Consortium led by Argentina's Invapwins contract to build Pallas research reactor in the Netherlands. Austrian government to challenge Turkey's Paks II project in court. Russia's Rostov-4 supplies first electricity to grid. Rolls-Royce and Nuclear AMRC to build UK Small Modular Reactor demonstrator module. IAEA's first Integrated Nuclear Infrastructure Review for Research Reactors conducted in Nigeria.

Waste Management

80

Settlement reached on San Onofre closure costs. Nuclear Waste Technical Review Board delivers spent fuel report to Congress. Swedish Radiation Safety Authority recommends granting a license for construction of spent fuel repository at Forsmark. Jacobs Engineering takes over management of Plutonium Finishing Plant recovery project. Waste Control Specialists is acquired by J.F. Lehman & Company.

Fuel 91

Industry responds to proposed changes to the Nuclear Regulatory Commission's fuel facility fee matrix. Global Nuclear Fuel's accident-tolerant fuel lead test assemblies to be loaded in Hatch plant. Denison Mine Corporation's Wheeler River resource estimate increased; other mining developments. Thorium fuel pellets tested in Norway's Halden research reactor.

Isotopes & Radiation

94

Food and Drug Administration approves NorthStar's technetium-99m generator.

Industry

9

Lightbridge Corporation and Framatome launch Enfission, a joint venture company that will sell Lightbridge's fuel; other business developments. BWXT signs four-year fuel tubing deal for Cernavoda; other contracts. Crane Nuclear finishes review of records on safety-related valves; other 10 CFR Part 21 reports.

Standards & Documentation

Standard approved, comments requested. NRC issues regulatory guides, NUREGs, regulatory issue summary.

Editorial Staff

EDITOR & PUBLISHER

Betsy Tompkins

SENIOR EDITOR

Phyllis Ruzicka

ASSOCIATE EDITORS
Michael McQueen
Kaitlin Schuler

Tim Gregoire Susan Gallier INTERNATIONAL EDITOR

Dick Kovan

PRODUCTION EDITOR

Patricia A. Matas

DESIGN/DESKTOP EDITOR

Chris Salvato

CONTRIBUTING COLUMNISTS

Linda C. Byus

Advertising & Circulation Staff

SALES MANAGER

Ieff Mosses

ADVERTISING/PRODUCTION ASSISTANT MANAGER

Erica McGowan

ADVERTISING SALES ASSISTANT

Jessica Vazquez

Editorial Advisory Committee

Jess C. Gehin, John G. Gilligan, and Kevan D. Weaver

ANS Officers

PRESIDENT

Robert N. Coward

VICE PRESIDENT/ PRESIDENT-ELECT John E. Kelly TREASURER

Darby S. Kimball

CHAIRMAN, ANS PUBLICATIONS

STEERING COMMITTEE

Donald G. Lorentz

Administrative

Robert C. Fine

ANS Headquarters

GENERAL NUMBER

708/352-6611 Fax 708/352-0499

www.ans.org

NUCLEAR NEWS ADVERTISING

708/579-8226 800/NUC-NEWS

Fax 708/352-6464 www.ans.org/advertising

advertising@ans.org

NUCLEAR NEWS EDITORIAL

708/579-8245 Fax 708/579-8204

nucnews@ans.org

INTERNATIONAL EDITOR (DICK KOVAN)

902/455-3575

dkovan@ans.org

Nuclear News (ISSN: 0029-5574), Volume 61, Number 3. 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 for 2018 is \$610, which includes complimentary electronic access, 2008 to current issue; for subscriptions outside North America, add \$70 for shipping and handling. Alternatively, subscription rate is \$535 for Electronic Access Only, 2008 to current issue. Single copy price (regular monthly issues) is \$48; add \$12 for postage and handling if being shipped to address outside North America. Individual ANS members receive Nuclear News 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 <nucners@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 © 2018 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 LexisNexis database, from Mead Data Corporation.



