Nuclear News Volume 61, Number 11

14

86 85

95



October 2018

DEPARTMENTS

EDITORIAL

ANS Membership Application	
ANS Technical Journals	
At the ANS Nuclear Cafe	
Backscatter	I
Calendar	
Equipment & Literature	
Late News	
Nuclear Notes	
People	
Recently Published	

ADVERTISING

Direct Answer
Index to Advertisers
Employment Ads Begin

Coming up . . .

December—Special Section on Fuel

January—Special Section on Education, Training & Workforce Development

February—Special Section on Instrumentation & Controls

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.



Special Section: Outage Management and Plant Maintenance 43

The "Drive For 25"	
by Mark Kanz	44
Utility Working Conference: Trends in maintenance and work	
management	58

Power

Permanent shutdown of Oyster Creek ends 49 years of operation. Illinois's ZEC program is upheld by appeals court. Focus on Finance. Vogtle project sparks dueling lawsuits. New Jersey regulator moves to create ZEC program. A steam generator is put in place at Vogtle-4. NRC to review application for subsequent license renewal for Peach Bottom. NRC approves transfer of Summer licenses from SCE&G to Dominion. California legislation approves funds to ease impact of closure of Diablo Canyon. Brunswick plant, other facilities prepared for Hurricane Florence. MIT study finds that nuclear power is necessary to reduce carbon emissions. Indian Point license renewals issued, but plant shutdown is in sight. NRC agrees that small modular reactors can have smaller emergency planning zones. NRC finds that chilled work environment persists at Watts Bar.

Security

32 Nuclear Threat Initiative releases 2018 Nuclear Security Index. Senate Judiciary Committee's Subcommittee on Crime and Terrorism holds hearing on cyber threats to U.S. electrical grid. Top U.S., Indian officials hold talks in New Delhi. Defense Nuclear Facilities Safety Board planning major staff reorganization. Down-blended high-enriched uranium to be used for tritium production. U.S.-Russia workshop on nonproliferation and disarmament held in California. NRC considers alternatives to

Policy & Legislation

physical security regulations for advanced reactors.

Senate bill aims to boost U.S. nuclear industry. Environmental Protection Agency defends holding Clean Power Plan in abeyance as Affordable Clean Energy Act moves forward.

International

68

39

20

Russia's Leningrad-II-1 ready for commercial operation. Cold hydraulic test at Slovakia's Mochovce-3 is completed. United Arab Emirates' Federal Authority for Nu-

2 • Nuclear News • October 2018

clear Regulation and Khalifa University sign research agreement. Youth council created for future UAE nuclear leaders. NuGeneration advances Moorside as site of new nuclear plant in United Kingdom. International Atomic Energy Agency reviews design safety documentation for Bangladesh's Rooppur nuclear power plant. IAEA report shows decline in world nuclear capacity up to 2050.

Waste Management

73

NRC resumes review of Waste Control Specialists' application to build a consolidated interim storage facility for spent fuel. Environmental group petitions NRC over FirstEnergy's decommissioning fund. New water pipeline to be installed at Hanford Site; other Hanford news. Finnish firms to provide low-level waste services to China. NRC issues report on spent nuclear fuel inspection at San Onofre.

Fuel

77

Orano launches uranium conversion plant at Tricastin site in France. ASLB hearing scheduled for Crow Butte license amendment request. IAEA publishes interactive digital map of uranium deposits worldwide. Denison Mines to increase stake in Wheeler River project. Anfield Energy announces resource estimate for Charlie Project. Researchers study radionuclide transfer at uranium mine sites in South Australia.

Isotopes & Radiation

Purdue University researchers to patent yeast-based dosimeters. Savannah River National Laboratory licenses hydrogen isotope separation technology. Phoenix to open neutron imaging services center.

Research

Record power level reached in neutron production cycle at Oak Ridge National Laboratory's Spallation Neutron Source. MIT researchers overcome plasma density limit to steadystate fusion operation in a tokamak reactor.

Education, Training & Workforce 92

Savannah River National Laboratory retirees to mentor and teach students at University of South Carolina Aiken. Canadian Nuclear Laboratories and Moscow State University host summer programs for students and specialists. National Nuclear Security Administration launches fellowship program for doctoral students.

Industry

BWX Technologies acquires Sotera Health's Nordion medical isotope business; other business developments. Bechtel is named project management contractor for Wylfa Newydd nuclear plant in North Wales; other contracts. Defects found in circuit boards, selector switch; other 10 CFR Part 21 reports.

Standards

Two standards approved, comments requested on three others.

Editorial Staff

EDITOR & PUBLISHER Betsy Tompkins

SENIOR EDITOR

Phyllis Ruzicka

ASSOCIATE EDITORS Michael McQueen Tim Gregoire Susan Gallier

Howard Ludwig

PRODUCTION EDITOR Patricia A. Matas

INTERNATIONAL EDITOR

Dick Kovan

DESIGN/DESKTOP EDITOR Chris Salvato

CONTRIBUTING COLUMNISTS Linda C. Byus

E. Michael Blake

Advertising & Circulation Staff

SALES MANAGER Jeff 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 John E. Kelly VICE PRESIDENT/ PRESIDENT-ELECT

Marilyn C. Kray

TREASURER Darby S. Kimball

CHAIRMAN, ANS PUBLICATIONS STEERING COMMITTEE Donald G. Lorentz

Administrative

EXECUTIVE DIRECTOR 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 11. 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. Sub-scription rate for 2018 is \$610, which includes complimentary electronic access, 2008 to current issue; 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. Single copy price for annual mid-April Buyers Guide is \$115; add \$15 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 <nunews@ans.org>. *Nuclear News*, and radditional mailing offices. Copyright © 2018 by the American Nuclear Society, ILC, 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.



94

96

81

89