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Coming up ...

March—18th Annual Reference Issue

April—Special Section on Outage Management

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POWER

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FitzPatrick to close by 2017; Clinton gets a reprieve. Dominion to apply for second license renewal for Surry. NRC proposes rule to set variable annual fee schedule for small modular reactors. NRC determines that only 20 sites need seismic probabilistic risk assessments. Commissioners overrule admission of fracture contention on Palisades. Revised Diablo Canyon renewal contention denied, hearing process terminated. Draft EIS issued for Fermi-2 license renewal; LaSalle reviews accelerated. Renaissance Watch: An update on developments that may lead to new power reactors. Final EIS for Turkey Point-6 and -7 delayed by eight months.

SECURITY

22

DOE awards funding to two university consortia for R&D on power grid protection. NRC adopts new cybersecurity event notification requirements. DOE inspector general says special nuclear material mismanaged at Y-12. NRC delays rulemaking on security requirements for spent fuel and high-level waste storage facilities for five years.

On the cover: Idaho National Laboratory's Advanced Test Reactor (ATR) has a unique serpentine fuel arrangement (top photo) that allows simultaneous testing of materials under varied conditions. The blue glow is due to Cherenkov radiation, emitted when a charged particle (such as an electron) passes through the cooling water at a speed faster than the speed of light in the water. Pictured across the bottom, from left to right: Sintered full-sized test pellets for ATR irradiations, along with two thermophysical samples (at front) for property measurements; individual fibers of silicon carbide woven together to make a new type of protective fuel cladding, intended to increase the coping time for a light-water reactor under severe accident conditions; and gas bubbles at the boundaries between individual crystals of material in a fabricated bit of nuclear fuel surrogate, to help researchers understand the impact of gas bubbles (or other characteristics) on heat transfer. (All photos: INL. Bottom center: Image captured by Tammy Trowbridge; bottom right: Image captured by Yuedong Wu.) To read more on issues related to fuel, see the Special Section on Fuel that begins on page 29.



POLICY & LEGISLATION 26

Congress enacts two-year budget deal; December shutdown still possible. House passes bill to reauthorize Export-Import Bank.

INTERNATIONAL 45

China National Nuclear Corporation may take a stake in Areva. Fuel loading begun at South Korea's Shin-Kori-3, world's first Generation III+ reactor. Japan's Ikata-3 gets local approvals for restart. Funding arranged for Jordan's planned research reactor. Land acquired for Argentina's fifth reactor. ABWR reaches final step in United Kingdom's design approval process. U.K. regulator gets new chief executive.

WASTE MANAGEMENT 49

Central Huron, Ontario, added to list of possible sites for Canadian HLW repository. DOE cancels spent fuel shipment to INL because of Integrated Waste Treatment Unit construction delay. Storage of high-burnup spent fuel to be tested at North Anna. Revised WIPP safety analysis to be submitted in December. Milestone met in Sellafield cleanup.

INDUSTRY 56

Westinghouse buys CB&I's nuclear arm; Fluor to manage AP1000 construction. Mitsubishi Heavy Industries to consider taking a minority share in Areva; other business developments. Westinghouse gets Sizewell B pact; other contracts. Defect found related to Vogtle-3 CA01 module; other 10 CFR Part 21 reports.

RESEARCH 60

Westinghouse pitches lead-cooled fast reactor to DOE, small modular reactor to United Kingdom.

ISOTOPES & RADIATION 61

ACMUI advises NRC to continue using linear-no-threshold model, for now. NRC inspector general has issues with agency's oversight of medical uses of radioactive isotopes. NNSA awards additional funding for molybdenum-99 production efforts.

STANDARDS & DOCUMENTATION 63

NRC issues one final interim staff guidance and two drafts. Comments requested on ANSI/ANS-2.23 revision.

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