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### Coming up . . .

**July**—Special Section on Operations  
—Profile of incoming ANS  
President John E. Kelly

**August**—24th Annual Vendor/  
Contractor Profile Issue

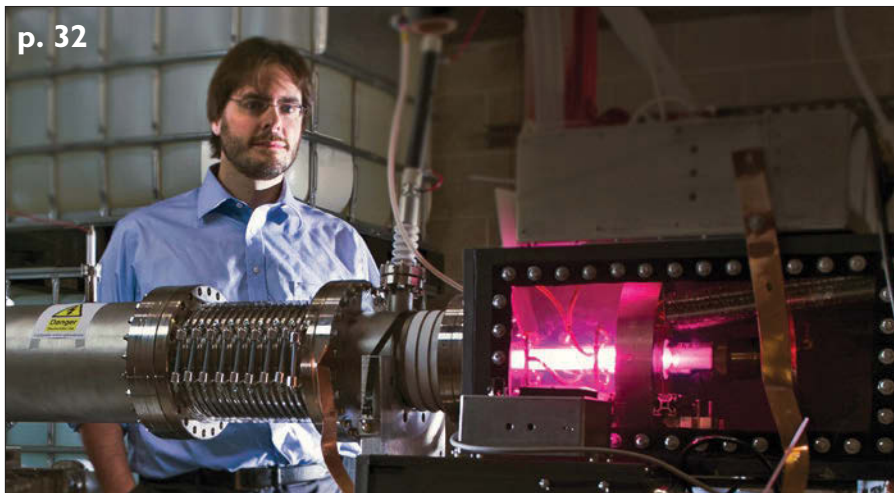
**October**—Outage Management/  
Plant Maintenance Special Section

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**On the cover:** SHINE Medical Technologies' founder and chief executive officer, Greg Piefer—shown above with a prototype of the accelerator to be used, along with low-enriched uranium, to produce molybdenum-99—has set the second half of 2020 as the startup goal for the commercial production of Mo-99 at the company's new Janesville, Wis., facility. See the Special Section on Health Physics and Isotopes & Radiation, which starts on page 31, for more information on isotope production progress being made at SHINE and at other companies, as well as two additional articles on other HP- and I&R-related subjects. (Photo: SHINE)

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## Special Section: Health Physics and Isotopes & Radiation

Meeting the moly-99 challenge	32
Bridging the LNT and hormesis radiation protection models BY MEHDI SOHRABI	37
Lights in the desert: Anniversaries and celebrations BY WANDA MUNN AND ANNA MARKHAM	43

## Power

14

Energy Secretary Perry ponders use of Cold War-era law to keep plants from closing. FirstEnergy Solutions disputes findings of PJM Interconnection's grid reliability study. Georgia Power announces more progress on Unit 3 at Vogtle plant site. NuScale Power's small modular reactor passes Phase 1 of the NRC's design certification review. NRC accepts Florida Power & Light Company's subsequent license renewal application for Turkey Point-3 and -4. South Carolina legislature wrangles over electricity rates and utility oversight related to the canceled Summer construction project. Focus on Finance. Political foes in Pennsylvania agree on need to keep Beaver Valley plant in operation. Report from The Brattle Group analyzes impacts of plant closures in Ohio, Pennsylvania. NRC seeks input on administrative rules review. U.S. Supreme Court rejects antinuclear group's appeal to prevent construction of Fermi-3.

## Security

26

DOE proposes pit production as alternative use for unfinished MOX Fuel Fabrication Facility. NNSA marks a decade of collaboration with Romania.

## Isotopes & Radiation

28

NASA and NNSA successfully demonstrate the Kilopower portable nuclear power reactor. NRC proposes fine for lost radioactive material at Idaho State University. Operating license issued for ANSTO's molybdenum-99 facility.

## Policy & Legislation

48

U.S. House of Representatives passes bill to amend Nuclear Waste Policy Act with goal of jump-starting Yucca Mountain-related work.



## International 50

Fuel loading begins at Sanmen-1 in China. China National Nuclear Corporation, Canadian Nuclear Laboratories sign clean-energy MOU. CNL takes next step toward development of small modular reactor project. First PWR simulation test of France's Cabri experimental reactor completed. United States, France sign nuclear R&D agreement. U.S. backs Westinghouse to finish six-unit AP1000 project in India. Construction under way on first VVER-TOI reactor at Kursk II site in Russia. Hunterston B1 restart delayed after inspection reveals cracks in graphite core. IAEA guidance document on estimating nuclear costs under way.

## Waste Management 56

Quality assurance problems persist at Hanford's Waste Treatment and Immobilization Plant. Cesium removal system installed at Savannah River Site tank farm; other SRS news. Newport News Nuclear BWXT-Los Alamos takes over legacy waste cleanup contract at Los Alamos National Laboratory. IAEA assists in removal of disused radioactive sources from South America.

## Fuel 65

Azarga Uranium and URZ Energy announce plans to merge; other business developments. NRC releases final environmental assessment for proposed Crow Butte expansion; other mining developments. NRC finds violation at Westinghouse's Columbia Fuel Fabrication Facility, nonconformance at Global Nuclear Fuel-Americas facility. Resource upgrade for Tiris uranium project in Mauritania announced; other resource news.

## Research 68

DOE awards \$60 million in cost-shared R&D funding for advanced reactor research.

## Industry 70

BWXT buys Nordion; Orano to supply Centrus. Bruce Power invests \$711 million in major components upgrade; other contracts.

## Standards 72

Reaffirmed standard approved; other actions.

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