

# Nuclear News

## Index to Volume 52 (2009)

The following listing provides an index to feature stories, authors, special sections, regular columns, and meeting reports published in the 2009 issues of *Nuclear News*.

### Feature Index

#### January

SPECIAL SECTION: 2009 Preview: A Look at the Year Ahead, pp. 33–50

Watching and waiting for Washington, by E. Michael Blake, p. 34

(With a new presidential administration in office, the focus on building new reactors may return to the federal government)

The changing shape of the global nuclear landscape, by Dick Kovan, p. 41

(Plans for nuclear power development continue to evolve worldwide)

And in the rest of the world . . . , by Dick Kovan, p. 42

(An update of nuclear developments in some of the main non-European Union countries)

The good and bad news about fuel cycle and waste, by Rick Michal, p. 48

(New enrichment facilities await federal loan guarantees, while nuclear waste storage options may head in a different direction)

*Nuclear News* Index to Volume 51 (2008), p. 13

(A brief index listing of *NN* features, authors, special sections, regular columns, and meetings of 2008)

2008 ANS Winter Meeting: “Ready, steady, go” for new reactors, by E. Michael Blake, Rick Michal, and Betsy Tompkins, p. 58

(A report on the 2008 ANS Winter Meeting, held November 9–13 in Reno, Nev.)

MENA Nuclear Energy Forum: The renaissance arrives in the Middle East, by Dick Kovan, p. 67

(Countries in the MENA region—Middle East and North Africa—revealed their intentions to introduce nuclear power into their countries during a meeting held November 10–11, 2008, in Doha, Qatar)

#### February

SPECIAL SECTION: Education, Training & Workforce Issues, pp. 37–50

GoNERI offers a new direction for nuclear energy education in Japan, by Rick Michal, p. 39

(A program at the University of Tokyo uses a systematic method to incorporate liberal arts with social and technical subjects)

Hakan Armagan: Energy knowledge for students, by Rick Michal, p. 42

(Interview with a physics teacher in Omaha, Nebr., who developed a course to educate high school students about energy and nuclear science)

Ja	January
F	February
Mr	March
Ap	April
My	May
Je	June
Jl	July
Ag	August
S	September
O	October
N	November
D	December

U.K. Nuclear Decommissioning Authority launches national skills strategy, plan, by Dick Kovan, p. 48

(By law, the U.K.’s NDA must ensure that there is a skilled workforce available to carry out its mission)

#### March

SPECIAL SECTION: Instrumentation & Controls and Human Factors, pp. 77–90

Regulatory oversight of the use of digital technology in nuclear power plant safety, by John A. Grobe and Steven A. Arndt, p. 79

(Information about how the Nuclear Regulatory Commission is updating its I&C regulatory infrastructure and processes)

The regulatory perspective on digital systems, by Peter B. Lyons, p. 79

(Comments from an NRC commissioner about digital systems that are becoming common in nuclear plants)

Guidelines for the design and implementation of computerized procedures, by Robert T. Fink, Charles D. Killian, Lewis F. Hanes, and Joseph A. Naser, p. 85

(The increased use of computerized procedures is driving the need to provide guidance for their use)

SPECIAL SECTION: 11th Annual Reference Issue, pp. 41–65

World List of Nuclear Power Plants, p. 41

Maps, p. 55

Tables, p. 61

(Annual compendium of nuclear power plants under construction, in operation, or retired from service worldwide)

## April

SPECIAL SECTION: Outage Management, pp. 33–50

A four-steam-generator outage at Diablo Canyon-2, by Rick Michal, p. 35

(A special delivery system had to be designed and implemented to move SGs in and out of the plant's containment building)

Cooper develops outage newsletter to reach out to temporary workers, by Glenn Trotter, p. 42

(The newsletter's objectives are to engage temporary outage workers and increase worker retention)

Olkiluoto gets a new outage building, by Dick Kovan, p. 47

(A new outage building and a controlled-area corridor connecting the two units will facilitate outage work)

Celebration marks opening of renovated historical exhibit at Argonne, p. 56

(Visitors to Argonne National Laboratory's new nuclear energy exhibit can view artifacts dating back to the start of the atomic age)

## May

U.S. capacity factors: Can older reactors keep up the pace? by E. Michael Blake, p. 29

(The median three-year capacity factor has continued to edge upward)

Politics, new build, and world views dominate conference agenda, by Nancy Zacha, p. 50

(The 2009 EnergySolutions Conference covered topics such as new nuclear plants, waste management, and politics)

## June

Renaissance Watch: Uncertainties abound, by E. Michael Blake, p. 27

(Many things are contributing to the air of doubt surrounding new reactor projects in the United States)

Special Report: DOE and NRC budgets, by E. Michael Blake and Rick Michal, p. 33

(The DOE's FY 2010 budget seeks cancellation of Yucca Mountain, while the NRC's budget request seeks a 2.4 percent boost)

Excelsior College: Filling the nuclear industry's employment pipeline, by Rick Michal, p. 47

(Interview with three officials from the distance-learning school located in Albany, N.Y.)

National nuclear museum reopens at new site in Albuquerque, by Rick Michal, p. 54

(A series of events kicks off the opening of the National Museum of Nuclear Science & History)

## July

SPECIAL SECTION: The 50th Anniversary of *Nuclear News* 1959–2009, pp. 51–80

(A review of the first half-century of your favorite magazine about nuclear science and technology)

50 years of *Nuclear News*: Reflecting on the past, looking to the future, by Betsy Tompkins, p. 53

(*NN*'s mission will continue to be to inform readers of developments in nuclear science and technology)

*Nuclear News*, decade by decade, p. 70

(A review of *NN* through the years)

When *Nuclear News* turns 100 . . . , by A. Priori (E. Michael Blake), p. 80

Thomas Sanders: A right-sized future, by Rick Michal, p. 85

(Profile of the American Nuclear Society's new president)

## August

SPECIAL SECTION: 15th Annual Vendor/Contractor Profiles, pp. 42–147

(Advertorial information about products and services provided by companies to the nuclear industry)

Quoting at Random: NRC Chairman Gregory Jaczko, p. 12

(Remarks from the NRC chairman, delivered at the Heritage Foundation on July 7, 2009, about the NRC as a decisive regulator)

2009 ANS Annual Meeting: Nuclear takes steps toward a greater tomorrow, E. Michael Blake, Dick Kovan, and Rick Michal, p. 148

(A report on the 2009 ANS Annual Meeting, held June 14–18 in Atlanta, Ga.)

Nuclear and emerging technologies for space, by E. Michael Blake, p. 162

(A report on the Topical Meeting on Nuclear and Emerging Technologies for Space, held during the 2009 ANS Annual Meeting)

## September

John Gilleland: On the traveling-wave reactor, by Rick Michal and E. Michael Blake, p. 30

(The reactor would, in concept, use depleted uranium to produce vast amounts of energy without the need for enrichment plants)

## October

SPECIAL SECTION: Plant Maintenance, pp. 37–68

Vermont Yankee's award-winning steam dryer inspection system, by Rick Michal, p. 38

(Remotely controlled inspection systems minimize refuel floor congestion and reduce personnel contamination exposure)

A new approach to maintenance at Sellafield, by Dick Kovan, p. 43

(Revamping the way maintenance is delivered at the U.K.'s Sellafield site is expected to bring performance improvements)

On-line maintenance at nuclear power plants: History, implementation, and benefits, p. 49

(An EPRI white paper describes how on-line maintenance can increase plant reliability and reduce risks of component failure)

Does the Maintenance Rule need a "redo"? p. 62

(A Utility Working Conference session addressed risk assessment as it is handled now, and whether fire risk should be included)

Big picture, tight focus share attention, by E. Michael Blake, p. 81

(A report on the Utility Working Conference, held August 2–5 in Amelia Island, Fla.)

## November

Bates and Vanderheyden: Heading up new projects at NINA, UniStar, by E. Michael Blake, p. 51

(Interviews on new reactor build proposals with executives of two companies that are moving toward taking the next step)

A role for industry in promoting nuclear security and nonproliferation, by Gretchen Hund, Amy Seward, and Oksana Elkhamri, p. 58

(Industry self-regulation can have a positive effect on the prevention of nuclear materials proliferation)

Quoting at Random: Kenneth Sheely, associate assistant deputy administrator of the NNSA's GTRI, p. 23

(Testimony on securing radiological sources at a September 14, 2009, hearing before a Congressional subcommittee)

IAEA General Conference: ElBaradei says his goodbyes; resolutions passed, events held, by Dick Kovan and Gamini Seneviratne, p. 65

(A recap of the 53rd IAEA General Conference, held September 14–18, 2009, in Vienna, Austria)

## December

SPECIAL SECTION: Robotics and Remote Systems, pp. 35–54

Red Whittaker and the robots that helped clean up TMI-2, by Rick Michal, p. 37

(The TMI-2 experience propelled a new technology from ideas to implementation)

Albert Sturm: On robotics and remote systems, by Rick Michal, p. 41

(The vice president and chief technology officer of PaR Systems talks about what is happening with robotics in the nuclear industry)

The cleanup at Dounreay: Using a mixed bag of robotics and remote systems, by Dick Kovan, p. 45

(A range of innovative robotics and remote systems are being deployed at Dounreay with a goal of decommissioning the site)

Robotic crawler used to inspect Z-9 Crib, by Jim Alzheimer, p. 52

(A remote-controlled camera system provided a panoramic view of the inside of a waste trench at the Hanford Site)

## Author Index

Alzheimer, Jim, "Robotic crawler used to inspect Z-9 Crib," D, p. 52

- Blake, E. Michael, "Watching and waiting for Washington," by E. Michael Blake, Ja, p. 34
- \_\_\_\_\_, "U.S. capacity factors: Can older reactors keep up the pace?" My, p. 29
- \_\_\_\_\_, "Renaissance Watch: Uncertainties abound," Je, p. 27
- \_\_\_\_\_, (writing as A. Priori), "When *Nuclear News* turns 100 . . .," Jl, p. 80
- \_\_\_\_\_, "Nuclear and emerging technologies for space," Ag, p. 162
- \_\_\_\_\_, "Big picture, tight focus share attention," O, p. 81
- \_\_\_\_\_, "Bates and Vanderheyden: Heading up new projects at NINA, UniStar," N, p. 51
- Blake, E. Michael, Dick Kovan, and Rick Michal, "2009 ANS Annual Meeting: Nuclear takes steps toward a greater tomorrow," Ag, p. 148
- Blake, E. Michael, and Rick Michal, "Special Report: DOE and NRC budgets," Je, p. 33
- \_\_\_\_\_, "John Gilleland: On the traveling-wave reactor," S, p. 30
- Blake, E. Michael, Rick Michal, and Betsy Tompkins, "2008 ANS Winter Meeting: 'Ready, steady, go' for new reactors," Ja, p. 58
- Fink, Robert T., Charles D. Killian, Lewis F. Hanes, and Joseph A. Naser, "Guidelines for the design and implementation of computerized procedures," Mr, p. 85
- Hund, Gretchen, Amy Seward, and Oksana Elkhamri, "A role for industry in promoting nuclear security and nonproliferation," N, p. 58
- Kovan, Dick, "The changing shape of the global nuclear landscape," Ja, p. 41
- \_\_\_\_\_, "And in the rest of the world . . .," Ja, p. 42
- \_\_\_\_\_, "MENA Nuclear Energy Forum: The renaissance arrives in the Middle East," Ja, p. 67
- \_\_\_\_\_, "U.K. Nuclear Decommissioning Authority launches national skills strategy, plan," F, p. 48
- \_\_\_\_\_, "Olkiluoto gets a new outage building," Ap, p. 47
- \_\_\_\_\_, "A new approach to maintenance at Sellafield," O, p. 43
- \_\_\_\_\_, "The cleanup at Dounreay: Using a mixed bag of robotics and remote systems," D, p. 45
- Kovan, Dick, and Gamini Seneviratne, "IAEA General Conference: ElBaradei says his goodbyes; resolutions passed, events held," N, p. 65
- Lyons, Peter B., "The regulatory perspective on digital systems," Mr, p. 79
- Michal, Rick, "The good and bad news about fuel cycle and waste," Ja, p. 48
- \_\_\_\_\_, "GoNERI offers a new direction for nuclear energy education in Japan," F, p. 39
- \_\_\_\_\_, "Hakan Armagan: Energy knowledge for students," F, p. 42
- \_\_\_\_\_, "A four-steam-generator outage at Diablo Canyon-2," Ap, p. 35
- \_\_\_\_\_, "Excelsior College: Filling the nuclear industry's employment pipeline," Je, p. 47
- \_\_\_\_\_, "National nuclear museum reopens at new site in Albuquerque," Je, p. 54
- \_\_\_\_\_, "Thomas Sanders: A right-sized future," Jl, p. 85
- \_\_\_\_\_, "Vermont Yankee's award-winning steam dryer inspection system," O, p. 38
- \_\_\_\_\_, "Red Whittaker and the robots that helped clean up TMI-2," D, p. 37
- \_\_\_\_\_, "Albert Sturm: On robotics and remote systems," D, p. 41
- Tompkins, Betsy, "50 years of *Nuclear News*: Reflecting on the past, looking to the future," Jl, p. 53
- Trotter, Glenn, "Cooper develops outage newsletter to reach out to temporary workers," Ap, p. 42
- Zacha, Nancy, "Politics, new build, and world views dominate [2009 EnergySolutions Conference] agenda," by Nancy Zacha, My, p. 50

## Departments

### Applications

- Waste management programs use simulation software, Jl, p. 48
- 3-D software, laser scanning used to prepare for refueling outage at Waterford-3, N, p. 61

### Backscatter, by Bill Minkler

- Taxi trauma, F, p. 76
- Too much digital? Or maybe not . . . , Mr, p. 112
- Memories in black and white, Ap, p. 80
- Two ends of the school, My, p. 72
- If Pittsburgh can do it, why not Blightsburg? Je, p. 76
- Fifty years of nuclear journalism, and other stuff, Jl, p. 124
- Smart pills, Ag, p. 184
- A ferry tale, S, p. 72
- Too much information? O, p. 116
- Blightsburg hosts GBG13 summit, N, p. 104
- Who's better off? D, p. 88

### Backscatter, by E. Michael Blake

- Predictions for 2009, Ja, p. 92

### Focus on Finance, by Linda C. Byus

- What happens now? Ja, p. 21
- Natural gas—the other "clean" fuel, Mr, p. 36
- The economics of climate change, My, p. 20
- Yucca Mountain—Dead or alive? Jl, p. 28
- DOE begins to shape the U.S. nuclear industry, S, p. 26
- Six degrees of separation in Copenhagen, N, p. 44

## Letters

- Ja, p. 12; Mr, p. 16; My, p. 13; Jl, p. 20; S, p. 13; O, p. 20; N, p. 20

## Nuclear Notes, by Betsy Tompkins

- Launching into the new year, Ja, p. 4
- A bright future for nuclear, Mr, p. 4
- Choose words carefully while cutting Yucca Mountain funding, Ap, p. 4
- Those damned nuclear power plants . . . , My, p. 4
- The new NRC chairman: A slower path to new nuclear? Je, p. 4
- From my vantage point, Jl, p. 4
- Working together for nuclear's future, Ag, p. 4
- Developing—and testing—technologies, S, p. 4
- Planning is the key, O, p. 4
- Thinking *way* outside the box, D, p. 4

## Nuclear Notes, by E. Michael Blake

- Out came 20 000 curies, F, p. 4; correction, Mr, p. 4

## Nuclear Notes, by Dick Kovan

- Merkel's reelection: A win for nuclear, but is it enough? N, p. 4

## Quoting at Random

- Chairman Gregory Jaczko: The NRC as a decisive regulator built on a firm foundation, Ag, p. 12
- NNSA's Kenneth Sheely: Securing radiological sources—An ongoing effort, N, p. 23

## Meetings

- 2008 ANS Winter Meeting: "Ready, steady, go" for new reactors, Ja, p. 58
- Middle East and North Africa Nuclear Energy Forum, Ja, p. 67
- EnergySolutions' 2009 conference, My, p. 50
- International Ministerial Conference on Nuclear Energy in the 21st Century, Je, p. 66
- Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management, Jl, p. 42
- 2009 ANS Annual Meeting: Nuclear takes steps toward greater tomorrow, Ag, p. 148
- Utility Working Conference: Big picture, tight focus share attention, O, p. 81
- International Atomic Energy Agency's 53rd General Conference, N, p. 65