# **Nuclear News**

## Index to Volume 47 (2004)

The following listing provides an index to feature stories, authors, special sections, regular columns, and meeting reports published in the 2004 issues of *Nuclear News*.

## **Feature Index**

## **January**

SPECIAL SECTION: Training, pp. 21-28

Moving training toward performance improvement, by Philip N. McCullough, p. 22 (Insights into the use of the Perry nuclear plant's training simulator)

Training: The post-TMI years, by Philip N. McCullough, p. 25

College credit for NANT-accredited programs—coming full circle, by Richard P. Coe, p. 27

(Expanded opportunities present themselves to nuclear industry workers)

Nuclear News Index to Volume 46 (2003), p. 17

(A brief index listing of *NN* features, authors, special sections, regular columns, and meetings of 2003)

2003 ANS/ENS Winter Meeting: Commemorating—and advancing—the philosophy of Atoms for Peace, by Dick Kovan, Rick Michal, and Patrick Sinco, p. 38

(A report on the 2003 ANS/ENS Winter Meeting, in New Orleans, La.)

Atoms for Peace—Updating the vision, by Rick Michal, p. 55

(A report on a session of an embedded topical meeting at the 2003 ANS/ENS Winter Meeting)

#### **February**

Ray Chambers: Distance learning and nuclear power, by Rick Michal, p. 20

(Interview with Ray Chambers, EPRI technical manager for distance learning)

Vision and reality: The EBR-II story, by Catherine Westfall, p. 30

(The story of the unexpected path taken by the EBR-II)

Book review: "Creating the New World: Stories & Images from the Dawn of the Atomic Age," by Theodore Rockwell, p. 34

(Raymond L. Murray reviews Rockwell's book, which is a blend of historical fact, information on nuclear projects, and expression of opinions)

#### March

A short history of the sump clogging issue and analysis of the problem, by Gordon H. Hart, p. 24

(Post-LOCA blockage of PWR emergency sumps should be solved once regulatory requirements are defined)

Memories of the Kemeny Commission, by Ronald M. Eytchison, p. 61

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

(A commission member explains how its work influenced the safety of nuclear power plant operations)

Book review: "Joint Eagles," by Robert C. Hagan, p. 22

(Brian Hajek reviews Hagan's tale of efforts to stop a terrorist action against the United States)

World List of Nuclear Power Plants, p. 35 (Annual compendium of nuclear power plants under construction, in operation, or retired from service worldwide)

#### **April**

Kirk Newell: On the Rotational Engineering Program at Cook, by Rick Michal, p. 21 (Interview with Kirk Newell, engineering projects supervisor at American Electric Power's Cook nuclear power plant)

EPR development—An evolutionary design process, by Robert C. Twilley, Jr., p. 26

(Finland's decision to build a new nuclear power plant is a positive step for the industry on a worldwide basis)

#### May

Liberalization of Japan's electric power industry and nuclear power development, by Masayuri Yajima, p. 10

(A *Perspective* on industrial and commercial customers in Japan being able to choose their electricity suppliers by 2010)

U.S. capacity factors: Still on the rise, by E. Michael Blake, p. 25

(Of the 104 licensed power reactors in the United States, 102 are now in the "good performers" category)

From science to technology, by Ted Rockwell, p. 30

(A scientist's experiences during the early days of reactor development; excerpt from Rockwell's book, *Creating the New World:* Stories & Images from the Dawn of the Atomic Age)

#### June

- SPECIAL SECTION: A History of the American Nuclear Society, 1954–2004, pp. 43–71
- ANS: 50 years of accomplishment, p. 44 (A brief review of ANS from its beginning in 1954)
- The Presidents of ANS: Looking back and looking ahead, p. 64
- (Past, current, and future ANS Presidents reflect on the last 50 years, and look ahead to the next 50)
- Nuclear power needs a fuel recycle reactor, by Leonard J. Koch, p. 27
- (A *Perspective* stating that a recycling program should be the cornerstone of the U.S. advanced nuclear technology development program)

## July

- SPECIAL SECTION: Health Physics, pp. 25–38
- Lori Glander: Environmental monitoring at Indian Point nuclear power plant, by Rick Michal, p. 26
- (Interview with Lori Glander, radiation protection supervisor at Indian Point)
- The decommissioning of San Onofre-1: Radiation protection challenges, by Eric M. Goldin, p. 30
- (Radiation protection for workers, protection of the public, and careful material management are all considered during the plant's dismantlement and decommissioning)
- Radiation safety aspects of decommissioning at the U.K. Atomic Energy Authority, by Dick Kovan, p. 34
- (The insights of the head of radiation protection for the United Kingdom's Atomic Energy Agency)
- *Nuclear News* celebrates an anniversary, p. 42 (A review of the 45 years of *Nuclear News*)
- Tulenko: Keeping things moving, by Rick Michal, p. 72
- (Annual article on ANS's newest President)

#### August

- SPECIAL SECTION: Tenth Annual Vendor/ Contractor Profiles, pp. 53–107
- (Advertorial information about products and services provided by companies to the nuclear industry)
- 2004 ANS Annual Meeting: On the 50th anniversary, golden opportunities foreseen, by E. Michael Blake, Dick Kovan, Rick Michal, and Nancy Zacha, p. 36
- (A report on the 2004 ANS Annual Meeting)

- Advances in Nuclear Power Plants (ICAPP 2004), by E. Michael Blake, p. 50
- (A report on an embedded topical meeting from the 2004 ANS Annual Meeting)
- Argonne's David Wade: On the development of small modular reactors, by Rick Michal, p. 25
- (Interview with David Wade, senior technical advisor at Argonne National Laboratory)
- 2004 International Youth Nuclear Congress: A World of Innovations, by Shannon Bragg-Sitton, p. 108
- (Report of the third biennial conference cohosted by North American Young Generation in Nuclear and the Canadian Nuclear Society, in cooperation with the International Atomic Energy Agency)

## September

- Larry Townsend: Barge transporting of modular reactors, by Rick Michal, p. 20
- (Interview with Larry Townsend, professor of nuclear engineering at the University of Tennessee)

#### October

- SPECIAL SECTION: Nuclear power plant maintenance, pp. 31–52
- STP's first-of-a-kind leakage repair, by Edward Conaway, p. 32
- (An inside look at how the never-before-seen leak at the bottom of a reactor vessel was fixed)
- Mike Baron: The INVADER comes to Exelon Nuclear, by Rick Michal, p. 36
- (Interview with Mike Baron, reactor services manager for Exelon Nuclear)
- NUMEX 2004: Room to innovate, by Dick Kovan, p. 42
- (Individual stories on NUMEX 2004 Trophy winner Leibstadt and runners-up Bradwell and Ringhals/Barsebäck)
- Utility Working Conference: Future plants cast shadow on existing ones, by E. Michael Blake, p. 67
- (The promise of new construction draws attention at a conference specializing in operation of existing plants)

#### November

- David Matthews: Why 10 CFR Part 20 isn't "one-step" licensing, by E. Michael Blake, p. 22
- (Interview with David Matthews, director of Regulatory Improvement Programs for the Nuclear Regulatory Commission)
- The Westinghouse AP1000—Final design approved, by Howard J. Bruschi, p. 30
- (The reactor design process based on a principle of simplicity that drove safety, economics, and constructibility)

- Documenting history: Minutes of the New Piles Committee meetings, by C. George Lawson and Carolyn Krause, p. 36 (correction, D, p. 9)
- (Designs for new reactors were explored during meetings in 1944 attended by physicists, chemists, and engineers, including three Nobel Laureates)

#### **December**

- SPECIAL SECTION: Nuclear medicine and radiation therapy, pp. 39–51
- A national isotope program to meet the needs of the United States in the 21st century, by David J. Hill, p. 40
- (U.S. leadership in isotope science and innovation is relying heavily on the success of a national isotope program)
- A century of brachytherapy, by John Russell, p. 44
- (The development of implantable radioactive "seeds" and other devices that have combined to make brachytherapy highly effective for treatment of a variety of cancers)
- PACT: The IAEA's plan to stem the "cancer crisis" in developing countries, by Dick Kovan, p. 47
- (A cancer therapy program is working to provide radiotherapy treatment facilities to the developing world)
- Australia to expand radiopharmaceuticals production, by Dick Kovan, p. 51
- (A major project to refurbish the radiopharmaceuticals production facilities in Australia)
- Perspective: The Realism Project: It's time to get real, by Theodore Rockwell, p. 10
- (A *Perspective* on the need for the realistic presentation of information to the general public)
- Cal Rad Forum's Alan Pasternak: Time is running out for a permanent LLW solution, by Rick Michal, p. 22
- (Interview with Alan Pasternak, technical director of the California Radioactive Materials Management Forum, on the issue of the dwindling permanent disposal options for low-level radioactive waste)
- Siting nuclear power plants underground: Old idea, new circumstances, by Wes Myers and Ned Elkins, p. 33
- (Revisiting an idea that is half a century old)

## **Author Index**

- Blake, E. Michael, "U.S. capacity factors: Still on the rise," My, p. 25
- \_\_\_\_\_, "Advances in Nuclear Power Plants (ICAPP 2004)" (topical meeting session), Ag, p. 50
- \_\_\_\_\_, "Utility Working Conference: Future plants cast shadow on existing ones," O, p. 67
- \_\_\_\_\_, "David Matthews: Why 10 CFR Part 20 isn't 'one-step' licensing," N, p. 22

- Blake, E. Michael, Dick Kovan, Rick Michal, and Nancy Zacha, "2004 ANS Annual Meeting: On the 50th anniversary, golden opportunities foreseen," Ag, p. 36
- Bragg-Sitton, Shannon, "2004 International Youth Nuclear Congress: A World of Innovations," Ag, p. 108
- Bruschi, Howard J., "The Westinghouse AP1000—Final design approved," N, p. 30
- Coe, Richard P., "College credit for NANTaccredited programs—coming full circle," Ja, p. 27
- Conaway, Edward, "STP's first-of-a-kind leakage repair," O, p. 32
- Eytchison, Ronald M., "Memories of the Kemeny Commission," Mr, p. 61
- Goldin, Eric M., "The decommissioning of San Onofre-1: Radiation protection challenges," Jl, p. 30
- Hajek, Brian, book review of *Joint Eagles*, by Robert C. Hagan, Mr, p. 22
- Hart, Gordon H., "A short history of the sump clogging issue and analysis of the problem," Mr, p. 24
- Hill, David J., "A national isotope program to meet the needs of the United States in the 21st century," D, p. 40
- Koch, Leonard J., "Nuclear power needs a fuel recycle reactor" (Perspective), Ju, p. 27
- Kovan, Dick, "Radiation safety aspects of decommissioning at the U.K. Atomic Energy Authority," Jl, p. 34
- \_\_\_\_\_, "NUMEX 2004: Room to innovate," O, p. 42
- \_\_\_\_\_, "PACT: The IAEA's plan to stem the 'cancer crisis' in developing countries," D, p. 47
- \_\_\_\_\_, "Australia to expand radiopharmaceuticals production," D, p. 51
- Kovan, Dick, Rick Michal, and Patrick Sinco, "2003 ANS/ENS Winter Meeting: Commemorating—and advancing—the philosophy of Atoms for Peace," Ja, p. 38
- Lawson, C. George, and Carolyn Krause, "Documenting history: Minutes of the New Piles Committee meetings," N, p. 36 (correction, D, p. 9)
- McCullough, Phillip N., "Moving training toward performance improvement," Ja, p. 22
  \_\_\_\_\_\_, "Training: The post-TMI years," Ja, p. 25
- Michal, Rick, "Atoms for Peace—Updating the vision" (topical meeting session), Ja, p. 55
- \_\_\_\_\_, "Ray Chambers: Distance learning and nuclear power," F, p. 20
- \_\_\_\_\_, "Kirk Newell: On the Rotational Engineering Program at Cook," Ap, p. 21
- "Lori Glander: Environmental monitoring at Indian Point nuclear power plant," Jl, p. 26
- , "Tulenko: Keeping things moving," Jl, p. 72

- , "Argonne's David Wade: On the development of small modular reactors," Ag, p. 25
- \_\_\_\_\_, "Larry Townsend: Barge transporting of modular reactors," S, p. 20
- \_\_\_\_\_, "Mike Baron: The INVADER comes to Exelon Nuclear," O, p. 36
- \_\_\_\_\_, "Cal Rad Forum's Alan Pasternak: Time is running out for a permanent LLW solution," D, p. 22
- Murray, Raymond L., book review of *Creating the New World: Stories & Images from the Dawn of the Atomic Age*, by Theodore Rockwell, F, p. 34
- Myers, Wes, and Ned Elkins, "Siting nuclear power plants underground: Old idea, new circumstances," D, p. 33
- Rockwell, Ted, "From science to technology" (excerpt from Rockwell's book, Creating the New World: Stories & Images from the Dawn of the Atomic Age), My, p. 30
- \_\_\_\_\_, "The Realism Project: It's time to get real" (Perspective), D, p. 10
- Russell, John, "A century of brachytherapy," D, p. 44
- Twilley, Jr., Robert C., "EPR development— An evolutionary design process," Ap, p. 26
- Westfall, Catherine, "Vision and reality: The EBR-II story," F, p. 30
- Yajima, Masayuri, "Liberalization of Japan's electric power industry and nuclear power development" (Perspective), My, p. 10

## **Departments**

#### **Applications**

- A "wheel" good grinding tool at Palo Verde, My, p. 56
- FirstEnergy's SPORT initiative saves money and time for the supply chain, Ag, p. 120
- National Spherical Torus Experiment (NSTX) finds solution for bolting problem, N, p. 68

#### Backscatter, by Bill Minkler

With deliberate lassitude, Ja, p. 72

From multi-tasking to no-tasking, F, p. 60

Westward expansion, Mr, p. 96

Elements of surprise, Ap, p. 72

Too early for class? My, p. 68

Tale of two meetings, Ju, p. 100

Remembering, Jl, p. 80

Lunch? Ag, p. 132

Off to college, now, then, and . . . ? S, p. 64

Brain Olympics, O, p. 88

Fish finale, N, p. 76

Orange Creek becomes Orange Lake, D, p. 76

#### Letters

Jl, p. 10; Ag, p. 9; S, p. 10; D, p. 9

### Setpoint, by Gregg M. Taylor

ANS—A future of promise, Ja, p. 4

Back to the future, F, p. 4

The race begins, Mr, p. 4

Revisiting the past, embracing the future, Ap, p. 4

That's some future, My, p. 4

A glorious past, a glorious future, Ju, p. 4

Check-out time, Jl, p. 4

## **Setpoint, by Betsy Tompkins**

Exciting times, and the challenges ahead, Ag, p. 4

An agreement—at last, S, p. 4

Exemplary nuclear power plant maintenance, O, p. 4

The present, the future, and the past, N, p. 4

Making a PACT in developing countries, D, p. 4

#### **Meetings**

2003 ANS/ENS Winter Meeting: Commemorating—and advancing—the philosophy of Atoms for Peace, Ja, p. 38

Atoms for Peace—Updating the vision, Ja, p. 55

International Conference on Geological Repositories, F, p. 48

German Nuclear Forum winter meeting, Mr, p. 65

Chernobyl Forum Expert Group on the Environment topical subgroup meeting, Ap, p. 32

The 14th Pacific Basin Nuclear Conference, Ju, p. 29

Physor 2004, Ju, p. 78

2004 ANS Annual Meeting: On the 50th anniversary, golden opportunities foreseen, Ag, p. 36

Advances in Nuclear Power Plants (ICAPP 2004), Ag, p. 50

2004 International Youth Nuclear Congress: A World of Innovations, Ag, p. 108

G8 Summit: World leaders strengthen non-

proliferation measures, Ag, p. 29 Utility Working Conference: Future plants

cast shadow on existing ones, O, p. 67

International Atomic Energy Agency Governing Board and General Conference, N, p. 48

Scientific Forum: Nuclear Fuel Cycles and Challenges, N, p. 51