# NEWSLETTER

#### DECONTAMINATION, DECOMMISSIONING, AND REUTILIZATION DIVISION

**MAY 2001** 

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# CHAIRMAN'S MESSAGE

The decommissioning activities in the industry today both for the commercial, institutional, and government facilities continue to move forward although more on a lesser basis from the commercial perspective. This is due to the shift in strategic thinking among utility executives from prematurely and permanently shutting down a nuclear unit to operating them beyond their initial 40-year design life. This change in thinking is the combination of vastly improved plant performance, deregulation, and the need for additional reserves to support our energy needs within the industry for the future.

This is not to say that decommissioning has taken a back door to our planning. We still face issues requiring resolution and efficiency improvements in the decommissioning process. We still need D&D Standards, more cost effective D&D technology, and explicit guidelines for license termination plans and site release clearance standards from Federal Agencies, just to name a few. This is not to say that these latter examples are the only important issues. These are open issues that are being presently addressed and must continue to be given that same needed focus to come to some resolution. I personally express my gratitude to DOE, the NRC, and the entire industry for keeping these issues moving forward to resolution.

I do, however, see the need for added attention to the development of D&D Standards. Although three standards (Security, Operator's Training, and Safety) are in progress to some level of degree, company-own higher priorities have kept key individuals from completing these standards in a timely manner. I do anticipate that a draft and completion of these standards, the first of an anticipated number to come, should see approval by the end of 2001.

Shifting to the broader perspective of D&D, the Division felt its first setback this year stemming from the cancellation of the biennial D&D Topical Meeting scheduled for September 2001. Logistics and individual's other Company's priorities and commitments played a major role in the decision the Division's Executive Committee and I had to make to cancel the meeting earlier this year. However, we have aggressively attempted to capture the elements of the topical meeting by incorporating some of these elements into the D&D Executive Conference being held July 8-11 in Mashantucket, CT. I encourage all of you to make every attempt to attend the meeting and capture both what you might have lost from the technical topical meeting but also gain insight into what industry executives today are strategically thinking in this area.

The need for integrating D&D conferences and meetings within the industry has become an elevated item. A division AdHoc Committee was assigned in Washington, D.C. to develop a preliminary list of recommendations that could form the basis for collaborating multiple meetings into one major late Summer/early Fall D&D conference that would complement the Waste Management Conference in late Winter. I personally ask all of you to become involved, if at all possible, in this effort. We need some changes in how we structure these industry meetings if we are all to benefit from them.

Finally, we made tremendous strides in improving the DD&R Website. If you haven't had an opportunity to view the recent website, I encourage you now to browse it. I know you'll find the information of use in your daily routine responsibilities. We owe our thanks to Hanna Shapira for the time and effort she has put into it.

As a final note to all of you, I have been told by my predecessors that as much as one would like to accomplish in his or hers one year tenure as Division Chair, the distractions just do not allow one to do it. Let me just say that I will pass on to my successor the many ideas I still have, hoping that some of them will begin to be developed and moved forward during their years as Chairman.

#### EXECUTIVE COMMITTEE (CONTINUED)

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#### (Chairman's Message - Continued)

My final request to all of you is that you will make every effort to attend our combined "FCWM/DD&R Division Luncheon" on Monday, June 18. Mal McKibben, FCWM Division Chair, and I have confirmed Mr. Pete Lyons as our luncheon speaker. Pete is Senator Dominici's Staff Advisor on nuclear matters and will be addressing "Legislative Initiatives Impacting Nuclear Energy." I can see no way we can lose in this engagement.

## Don Eggett

#### **DD&R DIVISION WEB SITE**

The Decommissioning, Decontamination and Reutilization Division of the American Nuclear Society website, at <u>http://ddrd.ans.org/</u>, was recently redesigned to serve as a gateway for division members to information relevant to DDRD. Information is updated on a regular basis and is designed to include an archive of newsletters, meetings announcements, directory of officers, committees and subcommittees. A section for Chair Message has been provided and the mission and bylaws, objectives, and 5-year plan are also posted. We have added a new section, members input. Send your input to the Division Chairman, Don Eggett at dreggett@aesengineering.com and it will be posted in this space.

Browser compatibility and accessibility considerations have played a role in design considerations. The site can be spruced up with images which I would welcome from any of you. Send them in gif, jpg, or psd format to <u>hshapira@techno-info.com</u>. I look forward to your feedback regarding the above issues and in addition Aesthetic, ease of navigation, and upload speed.

#### WOMEN IN DD&R

Women in the decommissioning and the environmental remediation industry have become more and more evident over the past few years. This has been noticeable both at conferences and meetings and in their involvement in federal and state agencies, government and commercial organizations, manufacturer and vendor's supporting firms, and even in professional societies. Their knowledge and experience coupled with their intuition and keen insight in both of these areas has proven to be very beneficial to the industry.

As the present Chairman of the DD&R Division, I ask that each of you truly consider becoming more involved in the DD&R Division activities. The DD&R Executive Committee as a whole believes that there should be more of a balanced representation of both men and women professionals to accomplish our projected goals. As Chairman of the Nominating 2001-2002, Committee for the year I welcome you to e-mail me at dreggett@aesengineering.com and express your interest in helping us accomplish the goals we have set out to do.

## ANS EXECUTIVE CONFERENCE

Please plan to attend this Executive Conference July 8-12, 2001 at the Foxwoods conference center, Mashantucket, Connecticut. The theme is **Engaging and Exchanging for Safety:** How to Share in a Competitive Environment.

The preliminary program is on the way and the technical and event programs promise to rival the incredible conference put on by Big Rock two years ago. Commissioner Dicus will be joining us and we are angling for the Secretary of Energy. Probably the most interesting part of this year's conference is the inclusion of the government sector into the technical program. There will be updates from both commercial and government projects, provocative exchanges on sharing in a competitive environment, a new technologies discussion with emphasis on the government's progress, regulatory hot topics and a discussion on end state planning and long term stewardship. The setting is unrivaled with state of the art conference amenities, castles, golf, and much more. Come early and get a special treat.

## **IN MEMORIUM**



Dr. Paul Hart

We are saddened by the loss of one of our members, Dr. Paul Hart. Dr. Hart, a member of the Division's Executive Committee, died December 18, 2000 in Morgantown, WV after a short illness.

Dr. Hart was also serving as a member of the U.S. Department of Energy's National Energy Technology Laboratory (NETL) Executive Board and as Associate Laboratory Director, where he directed the activities of the Office of Environmental Quality and Nuclear Security at Department of Energy (DOE) sites in Morgantown, WV., and Pittsburgh, PA.

Dr. Hart originally joined DOE in 1992 as a Research Program Manager in DOE's Office of Environmental Management and Waste Cleanup and later led the Mixed Waste Focus Area (1993-95). In 1995, Dr. Hart moved to the National Energy Technology Laboratory (NETL) to head the Decontamination and Decommissioning (D&D) Focus Area and where, in 1999, he was promoted to Associate Laboratory Director.

Prior to joining the U.S. Department of Energy, Dr. Hart was a research and development scientist and technology team leader with Union Carbide Corporation from 1974-1992. Dr. Hart received his doctorate in Physical Organic Chemistry from the University of Georgia. As a native of Guyton, Georgia and a 1963 graduate of Effingham County High School, Dr. Hart received his B.S. in Chemistry from the University of Georgia in 1967. He was married to the former Judy Gregorich of Charleston, West Virginia.

As an accomplished leader with DOE, Dr. Hart demonstrated his contributions in his roles in DOE's National Deactivation and Decommissioning Focus Area (DDFA). DDFA is a science and technology program which develops, demonstrates and deploys improved D&D technologies in active DOE site D&D projects and in non-DOE D&D projects, especially at commercial nuclear utility sites.

Through Dr. Hart's vision, technical knowledge and strategic thinking, DDFA demonstrated 121 improved D&D technologies at fullscale, and validated their cost and technical performance during the past five years. DDFA has gained deployment of 82 of these technologies, and these 82 were deployed a total of 300 times.

Dr. Hart also directed the activities of the DOE/Commercial Nuclear Utilities D&D Consortium, which includes the Electric Power Research Institute, Florida International University, Argonne National Laboratory, and nine nuclear utilities. This Consortium has sponsored technology demonstrations at the Big Rock Point and Rancho Seco Commercial Nuclear Utility decommissioning projects.

We would like to extend our most sincere condolences to Dr. Hart's wife, Judy, and the entire Hart family

#### **STATUS REPORT FOR D&D STANDARDS**

The action on the three D&D 3.12 series standards has been delayed by the press of the California energy crisis. Two Drafting Committee Chairs are located at the SONGS plants in Southern California. These are Dave Pilmer who has 3.12.1, the Defueled Security Plan, and Steve Shepherd who has 3.12.2, the Defueled Safety Analysis Report and Emergency Plan. Everyone at Songs is working night and day to get their plant back on line. Hopefully that will be accomplished soon and they will be able to turn some of their attention back to draft preparation. They had made tentative plans to have something this summer, but the delay may push those drafts off until fall. Regardless, we would far rather have that plant back on line than have a draft standard. Don Eggett who is chair for 3.12.3, the Defueled Operator Training standard, has also been serving as Division Chair of DD&R and understandably has been a little stretched. He says he will have a draft by the time of our June meeting.

Three new volunteers who responded to an ad placed by the NFSC have been contacted. These were: Larry Auman, Michael Iannantuono, and John Sanford. They will be added to the appropriate drafting committees depending on their responses. One other person, John Bennion, has volunteered for the Safety Standard and his name has been passed along to the drafting chair.

Our incoming Division Chair, Sam Bhattacharyya, when he takes office in June, plans to make the D&D Standards a high priority for the Division. We will both be trying to get more volunteers motivated and to actually produce some drafts this year.

#### Status Report for D&D Standards (Continued)

In a recent reorganization, the Nuclear Fuel Cycle Standards Committee created an SC-3 subcommittee to cover standards related to D&D. Neil Norman has accepted the Chair of this Subcommittee. One of the old standards which the NFSC assigned to the SC-3 Subcommittee is 3.8.9, "Criteria for Radiological Emergency Response Plans and Implementing Procedures for Permanently Defueled Commercial Nuclear Power Plants". The Project Initiation Notification (PINS) Form for this standard was provided recently to see if this standard can be resurrected. The PINS Form reads almost like the new standard 3.12.2 now that Emergency Planning has been added to 3.12.2. It does not appear that two standards will be needed covering Emergency Planning, and the Emergency Planning part will have to be taken out of 3.12.2 or cancel 3.8.9. This will be reviewed at the DD&R Executive Committee Meeting in Milwaukee in June, and will also be brought up at the NFSC meeting that same week.

Other old standards which were assigned to SC-3 are 41.2 "Criteria for Remote Sensing Techniques for Site Characterization in Environmental Remediation" and 41.5 "Validation of Data from Radiological Analyses for Use in Environmental Remediation". Volunteers are needed for both of these standards Drafting Committees.

## **PROGRAM COMMITTEE REPORT**

**<u>2001</u>** ANS Annual Meeting, Milwaukee, Wisconsin, June 17-21, 2001at the Midwest Express Convention Center Hyatt Regency

Your Division Program Committee has planned a number of exciting and innovative activities for this years Annual Meeting – a meeting with Safety as its center piece with the theme of <u>Safety Culture and its Relationship to Economic Value in the</u> <u>Competitive Market</u>. Don Eggett is the Technical Program Chair. Topical interest in the DD&R Programs is spread among five diverse panel sessions in two tracks. The track philosophy is designed to encourage audience participation from multiple divisions. To support this effort, the 2 DD&R sessions on "Clearance Criteria…" and "Site Release…" are in Track 7 – Policy and Public Interest and the 3 sessions on "Dry Cask Storage Update…", "Hot Topics…" and "Successes…" are in Track 9 – Fuel Cycle, Spent Fuel, Decommissioning and Waste Management. In an effort to learn more about other ANS Divisions, a Multi Division Mixer is planned for Tuesday evening at Maders Restaurant. For additional information on the meeting, click on the Meeting Preliminary Program - available on the ANS web site at <u>www.ans.org</u>. The panel sessions include:

**Tuesday June 19, 8:30 – 1130 AM "Licensing and Safety Issues Associated with Dry Cask Storage Update"** – Session Co-Chairs Russ Mellor, CYAPC and Steve Mirsky, SAIC

Tuesday June 19, 1:00 – 4:00 PM "Clearance Criteria: Still Eluding Consensus?" – Session Chair Jas Devgun S&L

Wednesday June 20, 8:30 – 1130 AM "Decommissioning Hot Topics and Emerging Safety Issues" – Session Co-Chairs Patty Augustyn, Graver Technologies and Tom Laguardia, TLG Services

Wednesday June 20, 1:00 – 4:00 PM "Industry Update: Ensuring Public Safety During Material and Site Release" – Session Co-Chairs Jim Byrne, GPU Nuclear and Arthur Desrosiers, Bartlett Services, Inc

Thursday June 21, 8:30 – 11:30 AM "Safety Yields Decommissioning Successes" – Session Co-Chairs Steve Bossart, NETL and Dick Miller, Bechtel Power Corp

<u>ANS Executive Conference on Nuclear Facility Decommissioning and Used Fuel Management,</u> - "Engaging and Exchanging for Safety: How to Share in a Competitive Environment" at Foxwoods Conference Center Mashantucket, Connecticut, on July 8-12, 2001.

The 2001 Executive Conference at Foxwoods Conference Center is set to engage a variety of key players in open discussion on how "competition" can impact our ability to conduct the safest and most efficient facility restoration. Russ Mellor is General Chair and Mike Cavanaugh is Program Chair. For additional information, please check the ANS web site.

#### D&D Focus Area Mid-Year Review Meeting - Miami, Florida on April 17-19, 2001

The D&D Focus Area Review and Decommissioning Symposium was rated a great success with about 215 participants including technology end users from DOE headquarters and field locations, DOE site contractors, commercial decommissioning firms, nuclear utilities, technology developers and vendors. During the Review Meeting, a six-member review panel evaluated the relevancy and technical merit of about 30 projects managed by the DDFA. A special dedication was also conducted in the honor and memory of Dr Paul W Hart.

## **HONORS AND AWARDS**

Richard Meservey's panel presentation during the session on Decommissioning Successes in the U.S. Department of Energy was selected as the best panel presentation at the DD&R sessions at the 2000 ANS/ENS International Meeting in Washington, D.C. We will be presenting him a plaque at the 2001 Annual Meeting in Milwaukee.

## **CONNECTICUT-YANKEE DECOMMISSIONING UPDATE**

**Decommissioning Progress** - Executives attending this year's Executive Conference on Nuclear Facility Decommissioning and Used Fuel Management in July will see first hand how the plant is taking on a new look as decommissioning continues. The entire turbine system, except for the generator, has been removed. The plant's two emergency diesel generators have been sold and will be shipped later this spring. The cleanup of legacy waste from the peninsula area is progressing well and is nearing completion. Connecticut Yankee has completed about 40% of its decommissioning activities in the 25 months since awarding a decommissioning operations contract to Bechtel Power Corp. The project is on track to meet its industrial safety and radiological goals. CY has hired the Conservation Law Foundation to assist in the donation of the majority of the 500 acre site for conservation purposes.

**Large Component Removal** - Two of the four steam generator lower assemblies were shipped by barge from the site on April 9, 2001. Because the Savannah River still is too low for barge traffic, the barge will travel to Port Royal, South Carolina. There the steam generator lower assemblies will be transported by rail the final 90 miles to Barnwell. The other two lower assemblies will be shipped in the same manner mid-May. Preparations continue for pulling the reactor vessel from containment later this year.

The plant's reactor coolant pumps were transported by truck to a nearby rail spur and shipped by rail to Envirocare in Utah. Bechtel plans to ship the pressurizer by truck and rail to Envirocare in May.

**<u>Reactor Pressure Vessel Internals</u>** - Segmentation of the approximately 850,000 curies of Greater Than Class C reactor pressure vessel internals, performed by using ultra-high pressure abrasive water jets is complete. The contractor, PCI, is currently demobilizing the operation. The thin strips of GTCC were cut and loaded into Fuel Assembly Sized canisters and will be transferred this spring to Connecticut Yankee's spent fuel pool for storage until the dry spent fuel storage facility is ready. Dive operations were conducted to prepare the spent fuel transfer canal for the transfer of the canisters to the spent fuel pool for storage.

**Independent Spent Fuel Storage Facility (ISFSI)** - Connecticut Yankee plans to use 43 casks for its ISFSI. Forty of those casks will be used for the spent fuel, with the remaining three casks reserved for the GTCC material. The NAC, Inc. multi-purpose canister system will be used. Initial design is complete and the fabrication of the VCC Liners has begun. Connecticut Yankee's application for a zoning change to site the ISFSI facility in a remote area on the property was denied by the Town of Haddam. The issue has been referred to federal court for resolution. Schedule of construction will be determined by the outcome of the court decision.

**License Termination Plan (LTP)** - The Nuclear Regulatory Commission has completed its initial review of the Connecticut Yankee LTP. The public comment period on the LTP ended in January and two interveners have been identified. The NRC has requested additional information and CY has responded to its request. A pre-hearing conference was held the end of April.

**<u>Repowering</u>** - Planning and permitting continues with Native Hollow, LLC (AES), who has taken an option to buy a portion of the plant property and existing buildings for the construction of a gas-fired generating station.



CY Waste in Transport by Barge

## FERMI 1 DECOMMISSIONING UPDATE

The secondary sodium cleanup continues at Fermi 1. More than 500 gallons of sodium residues have been safely processed. It is a slow careful process. Preparations have started for the primary sodium cleanup. The NRC has approved the license amendment needed before the primary system could be unsealed. Abatement of accessible asbestos (and some previously inaccessible asbestos) continues, with more than a million pounds shipped. The last major area will be started in early May. Removal of the demin system and turbine oil system are almost complete. Elemental lead abatement has started. Scheduling of the full radiological decommissioning has begun, with current activities being planned and performed towards the end goal of license termination. The decommissioning is being performed slowly in a controlled manner to minimize impact on the operating plant onsite. Approximately 30 people are working on the Fermi 1 project.

## MAINE YANKEE DECOMMISSIONING UPDATE

With about 43 percent of the work complete, Maine Yankee is entering the most active phase of the project: Building demolition began this month with the turbine hall, and GTCC waste is scheduled to begin moving to the Independent Spent Fuel Storage Installation next month followed by spent fuel in early summer.

To support self performance, Maine Yankee has reorganized to focus on four key projects that must be accomplished safely in order to complete decommissioning on budget in 2004: transfer fuel and GTCC waste to the ISFSI; remove/dispose of the reactor pressure vessel; remove structures and restore the site; dispose of the waste.

**Safety** - - With a work force of nearly 500 and more than 2.3 million hours worked there have been three lost time accidents for a cumulative lost time incidence rate of 0.25. The OSHA recordable incident rate is 2.94. Both statistics are per 200,000 hours worked.

**ISFSI --** Construction is nearly complete as workers install security and monitoring systems and finish modifications to the security and operations building. NAC International is contracted to move the fuel and GTCC waste from "pool to pad" with a fall 2002 completion date.

**Reactor Pressure Vessel** - - The container for the reactor vessel was recently delivered by barge. The vessel will be removed from containment at the end of this year and shipped to Barnwell, SC early next year. The vessel is the last remaining large component.

**Building Demolition-** - Turbine building demolition is underway, to be followed by the service building and circulating water pump house.

**Waste Disposal - -** About 25 million pounds of waste have been shipped from the site. That is about 12% of the projected total waste volume from the project. An estimated 73% of decommissioning waste will be concrete that leaves the site by rail. Commodity removal from containment and elsewhere is expected to be completed this year.

**Site Restoration - -** The revised License Termination Plan is scheduled to be submitted to the NRC in June. Since last fall Maine Yankee has held 15 meetings with stakeholders in an effort to resolve outstanding issues. Many of the LTP revisions reflect Maine Yankee's decision to ship concrete from demolished structures off site for disposal rather than place the concrete in the foundations. Maine Yankee has also applied to the NRC for release of backland areas from the Part 50 License and has begun Final Site Survey work in the area adjacent to the ISFSI. Additionally, Maine Yankee recently submitted its Resource Conservation Recovery Act closure sampling plan to the State of Maine. RCRA sampling is scheduled to begin this fall.

**Site Development - -** As part of the 1999 FERC settlement Maine Yankee will donate the 200 acre Eaton Farm to a non-profit entity for conservation and environmental education purposes. Maine Yankee retained a consultant last summer to put together a process for responsible development of the remaining 600 acres. Maine Yankee intends an initial solicitation of site development proposals later this spring.

**Community Involvement** - - Maine Yankee's Community Advisory Panel (CAP) remains integral to the decommissioning/site restoration process. The CAP meets about every six weeks, affording CAP members, the public, and media regular opportunities to receive updates on the project and to ask questions. The CAP has a keen interest in learning about best practices in decommissioning and will participate in a panel discussion on community involvement at the May High Level Radioactive Waste conference in Las Vegas. Outside the CAP process, Maine Yankee, through its development consultant, has held three meetings with representatives of the regional community to better understand what criteria the community would like to see applied to site development.

For more information contact Eric Howes, director of public and government affairs at (207) 882-5875, or visit the Maine Yankee web site at www.MaineYankee.com.

## **Maine Yankee Decommissioning Photos**



Demolition of M-Y Turbine Building Cool Side Machine Shop



M-Y Empty Vertical Concrete Canister Placed on Pad



Shipping Container for Maine Yankee Reactor Pressure Vessel

## **RANCHO SECO DECOMMISSIONING UPDATE**

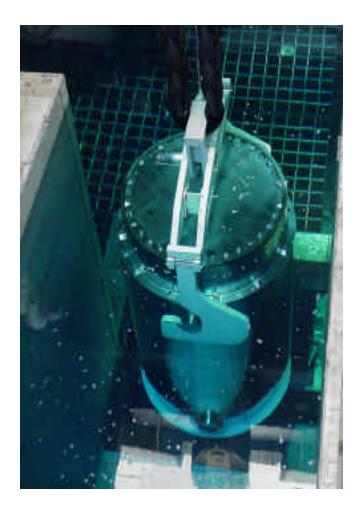
The first dry-fuel storage canister came out of the Spent Fuel Pool in the transfer cask on April 11. Thus finally begins a process that will allow the Sacramento Municipal Utility District (SMUD) to cut annual decommissioning costs. Assuming the canister delivery schedule can be met, the fuel should be transferred to the ISFSI by the end of the year.

System dismantlement continues in the Auxiliary and Reactor Buildings, greater than 40% complete in the Auxiliary Building. Ventilation and small piping systems are being removed in the Reactor Building. A complete high-pressure water wash is nearing completion in the Reactor Building. This will allow easier access and less protective clothing. Preparation is underway for removal of the four reactor coolant pump motors. A temporary building was just completed outside the Reactor Building Equipment Hatch for material lay-down and packaging.

During the last quarter of 2000 a major survey was performed of the SMUD owned property outside the security fence. This survey verifies that the property is non-impacted and can used as a background study. A portion of this property is designated for a natural gas generation facility.

DOE funding is expected for an EPRI sponsored proposal to demonstrate innovative decommissioning technologies at Rancho Seco. Full funding is expected for the next fiscal year beginning in October, but a fraction may be forthcoming to get the project started sooner.

The current schedule calls for site release by the end of 2008. An insufficient decommissioning fund requires that high dollar activities, such as large component removal, wait for later in the schedule, once funds accumulate.





First Immersion of the Spent Fuel Transfer Cask

The Spent Fuel Transfer Cask after removal from Pool

## **BIG ROCK POINT DECOMMISSIONING UPDATE**

Local acceptance of Big Rock Point's debris disposal plan highlighted restoration efforts over the past quarter. The plant's plan to dispose of up to 85 million pounds of clean concrete and other building material in a local industrial landfill was presented to government officials, opinion leaders and residents. The support of a third party expert played a key role in easing citizen concerns. Pending NRC approval, Big Rock Point intends to begin shipping clean building material to the landfill in the next 12 - 18 months.

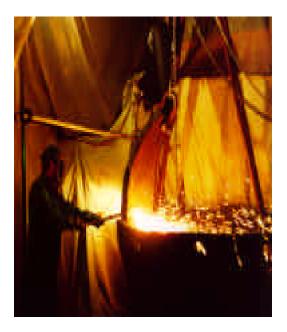
Other significant activities at Big Rock Point include:

- Employees successfully separated the steam drum from the reactor vessel. This was accomplished by cutting and removing pipes that ranged in size from 2- to 24-inches in diameter.
- The sodium pentaborate tank and 22-foot long emergency condenser were successfully cut into sections and shipped for processing at Oakridge, TN.
- The plant's decommissioning power supply earned a "Project of the Year 2000" award from *Power Engineering* magazine. The editors of the magazine recognized the system because it increased employee safety and provides a model for future decommissioning projects.
- The control room simulator, the first such simulator ever built by plant employees using microprocessor technology, was dismantled. The simulator building is being converted into a temporary plant museum
- The alternate shutdown building was the first structure to be confirmed clean of radioactive contamination by health physics employees and then demolished for future disposal in an industrial landfill.

Employees are currently constructing a storage pad and preparing to load the plant's 441 used fuel bundles in dry storage. Loading is scheduled to begin late this fall.



**Cutting Hole in Containment Sphere** 



**Cutting Up Sodium Pentaborate Tank** 

## SAN ONOFRE DECOMMISSIONING UPDATE

San Onofre Nuclear Generating Station Unit 1 (SONGS 1) Decommissioning is in the midst of it's second year. The last six months has brought numerous changes to the "profile" of SONGS 1. The projects planned to work in the next six months will alter it's appearance even more.

**Industrial Area:** SONGS 1 is becoming an Industrial Area. The physical separation of SONGS 1 from SONGS 2/3 is expected to occur in late April. Separating SONGS 1 from the operating units will provide greater ease of access to SONGS 1 as well as the ability to relax some physical security requirements. Metal and explosive searches of personnel or hand-carried objects will no longer be required for Unit 1 access. Security background checks or psychological evaluations of personnel will also not be required. Other changes are there will be no security searches or escort of vehicles required and visitor access restrictions and control measures will be relaxed. However, physical security enhancements have been made for the Unit 1 Spent Fuel Building. Personnel entering this building will need to have authorization from the Unit 1 Shift Supervisor and will be searched for explosive and prohibited items. Some things will remain unchanged. The Unit 1 Industrial Area will continue to be controlled as a Restricted Area by Health Physics (HP). All tools and equipment, other than personal items, must be surveyed by HP prior to exiting.



**Unit 1 Industrial Area Access Facility** 

**Reactor Vessel Internals (RVI) Segmentation:** Planning and preparation for RVI Segmentation has been completed and cutting began on the Class C or less components in mid-April. PCI Energy Services is the vendor performing the work at SONGS 1. SONGS 1 is going to remove approximately 78 inches of the core barrel (lower internals) that surrounds the active fuel region during reactor operations. This includes the baffles, formers and the lower core support plate. A water filtration system and secondary waste handling system are being used to capture activated cut particles to maintain water clarity for cutting and to meet SONGS' standards for ALARA. A collection system will capture gasses produced in the cutting and disintegration processes to ensure that atmospheric conditions in the containment area remain in check during the cutting process. RVI Segmentation is forecast to be completed in February, 2002.



Filtration Skid in the Upper Cavity

The new main bridge used for RVI Segmentation

## TROJAN DECOMMISSIONING UPDATE

On February 12, 2001, the NRC approved the License Termination Plan (LTP) for Portland General Electric's Trojan Nuclear Plant. This is the first power reactor LTP approved by the NRC since the requirements were established in 10 CFR 50.82 in 1996.

The Trojan LTP includes a description of remaining site decommissioning activities, site remediation plans, the final survey plan, the method of demonstrating compliance with the radiological criteria for license termination, an update of the site-specific decommissioning costs, and an evaluation of environmental effects of license termination. Final survey activities are scheduled to begin in late April 2001. Containment Building remediation and final survey are scheduled to be completed in 2001.

The largest remaining project, and perhaps the most crucial to ultimately terminating Trojan's Part 50 license, is the completion of the Independent Spent Fuel Storage Installation project, including transfer of the spent fuel into dry storage. In March 2001, the contract with BNFL Fuel Solutions, Inc. (formerly known as Sierra Nuclear Corporation) to provide a dual-purpose, canister-based, dry fuel storage system was terminated. A new contract to complete the project was awarded to Holtec International. Under this contract, Holtec will help prepare the site-specific license amendment request for submittal to the NRC, manufacture and deliver the Multi-Purpose Canisters (MPCs) and required ancillaries to the Trojan site, prepare ISFSI implementation procedures, conduct personnel training, perform NRC-observed dry runs, and transfer the fuel to dry storage. A total of 34 Holtec MPCs will be loaded and stored in the TranStor concrete casks. Fuel loading is scheduled to begin in the fourth quarter of 2002.

## YANKEE ROWE DECOMMISSIONING UPDATE

**DECOMMISSIONING STATUS** - Except for waste shipments, Yankee Rowe plant activities are focused on planning and preparing for the transfer of used fuel from wet to dry storage scheduled to begin this summer.

**ISFSI STATUS** The construction of Yankee's ISFSI dry storage pad and access road was completed in December 2000. The storage pad fencing and electrical and security systems are in place. A new Fuel Transfer Enclosure building, where the fuel canisters will be purged of water, filled with helium and their lids seal welded prior to being placed inside concrete storage casks, was completed in March. Some of the ISFSI components, which are being fabricated in Japan and North Carolina, have arrived at the site.

Yankee has selected NAC International to transfer the 533 spent fuel assemblies and segmented reactor internals from the pool to dry storage. NAC, which designed and licensed Yankee's multi-purpose fuel storage and transport system, will help provide a seamless "pool to pad" solution at Yankee Rowe. NAC's primary responsibilities are to construct the vertical concrete storage casks, load the fuel canisters, prepare and place the canisters in the concrete casks, and transfer the loaded casks to the storage pad. They will also remove, package and ship the fuel pool racks. NAC has completed mobilization efforts at Yankee Rowe and pre-transfer activities are underway.

The fuel transfer project is scheduled to be completed in 2002. Yankee will complete the remainder of decommissioning, including license termination plan activities, building dismantlement and site restoration, after the fuel is transferred to dry storage.

## SAXTON DECOMMISSIONING UPDATE

Saxton continues excavation and remediation of areas surrounding the containment vessel, including the previously demolished fossil unit the Saxton Steam Generating Station. Due to the extent of contamination migration throughout the concrete, a decision has been made to remove all concrete inside the containment vessel, which extends 50 feet below grade level and will provide a daunting challenge to the project. NRC review of the License Termination Plan is ongoing with responses submitted for 2 of 3 sets of request for additional information. Project completion is now projected for late 2002.

## HOT TOPICS AT THE UPCOMING ANS ANNUAL MEETING

At recent conferences, attendees have found the special sessions on "Hot Topics and Emerging Issues" to be especially interesting. We plan to do the same for the upcoming 2001 ANS Annual Meeting in Milwaukee, Wisconsin. A Facilitated Panel Session on Hot Topics and Emerging Issues is scheduled for Wednesday morning, June 20, from 9:30 to 11:30. It will include the following:

- 1. License Termination Plan Content and NRC Guidance in its Preparation Robert Nelson, NRC
- 2. Partial Site Release of Property Prior to LTP Approval Mike Ripley, NRC
- 3. New 50.59 Rule Changes and their Impact on Decommissioning Lynne Goodman, Detroit Edison
- 4. Private Dry Storage Pros and Cons John Parkyn, Dairyland Power
- 5. PCB's in Paint and Other Materials Tracey Goble, Big Rock Point, invited
- 6. Demolition of Buildings after License Termination Jim Byrne, GPU Nuclear
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