



Replacement of the Palo Verde Nuclear Generating Station's Unit 2 Steam Generators

- Date:** Thursday March 11, 2004
Time: 7:00 pm Meeting
Location: APS Building, Room 2 South
(NE Corner of the Arizona Center)
Cost: The Meeting is Free
(Cookies and Sodas will be provided by the Section)
RSVP: Please RSVP (see below) so we may
plan appropriately but all are welcome

Preceding the Meeting there will be a group meeting at 5:30 pm for Dinner at Mi Amigos in the Arizona Center. You will be responsible for the cost of your own dinner.

Please RSVP To: Mark Jones
Phone: 480-759-2958

Email: jonesm1@asme.org
Before noon Wednesday March 10th

Leave a message with the number in your party, a phone number at which you can be reached and if you are also planning to meet for dinner preceding the meeting.

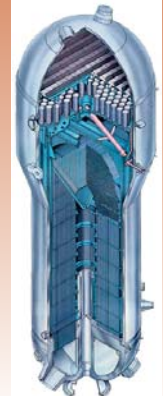


Casey Corcoran, Senior Engineer and Mike Pacholke, Sr. Project Manager will be discussing the now complete replacement of the Palo Verde Nuclear Generating Station's Unit 2 steam generators. Various plants across the country have been shutdown due to steam generator issues, while some units have proactively approached the issue by replacing the critical plant components. Palo Verde has been operating for just over 10 years, and replacement of the steam generators will ensure the design life of 40 years will be met. The Steam Generator Replacement will also pave the way for APS to request a Unit 2 plant life extension to 60 years.



There were many complex issues that were associated with the replacement of the largest Steam Generators ever built. The generators, being built in Italy, will be shipped over seas to Mexico, where they will be shipped on specially designed carriers from Puerto Penasco, Mexico to the Palo Verde Site. Issues range from ASME Code requirements and enforcement in a foreign country, shipping and port challenges in three countries, (Italy, Mexico and the United States) and the physical installation in the Palo Verde plant while conducting a refueling outage.

The physical size of each steam generator is approximately 74 feet in length, 20 feet in diameter with a weight of 804 tons. These steam generators are the LARGEST ever built and fittingly, are installed in Palo Verde, the Nation's Largest Power Producer which now has a generating capacity of 1420 MWE.





Chair's Message

Hello again.

The Honors and Awards banquet was an outstanding success. The speaker, Col. Richard H. Graham, USAF (Ret) was great. We honored several 25, 35 and 50 year members. If numbers matter, there were 104 in attendance. We even had a member travel all the way from Page for the meeting!

Our next meeting on March 11 is about the nuclear steam generator replacement at Palo Verde. April 7, we will have our annual industry breakfast. The next day, April 8, we will have a barbeque at the shop where Top Gun Fabricators design and build sand machines - the ones with big V-8 engines. Also, don't forget the Annual Steak Fry on May 13.

Our next board meeting will be March 9, 6 P.M. in room 2S at the APS building in Arizona Center. Some of us meet for dinner before-

Enjoy the weather and Spring Training!



hand at 5 P.M. at Mi Amigos in the Arizona Center. Come join us. Those who would like to be involved, we will help you get going.

Eric Smith

Chair, Arizona Section ASME

ASME President Named to Homeland Security Science and Technology Advisory Committee

Source: *Mechanical Engineering*
Publication date: 2004-03-05

ASME President Reginald Vachon, P.E. has been named to the Homeland Security Science and Technology Advisory Committee (HSSTAC) of the Department of Homeland Security's Science and Technology Directorate. HSSTAC has been established to serve as a source of independent, scientific and technical planning

advice to the Under Secretary for Science and Technology as mandated by the Homeland Security Act of 2002.

The committee held its first meeting from February 26-27 of this year. The 20-member advisory committee meets at least four times a year. Committee members are eminent in their fields, which include emergency response, research, engineering, new product development, business, and management consulting. These scientists, engineers, medical researchers, first responders, industrial and academic leaders, former government officials, and others provide expertise relevant to the Department of Homeland Security's science and technology enterprise. More information about HSSTAC, including the full list of members, can be found at: www.dhs.gov/dhspublic/display?theme=53.



Brain Teaser

If you were 3/4 long and 3/4 done, what would you be?

This month's Brain teaser is brought to you by Braingle.com

London, of course!
3/4 of long = lon
3/4 of done = don
lon and don = London

Answer

Gas Turbine Technical Chapter Plant Tour Successful

The gas turbine technical chapter had a very nice tour of the SRP Santan Generating Station on Saturday, February 28, 2004. Eleven members participated, with the tour taking about two hours. It included a technical description of the equipment, followed by a

walk through of the overhaul area when some of the internal hot gas path and cold end parts were available for viewing. This was a perfect time to see a heavy frame GE industrial turbine disassembled with service run parts available for inspection.

Mr. Drew Athetis, Senior Mechanical Engineer, conducted the tour and did an excellent job of describing everything that was seen and fielding the questions. Those that missed this tour may have another chance to visit a power generating plant down for inspection at some future date.

NASA Administrator Questioned On Bush Space Plan

Sean O'Keefe, Administrator of the National Aeronautics and Space Administration (NASA), and Presidential Science Advisor John Marburger, recently were put on the hot seat by members of the House Science Committee on "The President's Vision for Space Exploration." Testimony primarily focused on support for - and the total cost of - the President's initiative. The Crew Exploration Vehicle (CEV), the space shuttle, and the Hubble Space Telescope also were discussed.

During the hearing, Ranking Democratic Member Bart Gordon (D-TN) repeatedly, though unsuccessfully, pressed O'Keefe to provide a specific cost estimate for returning humans to the moon by 2020. In his opening statement, Gordon focused on the cost of the program, noting that as far back as 1989, the Office of Management and Budget had estimated the 30-year cost of such an initiative to be about \$590 billion (in 2003 dollars).

For a number of years, ASME has joined with an Aviation Research

and Technology Coalition to call attention to decreasing investments in Aeronautics research, and recently released a position statement on "Critical and Persistent Issues in the Nation's Aviation and Aeronautics Enterprise."

In his opening statement (and during his testimony) Dr. Marburger noted the following regarding Aeronautics:

"The President's FY2005 budget supports the NASA Aeronautics Blueprint with a request for \$919.2 M. This maintains the funding level for Aeronautics that was in the President's FY2004 budget plan. The presence of FY2004 earmarks in the budget numbers creates the impression that reductions have been made to content, which is not the case. The Blueprint identifies challenges facing aviation today and describes a vision of technology advances that will help solve these challenges. These advances will also create a whole new level of system performance and revolutionize civil and military aviation. The proposed FY2005 budget request includes the development of the highest priority (safety/security, noise, and emissions) technologies and directly supports the vision es-

Arizona Section ASME Annual In- dustry Breakfast

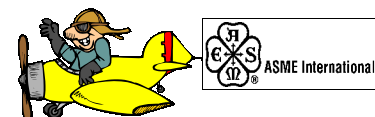
The Arizona Section of ASME invites engineering supervisors, managers, vice presidents, presidents and owners to the annual Industry Breakfast on Wednesday morning April 7, 2004. The purpose of the meeting is to help you use ASME effectively. This year we have the good fortune to welcome a past ASME president as our main speaker.

The Arizona Section would also like to thank ASME Region XII in advance for their assistance in hosting the breakfast. We do need reservations so that we may plan accordingly. Please call or e-mail Eric Smith, 602-938-1098, smithe7@asme.org.

poused by the Blueprint. To further emphasize the priority of Aeronautics, a new NASA enterprise specifically focused on Aeronautics has been created."

Testimony from the hearing is available online at <http://www.house.gov/science/hearings/full04/index.htm>

Kathryn Holmes handles public policy-related aeronautics issues for ASME. She can be reached at holmesk@asme.org. Additional information about ASME's aeronautics and aviation activities are available at <http://www.engineeringpolicy.org>





Your Section Executive Committee and Operating Board for '03 -'04

If we can help you, please feel free to contact us. We look forward to serving the AZ Section members.

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ASME International

The following has been quoted from the Constitution of the American Society of Mechanical Engineers. Revised to October, 1991.

C5.1.2 The provisions of the Constitution, By-Laws and Policies and Procedures established by the Board of Governors of the Society shall govern the procedure of all components of the Society but no action or obligation of such components shall be considered an action or obligation of the society as a whole. This provision shall be imprinted on any publication issued by such components.

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March, 2004

2003-2004 Calendar of Events

- Mar 9 Board Meeting -APS Building
- Mar 11 **Palo Verde Steam Generator** - APS Building
- Mar 31 **Engineering Careers Panel Discussion** - ASU
- Apr 6 Board Meeting -APS Building
- Apr 7 **Industry Breakfast** - TBD
- Apr 8 **Sand Rail Design** - TBD
- May 11 Board Meeting -APS Building
- May 13 **Steak Fry** -Pera Club

