Y-12 surplus uranium fuels commercial power reactors

After three years of planning and six years of execution, BWXT Y-12 celebrated the successful transfer of more than 45 metric tons (or approximately 100,000 pounds) of highly enriched uranium from Y-12 to the United States Enrichment Corporation.

BWXT’s Nuclear Products Division in Lynchburg, Va., blended the material with natural uranium to produce low-enriched uranium, which can be fabricated into commercial reactor fuel.

The good news is that Y-12 is no longer responsible for safeguarding and storing this surplus material, and it is being put to good use producing electricity.

“By shipping more than 2,500 containers of HEU for down blending, the USEC Transfer Project has contributed significantly toward reducing the safeguards, security and storage burden posed by the inventory of surplus legacy materials at Y-12,” said George Singleton, manager, HEU Disposition Program Office.

The potential energy in this large amount of fuel is sufficient to power a typical commercial power reactor for approximately 34 years or provide electricity to every household in the U.S. for 81 days.

Because of its size, the USEC program required effort from many Y-12 organizations. Shipments of oxide were processed and packaged by Enriched Uranium Special Processing personnel. Metal shipments followed, requiring a labor-intensive effort on the part of the Enriched Uranium Metal Working organization. The Material Management organization orchestrated material movements and staged and loaded material.

Supporting these areas were a myriad of personnel, including Analytical Chemistry, the Container Refurbishment group and all the groups required to support operations, such as Procurement, Maintenance, Engineering, Nuclear Materials Control and Accountability, Radiological Control, Quality Assurance and Criticality Safety.

How to get there—directions to the event

ROUTE 1: From Solway, bear left onto Oak Ridge Highway (62E, becomes Western Avenue) for approximately 12 miles. Continue into downtown Knoxville. Bear left onto W. Summit Hill Drive. Turn right on Hall of Fame Drive. Turn left onto Hill Avenue. Marriott is on right. Parking is free.

ROUTE 2: From Pellissippi Parkway, take I-40 East/I-75 North to Knoxville. Take James White Parkway, Exit 388A. On James White Parkway, stay in the left lane and continue straight to Hill Avenue. Marriott is on the right past SunTrust Bank. Parking is free.
The Cooperative Agreement of Labor and Management—or CALM—House project is reaching its final stages, and one of Y-12's biggest construction contractors recently donated some much-needed drywall assistance.

Blaine Construction, the lead subcontractor for Y-12's Highly Enriched Uranium Materials Facility project, loaned the talents of a crew of drywall experts to the refurbishment of Methodist Medical Center's second Hospitality House.

In existence since 1987, CALM is a joint labor-management initiative of the Knoxville Building and Construction Trades Council and the various unionized construction employers working on the Oak Ridge Reservation.

For the last two years, the degenerating “E” style building located near the hospital on Tennessee Avenue in Oak Ridge has provided trainees and apprentices of the building trades a place to hone their skills and work with seasoned professionals.

The partnering effort that blends the talent of the Apprenticeship and Training Programs of the Building Trades Unions with the donations of materials and expertise from many construction employers working on the reservation has resulted in a quality finished product. A number of components have been completed and have passed inspection by city officials.

You are aware of the recent changes in the management at Y-12. Denny Ruddy was a strong and dynamic leader, and he will be missed. It’s important for you to know that we are moving forward with many of the initiatives begun under his watch over the last year or so.

I also want you to know that I am determined in continuing our trend of bringing Y-12 to the forefront in all areas of our enterprise. To do this, we will focus on the following:

• On-time, on-cost execution of our work in a safe and secure manner. I call this sticking to our knitting.
• Taking an aggressive, but achievable, additional work-scope challenge utilizing resources freed up as a result of productivity improvements like we did in FY 2005. I call this continuing a good thing.
• Continuing the planning (like design of the Uranium Processing Facility) and execution (like construction of the Highly Enriched Uranium Materials Facility) of our modernization/consolidation strategy. I call this we planned the work, now work the plan.
• Solving our problems and meeting our challenges. Our problems and challenges are multidisciplinary; therefore, they need to be worked by involving parts of our organization. I call this working together.

There is a lot to be excited about. We were recently authorized by the U.S. Department of Energy to start up the Purification Facility, the first new processing facility built at Y-12 since the 1970s. We also received DOE's approval for the privately financed buildings. There will be several temporary inconveniences related to parking and moving employees around, but I ask you to bear with us as we make positive inroads into an improved Y-12.

If we work together, there isn’t anything we can't accomplish. Keep up the great work and thank you for all you do. If I haven’t already visited with you, I’ll be around to every area of the plant in the coming weeks to meet with you, hear your concerns and ideas for making Y-12 the best site possible.

The Cooperative Agreement of Labor and Management—or CALM—House project is reaching its final stages, and one of Y-12's biggest construction contractors recently donated some much-needed drywall assistance. Blaine Construction, the lead subcontractor for Y-12's Highly Enriched Uranium Materials Facility project, loaned the talents of a crew of drywall experts to the refurbishment of Methodist Medical Center's second Hospitality House.

In existence since 1987, CALM is a joint labor-management initiative of the Knoxville Building and Construction Trades Council and the various unionized construction employers working on the Oak Ridge Reservation.

For the last two years, the degenerating “E” style building located near the hospital on Tennessee Avenue in Oak Ridge has provided trainees and apprentices of the building trades a place to hone their skills and work with seasoned professionals.

The partnering effort that blends the talent of the Apprenticeship and Training Programs of the Building Trades Unions with the donations of materials and expertise from many construction employers working on the reservation has resulted in a quality finished product. A number of components have been completed and have passed inspection by city officials.

Blaine Construction's drywall experts helped refurbish the CALM House.

When completed, the renovated suites will provide temporary lodging for patients and families who must travel great distances for treatment at Methodist Medical Center. CALM Co-Director Mel Schuster of Y-12 estimates that occupancy should occur by late November.

BWXT Y-12 will have a suite dedicated in its name for the $10,000 contributed by the company.

Contact the Methodist Hospital Foundation at 481-5923 or visit www.mmcoakridge.com for more information.

[Image of a person with the caption “Liedle’s Letter ‘Moving forward’”]

Liedle’s Letter ‘Moving forward’

You are aware of the recent changes in the management at Y-12. Denny Ruddy was a strong and dynamic leader, and he will be missed. It’s important for you to know that we are moving forward with many of the initiatives begun under his watch over the last year or so.

I also want you to know that I am determined in continuing our trend of bringing Y-12 to the forefront in all areas of our enterprise. To do this, we will focus on the following:

• On-time, on-cost execution of our work in a safe and secure manner. I call this sticking to our knitting.
• Taking an aggressive, but achievable, additional work-scope challenge utilizing resources freed up as a result of productivity improvements like we did in FY 2005. I call this continuing a good thing.
• Continuing the planning (like design of the Uranium Processing Facility) and execution (like construction of the Highly Enriched Uranium Materials Facility) of our modernization/consolidation strategy. I call this we planned the work, now work the plan.
• Solving our problems and meeting our challenges. Our problems and challenges are multidisciplinary; therefore, they need to be worked by involving parts of our organization. I call this working together.

There is a lot to be excited about. We were recently authorized by the U.S. Department of Energy to start up the Purification Facility, the first new processing facility built at Y-12 since the 1970s. We also received DOE's approval for the privately financed buildings. There will be several temporary inconveniences related to parking and moving employees around, but I ask you to bear with us as we make positive inroads into an improved Y-12.

If we work together, there isn’t anything we can't accomplish. Keep up the great work and thank you for all you do. If I haven't already visited with you, I'll be around to every area of the plant in the coming weeks to meet with you, hear your concerns and ideas for making Y-12 the best site possible.
Talley earns certification

Tim W. Talley has completed the professional certification requirements of AACE International (formerly the American Association of Cost Engineers) and has earned the designation Earned Value Professional.

Talley is currently a program control analyst at BWXT Y-12. During his past four years there, his duties have included data analysis, cost estimate and schedule development, and being responsible for cost control and project reporting.

Talley is a member of the East Tennessee Section of AACE International. He has completed training for the Tennessee Department of Children’s Services and The University of Tennessee College of Social Work Office of Research and Public Service for foster parenting. He is a member of the New Vision Fellowship Church and a previous recreational league basketball coach. He is a graduate of The University of Tennessee.

—Condensed from The Oak Ridger, Nov. 1

Y-12 recognized for environmental accomplishments

BWXT Y-12 received recognition from the Tennessee Chamber of Commerce and Industry for outstanding environmental accomplishments at the 23rd Annual Environmental Awards Conference. Award and achievement certificates were as follows:

- Solid Waste Management Award for a recycling process for removed and formerly land-filled roadway construction base,
- Hazardous Waste Management Achievement Certificate for employee pollution prevention awareness and outreach initiatives impacting hazardous waste at Y-12 and
- Environmental Excellence Achievement Certificate for the combined pursuit of these and other Pollution Prevention projects.

Accepting the award and certificates were Jan Jackson, Y-12 Pollution Prevention program manager; Aprell Patterson, Y-12 Pollution Prevention; Terry Cothron, Environment, Safety and Health coordinator; Clarence Hill, Y-12 environmental coordinator; and Gary Calvert, construction specialist.

Award winners were selected by a panel of state officials who reviewed the nominations, accomplishments and compliance records of the respective environmental programs.

Y-12 breaking ground Dec. 1

Groundbreaking on two new buildings (conceptual drawings above) at the Y-12 National Security Complex [will take place Dec. 1].

Wayne Roquemore, president of Lawler-Wood LLC of Knoxville, said construction on the private-sector buildings, which total more than 500,000 square feet and might cost about $100 million, should begin around Jan. 1.

Janney said the two buildings should bring significant property tax revenues to Oak Ridge and Anderson County. The buildings are being developed with bonds issued by the IDB.

—Condensed from The Oak Ridger, Oct. 19
Retirement Program

Basic Financial Statement

Benefits under the plan are provided by a trust (benefits are provided in whole from trust funds). Plan expenses were $169,206,459. These expenses included $16,513,312 in administrative expenses and $152,693,147 in benefits paid to participants and beneficiaries. A total of 22,878 persons were participants in or beneficiaries of the plan at the end of the plan year, although not all of these persons had yet earned the right to receive benefits.

The value of plan assets, after subtracting liabilities of the plan, was $2,861,239,681 as of December 31, 2004, compared to $2,691,958,132 as of January 1, 2004. During the plan year the plan experienced an increase in its net assets of $169,281,549. This increase includes unrealized appreciation or depreciation in the value of plan assets; that is, the difference between the value of the plan's assets at the end of the year and the value of the assets at the beginning of the year, or the cost of assets acquired during the year. The plan had total income of $338,488,008, including gains of $12,216,729 from the sale of assets and earnings from investments of $324,074,438. The plan has contracts with Metlife and The Prudential Insurance Company of America, which allocate funds toward individual policies.

Minimum Funding Standards

An actuary's statement shows that enough money was contributed to the plan to keep it funded in accordance with the minimum funding standards of ERISA.

Your Rights to Additional Information

You have the right to receive a copy of the full annual report, or any part thereof, on request. The items listed below are included in that report:
1. An accountant’s report;
2. Assets held for investment;
3. Transactions in excess of 5 percent of the plan assets;
4. Insurance information including sales commissions paid by insurance carriers; and
5. Information regarding any common or collective trust, pooled separate accounts, master trusts or 103-12 investment entities in which the plan participates.

Savings Program

Basic Financial Statement

Benefits under the plan are provided by a trust (benefits are provided in whole from trust funds). Plan expenses were $63,293,139. These expenses included $770,820 in administrative expenses and $62,522,319 in benefits paid to participants and beneficiaries. A total of 10,685 persons were participants in or beneficiaries of the plan at the end of the plan year, although not all of these persons had yet earned the right to receive benefits.

The value of plan assets, after subtracting liabilities of the plan, was $1,255,747,754 as of December 31, 2004, compared to $1,154,576,971 as of January 1, 2004. During the plan year, the plan experienced an increase in its net assets of $101,170,782. This increase includes unrealized appreciation or depreciation in the value of plan assets; that is, the difference between the value of the plan's assets at the end of the year and the value of the assets at the beginning of the year, or the cost of assets acquired during the year. The plan had total income of $164,463,921, including employer contributions of $18,534,991, employee contributions of $50,085,297, gains of $563,820, and the sale of assets and earnings from investments of $93,544,249.

Your Rights to Additional Information

You have the right to receive a copy of the full annual report, or any part thereof, on request. The items listed below are included in that report:
1. An accountant’s report;
2. Financial information and information on payments to service providers;
3. Assets held for investment;
4. Transactions in excess of 5 percent of the plan assets;
5. Insurance information including sales commissions paid by insurance carriers; and
6. Information regarding any common or collective trust, pooled separate accounts, master trusts or 103-12 investment entities in which the plan participates.
Group Welfare Benefit Plan

Basic Financial Statement

The value of plan assets, after subtracting liabilities of the plan, was $–1,006,970,720 as of December 31, 2004, compared to $–963,725,672 as of January 1, 2004. During the plan year, the plan experienced a decrease in its net assets of $43,245,048. This decrease includes unrealized appreciation or depreciation in the value of plan assets; that is, the difference between the value of the plan's assets at the end of the year and the value of the assets at the beginning of the year, or the cost of assets acquired during the year. During the plan year, the plan had total income of $141,073,167. This income included employer contributions of $135,449,356 and employee contributions of $48,686,859. Plan expenses were $184,318,215. These expenses included $184,318,215 in benefits paid to participants and beneficiaries.

Your Rights to Additional Information

You have the right to receive a copy of the full annual report, or any part thereof, on request. The items listed below are included in that report:
1. An accountant’s report;
2. Financial information and information on payments to service providers; and
3. Insurance information including sales commissions paid by insurance carriers.

For more information

You also have the right to receive from the plan administrator, on request and at no charge, a statement of the assets and liabilities of the plan and accompanying notes, or a statement of income and expenses of the plan and accompanying notes, or both. If you request a copy of the full annual report from the plan administrator, these two statements and accompanying notes will be included as part of that report. These portions of the report are furnished without charge. You also have the legally protected right to examine the annual report at the main office of the plan: BWXT Y-12, L.L.C., 104 Union Valley Road, Room 140, Oak Ridge, TN 37830 and at the U.S. Department of Labor in Washington, D.C., or to obtain a copy from the U.S. Department of Labor upon payment of copying costs. Requests to the Department should be addressed to: U.S. Department of Labor, Employee Benefits Security Administration, Public Disclosure Room, 200 Constitution Avenue, NW, Suite N-1513, Washington, D.C. 20210.
In October, 56 Y-12 employees and their friends and family members visited the Big Apple all thanks to a Y-12 Employees’ Society-sponsored trip. The group left from Oak Ridge and had a fun-filled bus ride to the city. Five inches of rain didn’t stop the YES group from touring the city. During the downpour, some members visited the Statue of Liberty while others shopped till they dropped (or until their socks were ringing wet). The trip home was highlighted with lunch at Union Station in Washington, D.C. For more information on YES-sponsored trips, contact Travel Director Lisa Harris (lh; 576-2658).

“I wanted to tell you that I appreciate all of the hard work that you put in on this trip to NY. I had a wonderful time. So wonderful that I am wanting more information on the possible trips to Disney and DC next year.”—Sheila Garrett, Human Resources

“Thank you sooooo much for all your efforts in organizing the YES trip to New York. Ryan and I had a blast—he’ll be talking about his 10th birthday for a long time.”—Kathryn King-Jones, National Security Programs

“Wanted to say thank you for the fantastic trip. We had a blast every day and just laughed getting wet and just kept on going. . . . Everyone was friendly and helpful in New York. You all keep up the good work.”—Jan Wuest, Human Resources

“Thank you for the yes trip to New York. It was a blast and we are looking forward to more.”—Stuart Campbell, Human Resources

Most of us think we live in a safe area, but an increase in assaults has changed the minds of several Y-12 employees.

National Security Programs’ Amy Bush was shocked when her mother called and told her she had been mugged in the Target parking lot in Powell. Bush’s mother was putting her purchases in her car, and a young man approached her and asked if he could take her shopping cart for her. The lady’s “gut instinct” told her something wasn’t right, but she shrugged that feeling off and told the man yes and thanked him.

Before Bush’s mother was in her car, the man was back and pulled her purse off of her shoulder, knocking her to the ground. Although she screamed and several witnesses saw the incident, the mugger got away with her purse and left her banged up and bruised.

Bush’s mother’s story does have a good ending in that the man was arrested after cashing several checks from the victim’s account. Thanks to the help of the Y-12 Credit Union and local police investigators, the mugger was sentenced to four years in prison.

Judie Henegar of Information and Materials Division had a similar experience when her mother was assaulted at United Grocery Outlet in Oak Ridge. Henegar’s mother had finished putting groceries in her car trunk when a car pulled up behind her. The driver asked for directions. As she turned toward him, he reached out of his window, grabbed her purse and sped away, dragging her with him.

This victim also received several bumps and bruises, but she is OK. Her assailant has not been caught.

Assaults occur at all times of the day; both of these incidents occurred in the daylight in well-lit, populated areas. Victims come in all ages; one here is 56, the other 87.

Be safe at all times, but especially during the holiday season, pay attention to your surroundings. If something doesn’t feel right, avoid the situation.
Y-12 employees turn out in force to help the community

Y-12 employees stepped up to help the community and have fun at the same time. More than 400 employees and their family members worked at over 50 agencies on the annual Volunteer Day. The jobs spanned mulching to painting to clearing brush to bingo. Y-12 even had a Kids Kamp for employees’ children where they had the run of the Children’s Museum of Oak Ridge.

Thanks for another successful Volunteer Day.

From left to right, Madison and Lauren Eiler, nieces of Jane Miller of Public Affairs and Communications, and Asa Kelley, Projects division manager, prepare to mulch the garden at Girls Inc.