## September 2016 Newsletter

#### **Watts Bar Fire Means Costly Repair**

A fire in the switchyard at the Watts Bar Nuclear Power Plant Tuesday evening, August 30<sup>th</sup> was extinguished by fire crews at the plant within about an hour, but the blaze will mean a costly replacement of a main bank transformer and a further delay before America's newest reactor is declared a commercial unit.

TVA spokesman Jim Hopson said Wednesday (8/31/16) that the transformer fire was discovered at 9:11 p.m. Tuesday night and was put out by TVA crews by 10:20 p.m. Because transformers are cooled by oil and operate in high-voltage switchyards, TVA called in volunteer fire departments Tuesday night from Rhea and Meigs counties and declared the incident "an unusual event", the lowest of four emergency classifications for problems at a nuclear power plant.

Less than two days after a transformer fire forced TVA's newest reactor to shut down, the other reactor at the Watts Bar Nuclear Plant was also shut down to help plant workers perform needed tests and equipment repairs in the switchyard following the Tuesday night blaze.

Hopson said the Unit 1 reactor at Watts Bar was idled to allow plant workers to safely assess the main bank transformers and other equipment without the switchyard being energized with electricity. "The safest way to do the assessment we need to do is to deenergize the switchyard and the only way to do that is to take the unit off line," he said. "We wanted to ensure the safety of our employees while they do this necessary work."

Hopson said TVA hopes to complete the evaluation and to be able to restart the Unit 1 reactor "within a few days." But in the meantime, TVA is getting no power from either reactors at Watts Bar even as summertime temperatures keep power demand relatively high in the Tennessee Valley.

It is unclear when TVA may be able to restart its Unit 2 reactor. During high-demand periods, TVA generates nearly \$1 million a day worth of power from each of its nuclear units. TVA was in the midst of a series of power ascension tests on its new Unit 2 reactor on Tuesday when the fire erupted in a main bank transformer on the non-nuclear side of Watts Bar. The fire triggered a trip of the Unit 2 reactor, which was operating at about 99 percent of its rated 1,150-megawatt capacity at the time.

TVA and Nuclear Regulatory Commission crews are evaluating the cause of the fire and any corrective actions TVA needs to take to ensure the safety of the plant when it resumes power generation. The fire-damaged transformer will be replaced with one of the spare units on site at Watts Bar, Hopson said.

TVA began limited power generation from the Unit 2 reactor at Watts Bar in May. The unit is the first new reactor added to America's power grid in 20 years. But the newest unit has not yet achieved full power and has yet to officially be declared a commercial reactor and brought into TVA's rate base.

That achievement, which TVA said earlier this year should occur by June, now appears unlikely until next month at the earliest. That will push the start of the capital recovery for the \$5 billion reactor into fiscal 2017.

### First 'Douglas the Beautiful' Clean-up Nets 8,894 Pounds of Trash

All the comforts of home were found in the great outdoors, including one refrigerator, a carpet, two TV sets, one vacuum cleaner, and even a volleyball net. All were part of the 8,894 pounds of trash hauled in by 86 volunteers in just four hours at the first Douglas Lake the Beautiful cleanup on a hot and humid August 27<sup>th</sup>. "People camp on the islands and then they just leave it all set up on public land," said Jake Resor, who is an AmeriCorps volunteer and worked with the crew at Shady Grove Boat Dock. "When the wind or water comes into the coves, all this could end up in Douglas Lake."

Aurora Pulliam, the organizer of the event, said there were four sites where people could volunteer, Douglas Lake headwater ramp, Shady Grove Boat Ramp, Dandridge TWRA Ramp, and the Indian Creek Boat Ramp. The volunteers only worked cleaning up public land. The Jefferson County Road Department and Dandridge Public Works brought dumpsters to be hauled away after the event. TVA gave the new organization a community outreach grant to buy T-shirts, supplies such as trash bags, and lunch for all.

"Our boat was so full we had to stop picking up trash," said Julie Graham, who has experience working with Cherokee Lake Users Association on similar events. "After a few times of cleaning up on Cherokee Lake, some people get the idea and throw away their trash in the dumpsters provided by TVA."

Volunteers of all ages pulled together and work as teams to get the job done. Some Jefferson County High School students were helping lift the heavy items into the boat while standing in deep mud. "I am a freshman at the high school this year and I didn't volunteer just to get credit for community service," commented Jaycee Schroeder. She has been on mission trips that involved cleanup with her church and knew she was in for some hard work in the midday sun.

The next Douglas Lake the Beautiful cleanup is tentatively set for May 6, 2017. Information can be found on their Facebook page.

## Recliner Maker to Hire 600, Invest \$20 million in Lee County, Mississippi

In Jackson, Mississippi, a growing northeast Mississippi company will take over the former headquarters of a regional mainstay that dissolved in bankruptcy.

Southern Motion announced August 31<sup>st</sup> that it will spend \$20 million and hire 600 people over six years as the reclining-furniture maker moves into a 650,000-square-foot building in Baldwyn. Former owner Hancock Fabrics sold the building to Southern Motion in August for \$9.3 million as it liquidated its business and laid off 350 local workers.

"We have enough confidence in the future of our business and the future of the furniture business to take the big leap," said Roger Bland, CEO of Southern Motion. The company has 1,200 employees in the town of Pontotoc, where it was founded, and 250 in Baldwyn.

The state is providing \$2 million for building modifications, said Mississippi Development Authority spokeswoman Tammy Craft. Lee County is providing property tax breaks worth a projected \$800,000 over 10 years, and Lee County Supervisor Billy Joe Holland said he hoped Southern Motion might hire some laid-off Hancock workers. The Tennessee Valley Authority provided unspecified assistance.

Bland said the company has grown by 15 percent a year, on average, over the past five years. Bland said upholsterers, one of the more common job positions, can make more than \$16 an hour.

#### ATVG REPORT:

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ATVG is a 501(c)(4), not-for-profit, public interest organization. ATVG advocates for the interests of county and city/town governments residing within the seven-state TVA region and their partners in the public and private sectors.

For details about ATVG's mission and program of work, visit us on line at: www.atvg.org

#### TVA Gives Discovery Center Grant from STEM Education

Almost immediately following one large grant from the Nissan Foundation, the Discovery Center in Murfreesboro, Tennessee got another check at the end of August. As part of the Science Alliance of Tennessee, the museum was awarded \$10,000 by the Tennessee Valley Authority in an effort to promote science, technology, engineering and math education.

"TVA is a public power entity, and the public power model is focused on giving back to our communities and our customers, serving them alongside our local power companies like Murfreesboro Electric Department (MED)," said Jimmy Allen, TVA's general manager for customer delivery in the Middle Tennessee region.

"So we see this as a partnership with MED to serve the communities in the valley like Murfreesboro." Discovery Center CEO Tara MacDougall said the TVA money will go toward establishing a new "Geeking Out Space", which will give teens an informal, social and interactive place to engage with user-generated technology and will guide their own learning experience based on their interests. The venue will also be used for community Teen STEM Cafes.

"These events are a free, fun way for Youth Council members, their peers, local scientists, engineers and investors to exchange ideas and even collaborate," MacDougall said. Chartered in 1986 as the Children's Museum Corporation of Rutherford County, the Discovery Center is dedicated to creating hands-on educational opportunities for the community. The museum is located adjacent to 20 acres of wetlands.

Murfreesboro Electric Department, General Manager Steve Sax believes the center offers local kids and families unique opportunities for learning and exploration. "Having a place like the Discovery Center where kids can learn about science in a fun and informal way is crucial to preparing our community for increasingly competitive STEM fields," he said.

"MED is proud to be able to support them in their mission to better educate our students for the future." MacDougall also hopes the center's collaboration with MED will provide new opportunities for students to see science in action. "Our partnership with MED is a new opportunity to introduce our guests to the wonder and power of electricity and how engineering and technology improve lives," she said.

The hands-on children's museum was recently granted \$55,000 from the Nissan Foundation. The award will support its "Kids First" initiative.

## TVA Reduces FY2017 Budget by \$330 Million, Investing in Clean Energy Sources

The TVA said it will invest more than \$2 billion in cleaner energy sources in the upcoming year despite reducing its budget for fiscal year 2017. TVA's Board of Directors approved the company's capital plan and \$10.37 billion budget for fiscal year 2017, which is \$330 million less than the prior year. TVA CEO Bill Johnson said the utility continues to diversify its generation fleet, including completing Watts Bar nuclear Unit 2, new natural gas units expected to begin commercial operation next summer at the Paradise plant in Kentucky, and the Allen gas plant in Tennessee that is nearing 25 percent completion and scheduled to begin operations in 2018. TVA is also investing more than a billion dollars in environmental upgrades at the Gallatin coal-fired power plant in Tennessee and the Shawnee plant in Kentucky. In 2015, 13 percent of the electricity that TVA bought or generated was derived from renewables, including hydro.

TVA President and CEO Bill Johnson pointed out in his report to the Board that energy demand was not growing and has been essentially flat for the past five years. "We expect load growth to stay flat for the foreseeable future," Johnson said. "Our market is changing, and we and our customers are working to adapt to new business conditions that include reduced energy needs and increased demand for energy efficiencies and renewables."

#### TVA is First Mover for SMR Early Site Permit

The Tennessee Valley Authority (TVA) has submitted an application for an Early Site Permit (ESP) to the U.S. Nuclear Regulatory Commission (NRC) for a small modular reactor (SMR) which could be built at the Clinch River site in Tennessee. It is the first application of its type to be submitted to the regulatory agency. The ESP is for a 1,200 acre site about 25 miles southwest of the Oak Ridge National Laboratory and nearby Knoxville, TN.

While approval would speed up processing of a follow-on application for a combined construction and operating license (COL) for an SMR, the ESP itself does not authorize TVA to build and operate an SMR. The ESP has a "shelf life" of 10-20 years as long as there are no major changes to the conditions cited in the permit once it is issued by the NRC. Typically, the agency takes about 1-2 years to complete its review of an ESP application.

Also, the ESP does not require TVA to reference a specific reactor design other than its approximate power rating or size. TVA has cited four SMR light water design concepts without stating a preference for any of them. Typically, SMR's are rated at 300 MW or less (electrical) as compared to full size reactors like the Westinghouse AP 1000 which is rated at 1150 MW.

TVA's senior manager for SMRs, Dan Stout, told World Nuclear News on May 16 that the utility is "several years away" from a decision to actually proceed with a COL application. Earlier this year TVA published an updated Integrated Resource Plan which said that it could be as long as 20 years before it would need new nuclear capacity.

What may not be well known is that TVA's work on the SMR ESP is being co-funded by the U.S. Department of Energy under a five-year program. DOE is also supporting via cost sharing NuScale's work on design and licensing of its 50 MW SMR which is slated to be located at a site at Idaho National Laboratory.

# Association of Tennessee Valley Governments October 18/19/20, 2016

# Clarion Inn – Gatlinburg, TN (865) 436-5656 October 18, 2016 (Eastern Time Zone)

5:00 p.m. Opening Reception – James K. Polk Suite Video: <i>Norris Dam at 80</i> 6:30 p.m. Dinner – Calhoun's Banquet Hall			
October 19, 2016			
7:30 a.m. Breakfast – Clarion Lobby 9:30 – 11:00 a.m. Tour & Presentation SMNP Environment/Education Center - Jim Renfro, SMNP Air Resource Specialist (Optional event) 11:30 – 12:30 p.m. Pizza Lunch – James K. Polk Suite (Optional Event)			
ATVG Program			
1:00 p.m.	Welcome and Introductions	- Don Stisher, ATVG President	
1:15 p.m.	TVA Update	-Bert Robinson, TVA	
1:30 p.m.	TVA 80th Celebration of Hydro Power	- Pat Ezell, TVA	
2:15 p.m.	100th Anniversary of National Parks System -Dana Soehn, SMNP Public Affairs		
3:00 p.m.	<b>Compressed Natural Gas Success Story</b>	-Elliott Barnett, Strata-G	
3:30 p.m.	Break		
3:45 p.m.	Workplace Violence Training	-Kim Culpepper, TVPPA	
4:30 p.m.	Adjourn		
5:30 p.m.	Reception – James K. Polk Suite		
7:00p.m.	Dinner – Park Grill October 20, 2016		
7:30 a.m.	Breakfast – Clarion Lobby		
8:30 a.m.	ATVG Board Meeting		
	Association of Tennessee Valley Governm Registration Fee: \$40.00 for members and after	nents Meeting Registration Form filiates; \$75.00 for non-members	
Name:			
E-Mail:			

Registration Fee for spouse is included/No additional charge

Spouse's Name:

Company/Organization: _	
Full Address:	
Make checks payabi	e to: Association of Tennessee Valley Governments- P.O. Box 3578 – Clarksville, TN 37043

### East Tennessee celebrates rich history of the Smokies as NPS celebrates 100 years

The National Park Service is celebrating their 100 years since their founding. The Great Smoky Mountains, along with hundreds of other places across the nation, have been dubbed "America's Best Idea" and on September 1<sup>st</sup> many in East Tennessee came out to share in the memories.

Children from area schools came to the Smokies to hike alongside Senator Lamar Alexander and the park's Superintendent Cassius Cash. "It's an adventure," said eighth grader Eugene Duvall. "If I'm hiking, I like to look up at the sky and the trees. It's just really beautiful," added seventh grader Gretchen Wade.

The Smokies has a plan to preserve the flora and fauna for the next 100 years by encouraging everyone to find the right park for you, especially children. "My feeling is that once you have an emotional connection to something, you have ownership of it. Once you have ownership, it becomes part of your values. And once you have values these are things that we protect," said Superintendent Cash.

Many of the kids hiking said the park has a bright future, and some are planning on their future in park service. "Me and my grandma always go to Cades Cove when I was little and sometimes now. It's kind of tradition," said sixth grader Jackson Desear. "It's a cool job, I want to do it, just not in a hot uniform," said Duvall.

Senator Alexander chatted with students as they trekked through the Smokies, while he was reminiscing on his childhood in East Tennessee.

"When I was 15 years old, my dad dropped me and two other boys off in Newfound Gap in three feet of snow and told us he'd pick us up in Gatlinburg later in the day," said Alexander.

When it comes to the Smokies, there's a firm stake hold in its future. There's newly added money on federal and state levels to finish the Foothills Parkway, which should be complete by 2018. The park has also opened the Collection Center which archives belongings of people who used to live in the Great Smoky Mountains.

"The other thing I think we need to do, is keep cleaning the air. Anyone who lives in Knoxville area knows they can look at the mountains this year they can see them better than they could five years ago. That's because TVA has put pollution control equipment on their coal plants and that's made a big difference and we need to keep doing that," said Alexander. The "Smokies Centennial Challenge-Hike 100" program is part of the National Park Service Centennial celebration. The idea is to inspire all potential hikers to gain a new appreciation for the park. Participants must hike any 100 miles of maintained trail within park boundaries between January 1 and December 6.

## **ATVG 2017 Schedule**

Make your plans to join ATVG for our upcoming meetings; The ATVG meeting schedule for 2017 is as follows:

- January 18 & 19, 2017 Knoxville, TN
- April 19 & 20, 2017 Kentucky
- July 19 & 20, 2017 Oxford, Mississippi
- October 17, 18 & 19, 2017 Gatlinburg, TN