



TOWED, PUSHED AND GUIDED BY THREE TUGS, THE 4,000-TON HRSG HEADS DOWN THE HUDSON RIVER AUGUST 7.

Photo courtesy of Drone Pilots Leon Taufield & James Griggs Sr.

UNION-BUILT, 4,000-TON, MODULAR HRSG IS FIRST FOR U.S.

*Massive steam generator makes
historic journey down the Hudson*





CREWS LOAD THE HRSG ABOARD A HEAVY-LIFT BARGE at the Port of Coeymans for transport down the Hudson River to Sewaren, New Jersey.

Photo courtesy of Drone Pilots Leon Taufield & James Griggs Sr.

Boilermakers played a leading role in 2017 in what is thought to be the first ever heat recovery steam generator (HRSG) built in the United States as a complete modular unit and shipped to its final destination.

THE PARTNERSHIP OF Durr Mechanical Construction and Megrant built the 4,000-ton (8-million-pound) HRSG at Megrant’s shop at the Port of Coeymans in upstate New York from January to July. In early August, crews loaded the unit aboard a heavy-lift barge for transport down the Hudson River to Sewaren, New Jersey, where Public Service Electric and Gas (PSEG) is constructing a new 540-megawatt combined-cycle power plant. Three tugs pulled, pushed and guided the load on its 170-mile journey, passing New York City along the way.

PSEG’s \$600 million facility will generate electricity using natural gas as the primary fuel source. Heat recovered from the process will be used to power a steam generator to produce additional electricity. The high-efficiency, low-emission plant will also be able to run on ultra-low-sulfur distillate oil as a backup fuel source.

Boilermakers Local 5 Zone 197 (Albany, New York) led the union craft work on the HRSG and 20 air-cooled condensers, which were shipped separately in mod-



A BOILERMAKER WORKING AT COEYMANS guides a section of steel during modular construction of an air-cooled condenser.

ONE OF 20 AIR-COOLED CONDENSERS BEING BUILT AS A MODULE takes shape at Coeymans prior to shipment downstream to PSEG's Sewaren 7 project.



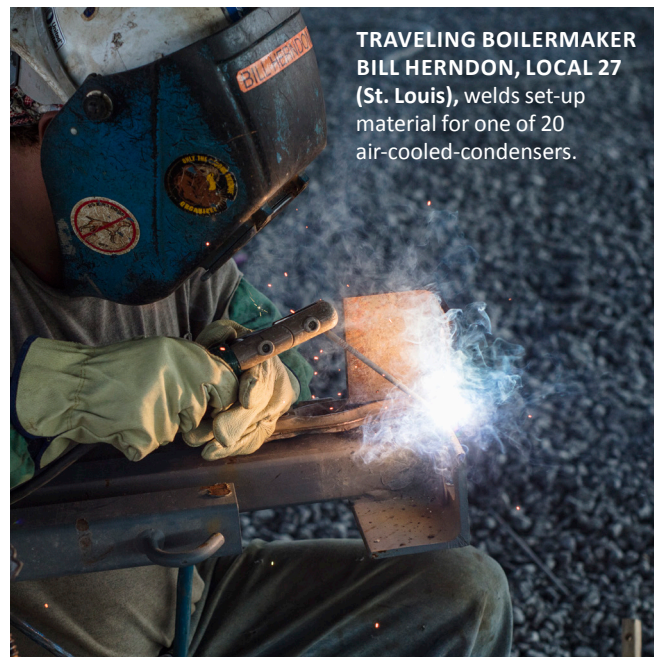
ules. Crews also constructed sections of the plant's stack along with other assemblies. Some 150 Boilermakers were employed on the project at peak, according to L-5 Z197 ABM William Bailey.

At Sewaren, Local 28 members (Newark, New Jersey) took part in offloading the HRSG, condensers and other components. Crews there have been working onsite since January 2017 for Durr/Megrant, Shelby Mechanical and other contractors.

With all modular components now delivered, crews are fitting up the HRSG, erecting condensers and the stack, and building the auxiliary boiler and other plant components. L-28 BM-ST Jim Chew said about 65 Boilermakers are employed at Sewaren 7.

The all-union project is being performed by various crafts under the National Maintenance Agreement, which establishes jurisdictions and other terms of employment. The project has a completion date of June 2018.

continued on next page



TRAVELING BOILERMAKER BILL HERNDON, LOCAL 27 (St. Louis), welds set-up material for one of 20 air-cooled-condensers.

UNION-BUILT HRSG

continued from page 17

Modular concept offered challenges

SAM MIRIAN, MEGRANT'S Vice President for Marketing, said the concept of building major elements of PSEG's new plant offsite as modules originated with PSEG Project Director Kevin Reimer. "Kevin deserves credit for taking this approach," he said.

While a modular approach made sense given the power plant's access to river transportation and its limited space for conventional construction, there were inherent challenges in floating such a massive load, allowing for tides and river traffic, and navigating beneath 10 bridges along the route.

Mirian said the tug captain had to navigate so the barge passed beneath bridges where the clearance was greatest. At one of the bridges, the clearance was so tight that ballast had to be added to lower the barge and its 130-foot-tall cargo.

Crowds gathered along parts of the route to witness the HRSG's trip, waving and shouting "USA!" as the barge passed. A large banner draped across the HRSG proclaimed "Union Built in the USA," advertising the partnership of union labor, the owner and the primary contractors.



BOILERMAKERS PREPARE RAMPS to offload the HRSG at PSEG's Sewaren, N.J., plant site.

THE HRSG IS ROLLED INTO POSITION AT SEWAREN 7.



“I hope the industry learns that they no longer need to go overseas to reach out for good labor, for a good performance, for a good [modular] product and timely delivery.” — Sam Mirian, Megrant

Project delivered on schedule

BUILDING AND DELIVERING the HRSG and condensers on time required Boilermakers and other crafts to work 12-hour shifts and weekends. Mirian said the modular equipment built at Coeymans was delivered on schedule, and there were no major injuries reported.

“In a matter of six or seven months, we have manufactured 20 air-cooled condensers, one big HRSG, all the steam ducts, all the stack pieces, a number of other assemblies . . . which is phenomenal.”

He said the PSEG job should help convince owners that large-scale modular industrial projects do not have to be performed offshore to be competitive.

“I hope the industry learns that they no longer need to go overseas to reach out for good labor, for a good performance, for a good [modular] product and timely delivery. ■



A video of the project produced by Wide Awake Films can be viewed at vimeo.com/boilermakers.



BOILERMAKER CONTRACTOR RIDES TUG TO NEW JERSEY

Trip closes a circle in Mirian’s life

MEGRANT VICE PRESIDENT of Marketing Sam Mirian was so excited about his firm’s involvement in the first modular HRSG to be built in the U.S. that he secured a bunk on the lead tug boat to “babysit” the HRSG on its overnight trip down the Hudson River.

But the trip meant more than just capping off a unique project. As the tug and its load passed New York City, Mirian spied the apartment building where he first lived upon coming to America as an immigrant “from Persia” (present-day Iran) more than half a century ago. He also saw the building where he had his first job, beginning his long career as an engineer and later a Boilermaker contractor.

“You know, people take cruises and they come back with the story of the cruise,” he said. “For me, this is just the whole story. I mean you’re talking 1964. Just [coming] into the country, I got myself a first job, and two days later my first apartment. Now, here, years after that, I’m passing by those things and bringing the first-ever modular HRSG built in the United States.”

“This is something I’ll never forget.”