

TVA Leases Three Knoxville Homes For 3-Year Energy Efficiency Study

TVA will test building techniques, technologies and household appliances at three experimental houses over the next three years to learn more about how cutting-edge residential construction affects energy efficiency in homes in the Tennessee Valley region. The three houses, in Knoxville's Campbell Creek Subdivision, include a newly built home that meets Energy Star Performance standards, a second home modified with improvements that could easily be made to existing homes for increased efficiency, and a third home built from the ground up to be a "near-Zero Energy Home."

TVA will use data collected from the houses to develop information and programs to help the public choose energy efficiency packages for their homes and help builders provide affordable, near-Zero Energy Homes in the future. TVA also intends to test technologies that enable consumers to better manage the energy they use and save money on their electric bills.

"Going forward, this three-year project will help TVA fine-tune its energy efficiency products so that we can work with local distributors to help homeowners add energy efficiency and money-saving measures to their existing homes," said Joe Hoagland, TVA's vice president for Environmental Science, Technology and Policy. "Along with the expertise of Oak Ridge National Laboratory and the building industry, these homes give us a multimillion-dollar research laboratory for about 10 percent of the cost of creating the testing capacity in a laboratory setting. This project is an enormous resource to TVA and local distributors of TVA power, and we believe it's the only one of its kind in the world."

In addition to ORNL, TVA's partners in the project are the Electric Power Research Institute and General Electric, which will supply the GE heat pump water heater in the retrofitted home and GE Energy Star appliances. TVA also worked closely on the project with Michael Rhodes, owner of the homes, and builder John Kerr. Both expressed an interest in learning about new building technologies that will be explored in this project. The homes are served by Lenoir City Utilities Board.

For more information on this project, please visit www.tva.com/campbellcreekresearchhomes.