

Batch Testing Protocols Pilot Program Overview

Agreement of Understanding

An agreement of understanding was signed in late 2000 by the Ohio Department of Development, the Residential Energy Services Network (RESNET), the U.S. Environmental Protection Agency, Energy Design Alternatives, and three builders – MI Homes, Summit Homes and Avenbury Lakes. The Columbus Partnership Office of Fannie Mae will sign it this month.

The agreement will result in the building of over 2000 new Ohio homes in 2001 that meet Energy Star standards. EPA rates and labels new homes as Energy Star homes when they use at least 30 percent less energy for heating, cooling, and water heating than a home built to meet the Model Energy Code. The value of Energy Star homes is that the homeowner enjoys significantly reduced energy bills – saving money monthly throughout the life of the home.

Significance of Project

Assuming the builders follow through with this commitment, Ohio will become one of the top ten states in the nation producing energy star homes. In 2000, about 68 ES homes were built in Ohio. In 2001, the number of ES homes in Ohio is expected to increase by over 2000 percent.

ODOD's Role

The Ohio Department of Development/Office of Energy Efficiency (ODOD/OEE) played a critical role in making it possible for these builders to make this commitment. ODOD/OEE secured approval of a pilot project that enables the builders to build Energy Star homes at less cost to them.

Background Information

The ODOD/OEE administers the Home Energy Ratings System (HERS) for the State of Ohio under the name Home Energy Ratings of Ohio (HERO). The contractors who perform the home energy ratings (HERO Raters) have had little success capturing the large production builder segment. Therefore the positive influence the HERO raters consulting services can have on the construction practices of Ohio builders and the influence the HERS can have on the buyers has been limited.

The OEE has also been in discussions with the local office of Fannie Mae concerning the lack of market penetration of Energy Efficient Mortgages in the Columbus market. Fannie Mae's discussions with large-scale production builders echo the concern the HERO raters have heard in their discussions with the same builder segment. The Energy Star Homes Program (a US EPA rating and certification program) has been struggling with the same issue.

Large-scale production builders operate on limited profit margins due to the highly competitive market in which they work. These builders are reluctant to add any additional cost to their product that does not show almost immediate returns, i.e. increased sales. The approximate cost of completing a full HERO rating on each unit is \$300 and that, they say, is the single greatest reason they will not participate.

As an accredited HERS provider, HERO must require 100% inspection of all buildings in any development regardless of the standardization of products and techniques the builder uses. There is some sentiment that full HERS ratings are not necessary on 100% of the buildings that are associated with a production run of the same model building and if there is a quality control system in place.

ODOD/OEE worked with RESNET to secure approval of a batch sampling pilot project – the first approved by RESNET nationwide. HERO raters will test a 20 percent random sample of homes by a builder. If the sample passes, buildings in the batch (five similarly built homes) will be certified Energy Star. So, instead of paying to rate every single home, the builders pay to rate about one out of five homes.