Home Performance with ENERGY STAR® offers a comprehensive, whole-house approach to home improvement that results in better energy efficiency, greater comfort, and lower energy bills. ENERGY STAR is a voluntary partnership sponsored by the U.S. EPA and U.S. DOE to protect the environment through superior energy efficiency.

Quality Assurance Procedures

Quality assurance is a required component of any Home Performance with ENERGY STAR program and essential to maintaining a good reputation. It also reassures homeowners that participating contractors will be held accountable for the work they perform. A quality assurance plan should be an integral part of the program design and the policies and procedures for participating contractors. Having a plan will help streamline delivery and avoid information gaps that some programs have experienced. It will determine how and what information contractors will submit for review. This information will become the basis of future program evaluation activities.

Home Performance with ENERGY STAR requires quality assurance through either: (1) a rigorous certification and accreditation process; or (2) oversight and inspection by a qualified third party. These two quality assurance options are described below.

Certification and Accreditation

This quality assurance approach requires certification and accreditation of participating contractors that is at least as rigorous as accreditation and technical certifications of the Building Performance Institute (BPI). Accreditation indicates that the contractor (business) commits to perform all work according to consensus-based building science standards and use certified technicians to oversee appropriately-trained crews. To meet accreditation requirements, the contractor must also establish internal quality control and consumer complaint procedures and agree to oversight by the certifying/accrediting body or program administrator. Certification indicates that technicians possess minimum competency in core subject areas for participation in the program. The certification requirements must include both written and performance-based skill evaluations, which focus on consensus-based building science standards in all relevant subject areas.

Inspection Oversight

In this quality assurance approach the program administrator is responsible for ensuring that participating contractors receive building science training sufficient to perform diagnostic testing and properly install improvement measures. The program administrator, or a designated agent, must also directly inspect the completed work at no less than a 15% sampling rate to ensure that cost-effective recommendations are being presented to homeowners and improvements are completed according to established standards. Program administrators should develop a sampling protocol to randomly evaluate each participating contractor's work, including a review of home assessments, evaluation of recommended and installed measures, and on-site field verification. Job inspection sampling should reflect the contractor's entire geographical service area and various technicians to gain an accurate sense of the contractors' performance.

New York's Home Performance with ENERGY STAR program is a good example of the use of the certification and accreditation approach. Participating contractors are required to be accredited by BPI. BPI accreditation applies to a company and must be renewed annually. Accreditation





requirements include: having at least one technician on staff who has a BPI specialist certification; liability and worker's compensation insurance; and use of a qualifying quality assurance system. Contractors agree to perform all work to BPI standards and report on a semi-annual basis to BPI. The New York Energy Research and Development Authority reimburses a portion of the accreditation fees for participating contractors.

A good example of the use of the inspection oversight approach is Austin Energy's Home Performance with ENERGY STAR program. All participating contractor's supervisory staff, sales staff and key weatherization personnel must attend classroom and field training sessions. Contractors must also complete an annual program registration and attend monthly meetings about the program. Austin Energy staff complete field inspections on at least 15% of projects completed by each contractor and review 100% of the paperwork for incentives.

Corrective Actions

All program administrators need to establish policies and be prepared to respond to poor contractor performance. If a contractor continues to deliver poor quality or disregard program requirements after intervention by the program administrator they should be restricted from participation in the program. If a contractor negatively affects the health and safety of homeowners, corrective actions should be taken immediately to limit the contractor's participation and review their performance.