Therefore, the purpose of these two proposed reporting requirements is to provide information that allows users to decide for themselves if the accuracy of the energy analysis tool, as defined by the accrediting body, is acceptable. The Department expects and encourages comments from the financial community on this issue.

Proposed paragraph (a)(7) of this section requires each HERS provider to report the level of their accreditation as either ''basic compliance'' or ''full accreditation''. Existing HERS providers may have functioning systems that would comply, or could readily be made to comply with the majority of these guidelines, but would require lengthy periods of time to come into full compliance. In response to this situation, the Department proposes two levels of performance, basic compliance and full accreditation, with the opportunity for any existing HERS provider to meet certain guidelines with their present system for a period of up to two years, during which time they may represent themselves as being in basic, but not full compliance with the guidelines. The Department invites comments on the advisability of such a structure.

Paragraph (a)(9) provides for the reporting of previous energy consumption data if it is made available by the homeowner. Various factors such as prior home improvements or unusual weather conditions make it necessary for the rater to determine the usefulness of such information and to determine if it should be included in the report.

To facilitate energy efficient mortgages and loans as provided in section 271 of the Act, paragraph (b) of this proposed section provides for the report to include the estimated energy cost savings available with the rated home reconfigured with possible improvements to the minimum rated features. Paragraph (b)(2) also provides for reporting of ''The Present Worth Value'' of the energy cost savings and the discount rate used to calculate that value. The Department considers this information necessary because it is used in the qualification process for Federally backed energy efficient mortgage programs such as those provided by the Department of Housing and Urban Development (HUD). The Department is not proposing a specific discount rate.

Proposed Section 437.103: Reference House Configuration

Proposed § 437.103 establishes the level of energy efficiency of the reference home. The insulation levels are those that are required by the Council of American Building Officials Model Energy Code, 1993 edition (CABO-MEC), therefore, specific reference is made in this proposed section to have the enclosure elements configured to Paragraph 502.2 of CABO-MEC. This paragraph establishes the criteria for building envelope components according to the severity of the normal winter weather conditions for the geographic location of the home. The Department considers this procedure to be appropriate for the determination of insulation levels for the reference home.

To be responsive to the language in section 271 of the Act regarding the need to take into account ''solar energy collected on-site,'' this proposed section would create what the Department considers a ''solar neutral '' reference home by fixing the following components:

Fenestration Area—In proposed paragraph (a)(5)(i), the fenestration area is fixed at 18 percent of the conditioned floor area. The requirements for wall assemblies in CABO-MEC are based on the average U-values of those assemblies and therefore the total U-value of the wall assemblies including windows and doors is calculated, then divided by the gross wall area to determine the average. Since the area of glazing may vary depending on the thermal performance of the window itself and/or the opaque wall area, it is considered necessary to fix the amount of glazing to create consistency in the reference home. In the case of multi-family homes, where 18 percent of the conditioned floor area may exceed the actual exposed wall area, a formula is provided in proposed section 437.103 to establish the reference home fenestration on a ratio of exposed and common wall areas.

Orientation—Also in proposed paragraph (a)(6)(i), glazing in the reference home would be distributed equally in each of four cardinal directions—north, south, east and west. As a result, the reference home is assumed to experience equally beneficial solar gains during heating season and equally detrimental solar gains during cooling. The rated home would reflect the benefits of favorable orientation and/or the negative impact of poor orientation. This principle is also utilized with regard to multi-family homes, which would assume hypothetical glazing in walls even though the actual wall in the rated home may be common with an adjoining unit and not have any windows.

Adjustment to Fenestration Area—Proposed paragraph (a)(7) specifies the percentage of the fenestration area that be assumed as frame or sash. This serves to further refine the actual glazed area for purposes of solar contribution for heating or solar load for cooling. The value of 27 percent is taken from the information in Chapter 27 of the 1993 ASHRAE Handbook of Fundamentals which specifies a 27 percent frame area for a 3 ft. by 4 ft. operable wood residential window. Frame and sash adjustments to fenestration area in the rated home are based on the actual windows in use or as proposed for retrofit or to be built homes.

Shading Coefficient—Proposed paragraph (a)(8) fixes the shading coefficient at 0.70 during the cooling season. This is consistent with the provisions for a reference house in section 8.8.3.2 of ASHRAE Standard 90.2, for energy efficient design of low rise residential buildings. It is also consistent with the provisions found in the 1994 amendments to CABO–MEC. The 1994 amendments were used as a source of information to define this feature of the reference home because the 1993 code lacks clarity on these necessary specifications. It should be noted that CABO states the use of draperies without providing a specific shading coefficient which still leaves some ambiguity that is avoided by following the ASHRAE approach. This part of the proposed guidelines also fixes the shading coefficient for the glazing area at 0.88 during heating. This value is as stated in Chapter 27 of the 1989 ASHRAE Handbook of Fundamentals for clear double ⅛ inch glass. Shading coefficients for glazing in the rated home are based on the actual windows in use or as proposed, but also assuming the use of non-white draperies on the same schedule as is specified for the reference home.

In response to the language in section 271 of the Act that requires that these proposed guidelines not discriminate among fuel types, proposed paragraph (a)(10) provides that the reference home utilize the same energy sources for the same purposes as in the rated home. In the case of ratings that include proposed upgrades, this eliminates the possibility of a better rating by fuel switching. Energy suppliers are free to promote their particular fuel type by providing comparative operating costs but should do so outside of the information provided in the rating of the home as it exists.

In proposed paragraph (a)(12), the equipment efficiencies specified for HVAC systems and domestic hot water equipment in the reference home, are the minimum efficiencies initially established by the National Appliance Energy Conservation Act of 1987 (NAECA)(Pub.L. 100–12). In proposed paragraph (a)(11), the reference home is