positive NPV of consumer benefits, emission reductions, the estimated monetary value of the emissions reductions, and positive average LCC savings would outweigh the negative impacts on some consumers and on manufacturers, including the conversion costs that could result in a reduction in INPV for manufacturers. Accordingly, the Secretary has concluded that TSL 4 would offer the maximum improvement in efficiency that is technologically feasible and economically justified, and would result in the significant conservation of energy.

Therefore, based on the above considerations, DOE adopts the energy conservation standards for ceiling fans at TSL 4. The amended energy conservation standards for ceiling fans, which are expressed as minimum CFM/W, are shown in Table V.33.

Table V.33 Amended Energy Conservation Standards for Ceiling Fans

Product Class	Minimum Efficiency Equation (CFM/W)*
Very Small-Diameter (VSD)	D ≤ 12 in.: 21 D > 12 in.: 3.16 D -17.04
Standard	0.65 D + 38.03
Hugger	0.29 D + 34.46
High-Speed Small-Diameter (HSSD)	4.16 D + 0.02
Large Diameter	0.91 D – 30.00

* D is the ceiling fan's blade span, in inches, as determined in Appendix U.

2. Summary of Annualized Benefits and Costs of the Adopted Standards

The benefits and costs of the adopted standards can also be expressed in terms of annualized values. The annualized net benefit is the sum of (1) the annualized national economic value (expressed in 2015$) of the benefits from operating products that meet