

**EXPERT GROUP STUDY
ON
RECOMMENDED PRACTICES
FOR WIND TURBINE TESTING
AND EVALUATION**

8. GLOSSARY OF TERMS

*Submitted to the Executive Committee
of the International Energy Agency Programme
for
Research and Development
on Wind Energy Conversion Systems*

RECOMMENDED PRACTICES FOR WIND TURBINE TESTING

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Issue 1, March 1987

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Foreword

The evaluation of wind turbines must encompass all aspects of a Wind Energy Conversion Systems (WECS) ranging from: energy production, quality of power, reliability, durability and safety, through to cost effectiveness or economics, noise characteristics, impact on the environment and electromagnetic interference. The development of internationally agreed evaluation procedures for each of these areas is needed now to aid the development of the industry while strengthening confidence and preventing chaos in the market.

It is the purpose of the proposed recommendations for wind turbine testing to address the development of internationally agreed test procedures which deal with several aspects for characterizing wind turbines. The IEA expert committee will pursue this effort by periodically holding meetings of experts, to define and refine consensus evaluation procedures in each of these areas:

1. Power Performance
2. Cost of Energy from WECS
3. Fatigue Evaluation
4. Acoustics
5. Electromagnetic Interference
6. Safety and Reliability
7. Quality of Power

For items 1, 2, 3, 4, 5 and 7 documents have already been issued during the years 1982-1986. However due to the widening appeal of wind energy it was considered that a Glossary of Terms, expressed in simple language, would serve to introduce consistency into future publications of the IEA as well as be of use to those with an interest in wind energy such as planning authorities, manufacturers and users of wind turbines.