BUREAU OF INDIAN STANDARDS
DRAFT FOR COMMENTS ONLY

Draft Indian Standard

Marine Energy – Wave, Tidal and Other Water Current Converters
Part 100 : Electricity producing wave energy converters - Power performance assessment

(ICS 27.140)

Marine Energy Conversion Systems Sectional Committee, ETD 54

Last date for Comments – 02/03/2024

FOREWORD

(Formal clauses will be added later)

This Draft Standard which is identical with IEC 62600-100-2012 'Marine Energy – wave tidal and other water current converters Part 100 : Electricity producing wave energy converters - Power performance assessment' issued by the International Electrotechnical Commission (IEC) is proposed to be adopted by the Bureau of Indian Standards on the recommendation of the Electrical Installation Sectional Committee and approval of the Electrotechnical Division Council.

The text of the IEC Standard has been approved as suitable for publication as an Indian Standard without deviations. Certain conventions are, however, not identical to those used in Indian Standards. Attention is particularly drawn to the following:

a) Wherever the words 'International Standard' appears referring to this standard, they should be read as 'Indian Standard'.
b) Comma (,) has been used as a decimal marker, while in Indian Standards the current practice is to use a point (.) as the decimal marker.

International Standard	*Corresponding Indian Standard*	*Degree of Equivalence*
IEC 60688, Electrical measuring transducers for converting a.c. electrical quantities to analogue or digital signals	IS 14570 : 2012 IEC 60688, Electrical measuring transducers for converting a.c. electrical quantities to analogue or digital signals (*First Revision*)	Withdrawn
ISO 8601, Data elements and interchange formats – Information interchange – Representation of dates and times	IS 8601 : 2013, Myrobalan nuts (Whole And Crushed) for tanning industry - Specification (*First Revision*)	Identical with IS/IEC 8601 : 2013

NDBC:2009, Technical Document 09-02, Handbook of automated data quality control checks and procedures. National Data Buoy Center, August 2009	IS 2009 : 1975, Method for calibration of horizontal and tilted oil storage tanks (*First Revision*)	Identical with IS/IEC 2009 : 1975

In this adopted standard, reference appears to International Standards for which Indian Standards also exists. The corresponding Indian Standards, which are to be substituted, are listed below along with their degree of equivalence for the editions indicated:

The technical committee has reviewed the provisions of the following international standards referred in this adopted standard and decided that they are acceptable for use in conjunction with this standard.

International Standard	*Title*
IEC 60044-1	Instrument transformers – Part 1: Current transformers
IEC 61000-3 (all parts),	Electromagnetic compatibility (EMC) – Part 3: Limits
IEC 61869-3	Instrument transformers – Part 3: Additional requirements for inductive voltage transformers
ISO/IEC Guide 98-1:2009	Uncertainty of measurement – Part 1: Introduction to the expression of uncertainty in measurement
ISO/IEC Guide 98-3:2008	Uncertainty of measurement – Part 3: Guide to the expression of uncertainty in measurement (GUM:1995)

For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated expressing the result of a test, shall be rounded off in accordance with IS 2: 2022 ‘Rules for rounding off numerical values (*Second Revision*)’. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

Scope

This standard provides a method for assessing the electrical power production performance of a Wave Energy Converter (WEC), based on the performance at a testing site.

The scope of this Technical Specification includes:

a) All WECs that produce electrical power from wave energy;
b) All sea resource zones (near and offshore, deep and shallow water);
c) The specification applies to commercial scale WECs that are:

1) Compliantly moored,
2) Tautly moored,
3) Bottom mounted,
4) Shore mounted.

Note — The technical content of their document has not been enclosed as there are identical with the corresponding IEC standards for details, please refer the corresponding IEC 62600-100-2012 or kindly contact:

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