

A I E E
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Recommended Specification
for
**SPEED GOVERNING OF PRIME MOVERS
INTENDED TO DRIVE ELECTRIC
GENERATORS**

(This Edition Is Limited to Steam Turbines Intended to Drive Electric
Generators of Not Less Than 10,000 Kw Rated Capacity)

PUBLISHED FOR ONE YEAR TRIAL USE

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A I E E and ASME

Approved by
A I E E Standards Committee
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FOREWORD

The plan for the formation of a joint AIEE—ASME committee for the purpose of preparing a recommended specification covering the speed regulation of prime movers intended to drive electric generators that may, if desired, be included in prime-mover purchase specifications, was approved by action of the Board of Directors of the AIEE on January 30th, 1941; and of the council of the ASME on June 15th, 1941.

The personnel of this Joint Committee was nominated jointly by the Chairman of the AIEE Committee on Power Generation and that of the ASME Standing Committee on Power Test Codes. The Joint Committee operated under the sponsorship of the Power Division of the ASME.

The need for a recommended specification arose from recognition that confusion existed in regard to values of desirable, possible and acceptable performance characteristics for the speed governing of prime movers and in nomenclature employed in connection therewith.

It was recognized that the fundamental studies necessary for the writing of such a specification are identical with those for the preparation of the ASME Power Test Code on Speed, Temperature and Pressure Responsive Governors which has been assigned to the ASME Power Test Code Committee No. 20. The need of close collaboration between the standing committees of the two societies was recognized and is the reason for joint activity and the method of selection of the Joint Committee's personnel.

While the Joint Committee was appointed for the purpose of preparing a recommended specification covering the speed governing of all types of prime movers intended to drive electric generators, the specification is for the present limited in its scope to steam turbine-generators of not less than 10,000 kw rated capacity.

The recommended specification does not cover emergency governors or other overspeed devices, or devices that are not responsive to speed.

The subjoined document containing the recommended specification, also contains some informative matter and definitions that would not ordinarily be included in a purchase contract or specification.

It has been the intention of the Joint Committee to limit the proposed specification for the present to those functional and performance characteristics that are generally believed to be the requirements for satisfactory and acceptable speed governing, and that are capable of being subjected to measurement and of being conformed to by the manufacturers with their available equipment of substantially standard design.

The recommended specification is not intended to preclude a purchaser specifying and a manufacturer agreeing to supply additional functional and specified requirements not included in this specification, including agreement to modify certain numerical values recommended therein.

The recommended specification is intended to apply to steam turbines driving electric generators at constant speed when operated isolated or in parallel with other generators.

It is recommended that the purchase specification include the following:

- (a) That the standard equipment of Paragraphs 25 to 29 inclusive be supplied by the manufacturer.
- (b) That the manufacturer shall supply such of the optional equipment of Paragraphs 31 to 34 inclusive desired by the purchaser and agreed upon by the manufacturer.
- (c) The performance specification of Paragraphs 36 to 50 inclusive to be guaranteed by the manufacturer.
- (d) The requirements of Paragraphs 51 and 52.

PERSONNEL OF THE JOINT AIEE-ASME COMMITTEE

on

A Recommended Specification for Prime-Mover Speed Governing

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