1. Record Nr. UNINA9910136269103321 ANSI/IEEE Std 352-1975 (Revision of IEEE Std 352-1972): IEEE guide Titolo for general principles of reliability analysis of nuclear power generating station protection systems / / Institute of Electrical and Electronics **Engineers** Pubbl/distr/stampa Piscataway, New Jersey:,: IEEE, , 1974 **ISBN** 1-5044-0749-0 Descrizione fisica 1 online resource (75 pages) Disciplina 621.4835 Nuclear power plants - Safety measures Soggetti Lingua di pubblicazione Inglese Formato Materiale a stampa Livello bibliografico Monografia Sommario/riassunto This document was prepared to provide the designers and operators of nuclear power plant protection systems and the concerned regulatory groups with the essential methods and procedures of reliability engineering that are applicable to protection systems. By applying principles given, systems may be analyzed, acceptable test intervals may be established, results may be reconciled with reliability objectives, and the analyses may be suitably documented. The quantitative principles are applicable to the analysis of the effects of random failures on protection system reliability. They are not intended

nuclear power plant protection systems and the concerned regulatory groups with the essential methods and procedures of reliability engineering that are applicable to protection systems. By applying principles given, systems may be analyzed, acceptable test intervals may be established, results may be reconciled with reliability objectives, and the analyses may be suitably documented. The quantitative principles are applicable to the analysis of the effects of random failures on protection system reliability. They are not intended for use in treating the problem of systematic or common-mode failure. The principles are applicable during any phase of a protection system's lifetime. They have their greatest value during the design phase. During this phase reliability engineering can have the greatest effect for enhancing safety. The principles may also be applied during the peroperational phase or at any time during the normal lifetime of a system. When the principles are applied during either of these two phases, they will aid in the evaluation of systems and in improving test programs. Although not inherently limited, these principles are intended for application to systems covered in the scope of IEEE Std 279-1971, Criteria for Protection Systems for Nuclear Power Generating Stations, ANSI N42.7-1972.