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This index covers all items—papers, correspondence, reviews, etc.—that appeared in this periodical during 1987, and items from previous years that were commented upon or corrected in 1987.

The *Author Index* contains the primary entry for each item, listed under the first author's name, and cross-references from all coauthors. The *Subject Index* contains several entries for each item under appropriate subject headings, and subject cross-references.

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- Carrisa Plains (California) plant; two years of performance data for world's largest plant. *Hoff, Tom, + , T-EC Jun 87* 232–235
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 integrating photovoltaic devices into distribution network so as to improve system stability. *Kalaitzakis, K. C., + , T-EC Dec 87* 556–562
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Power conversion, dc – ac
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Power conversion harmonics
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Power generation; cf. ac generators; Hydroelectric power generation; Photovoltaic power systems; Pulse power systems; Pumped-storage power generation; Synchronous generators; Wind power generation
Power generation auxiliary systems
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Power generation faults
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- Power generation mechanical factors; cf.** Turbogenerator mechanical factors
- Power generation meteorological factors; cf.** Photovoltaic power systems; Wind power generation
- Power generation planning** intelligent computer-aided design techniques applied to power plant design and operation. *Kanga, Darius, T-EC Dec 87* 592–597
- Power generation protection; cf.** Nuclear power generation protection/safety; Power generation faults; Power generation reliability
- Power generation reliability** optimum design of stand-alone solar thermal power system with reliability constraint. *Farghal, Soliman A., +, T-EC Jun 87* 215–221
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- reliable operation of hydrogenerator PID governor using parameter identification and adaptive filtering. *Jiang, J., +, T-EC Jun 87* 189–195
- solar thermal plants' impact on economy and reliability of utility system. *Farghal, Soliman A., +, T-EC Jun 87* 208–214
- vibrations of generator shaft following severe disturbances of network; effects of fault clearing and damper modeling. *Hammons, T. J., T-EC Jun 87* 308–319.
- Power generation testing** standstill frequency-response testing of turbogenerators; application to 500-MW machine at Nanticoke G. S.. *Jack, A. G., +, T-EC Sep 87* 496–505.
- Power supplies; cf.** Pulse power systems
- Power system ...; cf.** Power generation ...
- Power system faults** vibrations of generator shaft following severe disturbances of network; effects of fault clearing and damper modeling. *Hammons, T. J., T-EC Jun 87* 308–319.
- Power system interconnection; cf.** Interconnected power systems
- Power system parameter estimation** aggregation of induction motor loads for transient stability studies. *Rahim, A. H. M. A., +, T-EC Mar 87* 55–61
- estimating synchronous machine electrical parameters from frequency response tests. *Eitelberg, Eduard, +, T-EC Mar 87* 132–138.
- estimating synchronous machine parameters using modified frequency-response method; theory. *Balda, Juan C., +, T-EC Dec 87* 646–651
- estimating synchronous machine parameters using modified frequency-response method; application to 3-kVA microalternator. *Balda, Juan C., +, T-EC Dec 87* 652–657.
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- Power system protection; cf.** Nuclear power generation protection/safety; Power system faults
- Power system stability** design of decentralized multivariable excitation controllers in multimachine power systems by projective controls; power system stabilizers and automatic voltage regulators. *Arnautovic, D., +, T-EC Dec 87* 598–604
- dual-rate self-tuning power system stabilizer for generation control. *Malik, O. P., +, T-EC Sep 87* 355–360
- integrating photovoltaic devices into distribution network so as to improve system stability. *Kalaitzakis, K. C., +, T-EC Dec 87* 556–562
- saturation functions for synchronous generators from finite elements, for inclusion in system stability codes. *Minnich, S. H., +, T-EC Dec 87* 680–692.
- Power system stability; cf.** Subsynchronous resonance; Synchronous generator stability
- Power system stability, transient** aggregation of induction motor loads for transient stability studies. *Rahim, A. H. M. A., +, T-EC Mar 87* 55–61
- superconducting turbogenerator governor control; effect on transient stability. *Alyan, M. A. A. S., +, T-EC Mar 87* 38–46.
- Power system transients** uninterruptible power system as safety-related isolation device for nuclear power plants. *Gelazis, Valdas, +, T-EC Dec 87* 513–519
- Power system transients; cf.** Rotating-machine transient analysis
- Power transformers; cf.** EHV transformers
- Power transmission; cf.** EHV transmission; HVDC transmission
- Programmable control** burner control system retrofit using programmable controllers. *Urrea, Walter Rangel, T-EC Jun 87* 222–226
- Proportional control, linear systems** reliable operation of hydrogenerator PID governor using parameter identification and adaptive filtering. *Jiang, J., +, T-EC Jun 87* 189–195
- self-tuning PID power system stabilizers for synchronous generators. *Hsu, Yuan-Yih, +, T-EC Sep 87* 343–348
- Pulse power systems** pulse power supply for nuclear fusion toroidal field coil; 215-MVA flywheel motor – generator set with 4-GJ discharge energy. *Matsukawa, T., +, T-EC Jun 87* 262–268
- Pulsed magnets; cf.** Electromagnets, pulsed
- Pumped-storage power generation** Raccoon Mountain 1,530-MW underground plant; ten-year operating experience. *Adkins, F. E., T-EC Sep 87* 361–368
- Pumps** low-cost wind turbines for pumping water and electricity generation; developments in Latin America. *Nelson, Vaughn, +, T-EC Jun 87* 236–238

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Reduced-order systems, nonlinear

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Rotating-machine measurements

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integrated nonlinear magnetic-field/network transient analysis of electronically commutated permanent magnet motor with partially shorted armature. *Nyamusa, Tagyen A., +, T-EC Mar 87* 86–92

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saturation functions for synchronous generators from finite elements, for inclusion in system stability codes. *Minnich, S. H., +, T-EC Dec 87* 680–692.

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- Rotating-machine testing; cf.** Power generation testing; Rotating-machine insulation testing
- Rotating-machine thermal factors**
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- Rotating-machine transient analysis**
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- Rotating machines; cf.** ac generators; ac motors; Brushless rotating machines; Induction machines; Motors; Superconducting rotating machines; Synchronous machines
- Rural areas**
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- Saturation; cf.** Rotating-machine nonlinear analysis
- Self-tuning regulators; cf.** Adaptive control
- Solar energy**
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- Solar heating/cooling; cf.** Solar power generation, thermal
- Solar power generation; cf.** Photovoltaic power systems
- Solar power generation, thermal**
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- Sress analysis; cf.** Mechanical factors
- Stability; cf.** Power system stability
- Standards; cf.** ANSI standards; IEEE standards
- Steam generation**
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- Subsynchronous resonance**
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- Superconducting magnets, energy storage**
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- Superconducting magnets, plasma confinement**
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- Superconducting rotating machines**
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- Surges; cf.** Power system transients; Rotating-machine transient analysis; Switching transients
- Switching transients**
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- Synchronous generator excitation; cf.** Power generation control, excitation
- Synchronous generator stability**
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- Synchronous generator transient analysis**
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- Synchronous generators**
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- Synchronous generators; cf.** Hydroelectric generators; Permanent magnet generators; Power generation; Turbogenerators
- Synchronous machines**
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- Synchronous motor drives**
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- Synchronous motors**
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- Synchronous motors; cf.** Hysteresis motors; Permanent magnet motors
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- Testing; cf.** Rotating-machine testing
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- Uninterruptible power systems**
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- Vibrations; cf.** Mechanical factors
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