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Nota di contenuto	PART ONE RESOURCE IDENTIFICATION AND DEVELOPMENT: 1. Geology of Geothermal Regions; 2. Exploration Strategies and Techniques: Introduction; 3. Geothermal Well Drilling; 4. Reservoir Engineering; PART TWO GEOTHERMAL POWER GENERATING SYSTEMS: 5. Single-Flash Steam Power Plants. 6. Double-Flash Steam Power Plants; 7. Dry-Steam Power Plants. 8. Binary Cycle Power Plants. 9. Advanced Geothermal Energy Conversion Systems; 10. Exergy Analysis Applied to Geothermal Power Systems; PART THREE GEOTHERMAL POWER PLANT CASE STUDIES: 11. Larderello Dry-Steam Power Plants, Tuscany, Italy; 12. The Geysers Dry-Steam Power Plants, Sonoma and Lake Counties, California, U.S.A. 13. Cerro Prieto Power Station, Baja California Norte, Mexico. 14. Hatchobaru Power Station, Oita Prefecture, Kyushu, Japan. 15. Mutnovsky Flash-Steam Power Plant, Kamchakta Peninsula, Russia. 16. Miravalles Power Station, Guanacaste Province, Costa Rica. 17. Heber Binary Plants, Imperial Valley, California, USA; Introduction; Exploration and discovery; 18. Magmamax Binary Power Plant, East Mesa, Imperial Valley California, USA
Sommario/riassunto	Geothermal Power Plants: Principles, Applications and Case Studies is the latest book from Ron DiPippo, Professor Emeritus, University of

Massachusetts Dartmouth. It is a single resource on all aspects of the utilization of geothermal energy for electric power generation. Written in one voice by a respected authority in the field with twenty-five years of experience in geothermal research, teaching, and consulting, it is intended for those involved in any aspect of the geothermal industry. Grounded in fundamental scientific and engineering principles, its practical emphasis is enhanced by the use of actual case studies from historic and present-day plants. The thermodynamic basis for the design of geothermal power plants is at the heart of the book. The Second Law is used extensively to assess the performance and guide the design of various types of geothermal energy conversion systems. The case studies included in the third part of the book are chosen from plants around the world, and increase the reader's understanding of the elements involved in gaining access to, and making use of, this important renewable energy resource. The book is illustrated with over 240 photographs and drawings, many in full color. Nine chapters include practice problems, with answers, for the reader to test his/her understanding of the material. A comprehensive and definitive worldwide compilation of every geothermal power plant that has ever operated, unit by unit, is given in detailed tables as an appendix. In another appendix, DiPippo offers a concise digest of applicable thermodynamics. * Unique and thoroughly up to date * Comprehensive and international in scope * Author of international repute
