

1. Record Nr.	UNINA9910966092103321
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Titolo	Power plant characteristics and costs / / Stan Kaplan
Pubbl/distr/stampa	New York, : Nova Science Publishers, c2010
ISBN	1-61122-346-6
Edizione	[1st ed.]
Descrizione fisica	1 online resource (140 p.)
Collana	Energy policies, politics and prices series
Disciplina	621.31/210973
Soggetti	Electric power-plants - United States Electric power-plants - United States - Cost of operation Electric power-plants - United States - Design and construction Electric power production - United States - Forecasting
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	"This is an edited, excerpted and augmented edition of a United States Congressional Research Service publication, report order code RL34746, dated November 13, 2008 by Stan Kaplan"--Pref.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Intro -- POWER PLANT CHARACTERISTICS AND COSTS -- POWER PLANT CHARACTERISTICS AND COSTS -- CONTENTS -- PREFACE -- INTRODUCTION AND ORGANIZATION -- TYPES OF GENERATING TECHNOLOGIES -- Electricity Demand and Power Plant Choice and Operation -- Generation and Load -- Economic Dispatch and Heat Rate -- Capacity Factor -- Utility Scale Generating Technologies -- Supercritical Pulverized Coal -- Integrated Gasification Combined Cycle (IGCC) -- Natural Gas Combined Cycle -- Nuclear Power -- Geothermal Power -- Wind Power -- Solar Thermal and Solar Photovoltaic (PV) Power -- FACTORS THAT DRIVE POWER PLANT COSTS -- Government Incentives -- Renewable Energy Production Tax Credit -- Nuclear Energy Production Tax Credit3 -- Loan Guarantees for Nuclear and Other Carbon-Control Technologies -- Energy Investment Tax Credit -- Clean Coal Technologies Investment Tax Credit -- State and Local Incentives -- Capital and Financing Costs -- Construction Cost Components and Trends -- Financing Power Plant Projects -- Fuel Costs -- Air Emissions Controls for Coal and Gas Plants -- Conventional Emissions -- Carbon Dioxide -- CO2 Removal for Pulverized Coal and Natural Gas Plants -- CO2 Removal for IGCC Coal Plants -- CO2 Allowance Costs -- FINANCIAL ANALYSIS

METHODOLOGY AND KEY ASSUMPTIONS -- ANALYSIS OF POWER PROJECT COSTS -- Case 1: Base Case -- Case 2: Influence of Federal and State Incentives -- Case 3: Higher Natural Gas Prices -- Case 4: Uncertainty in Capital Costs -- Case 5: Carbon Controls and Costs -- POWER GENERATION TECHNOLOGY PROCESS DIAGRAMS AND IMAGES -- Pulverized Coal -- Integrated Gasification Combined Cycle Coal (IGCC) -- Natural Gas Combined Cycle -- Nuclear Power -- Wind -- Geothermal -- Solar Thermal Power -- Solar Photovoltaic Power -- ESTIMATES OF POWER PLANT OVERNIGHT COSTS -- ESTIMATES OF TECHNOLOGY COSTS AND EFFICIENCY WITH CARBON CAPTURE. FINANCIAL AND OPERATING ASSUMPTIONS -- LIST OF ACRONYMS AND ABBREVIATIONS -- INDEX.

Sommario/riassunto

This study analyses the factors that determine the cost of electricity from new power plants. It offers projections of the possible cost of power from new fossil, nuclear, and renewable plants built in 2015, illustrating how different assumptions, such as the availability of federal incentives, change the cost rankings of technologies.