

Feasibility study (Regulatory and Market analysis) for a 500 MW Combined Cycle Gas Turbine Independent Power Plant in Albania



Task 3: Market Analysis

Final Report

February 2018







ABBREVIATIONS

ACER Agency for the Cooperation of Energy Regulators

AGC Automatic Generation Control

AL Albania

ALL Albanian Leke (currency)

AS Ancillary Services

AT Austria

ATC Available Transfer Capacity

BA Bosnia Herzegovina
Bbl Barrel (of crude oil)
Bcm Billion cubic meter

BiH Bosnia & Herzegovina

BG Bulgaria

BSP Balancing Service Provider
BRP Balancing Responsible Party

CACM Capacity Allocation and Congestion Management

CCCPP Combined Cycle Cogeneration Plant

CCGT Combined Cycle Gas Turbine

CCS Carbon Capture and Sequestration

CEER Council of European Energy Regulators

CESEC Central and South Eastern Europe Connectivity

CfD Contract for differences

CHP Combined Heat and Power

CRM Capacity Remuneration Mechanism

CROPEX Croatian Power Exchange

CWE Central West Europe
CZC Cross Zonal Capacity
DC Distribution Charge

DH District Heating

DHNC District Heating Network Charge

DSCR Debt Service Coverage Ratio

EAT Earnings After Tax

EBIT Earnings Before Interest and Tax

EBITDA Earnings Before Interest, Tax, Depreciation and Amortization

EC European Commission

ECB European Central Bank

EEX European Energy Exchange

EFTA European Free Trade Association

EIRR Equity Internal Rate of Return

EnC Energy Community

ENTSO-E European Network of Transmission System Operators for Electricity

ENTSO-G European Network of Transmission System Operators for Gas

EPEX European Power Exchange

ERE Energy Regulatory Authority

ETS Emissions Trading System

EU European Union

EUA European Union Emissions Allowances

EUR Euro (the currency of the EU)

EV Electric Vehicles

FCR Frequency Containment Reserves

FRR Frequency Restoration Reserves

FOR Forced Outage Rate

FSRU Floating Storage And Regasification Units

FYR Former Yugoslav Republic

GDP Gross Domestic Product

CEGH Central European Gas Hub

GHG Greenhouse Gas Emissions

GJ Gigajoule

GMDCA Gas Market Development Commitment Agreement

GR Greece

GRP Gas Retail Price

GT Gas Turbine

GW Gigawatt

GWh Gigawatt hour

HDD Heating Degree Day
HHV High Heating Value

HR Croatia

HRP Heat Retail Price

HU Hungary



3

HUPX Hungarian Power Exchange

HVAC High Voltage Alternating Current

HVDC High Voltage Direct Current

IAP Ionian Adriatic Pipeline

IBEX Independent Bulgarian Energy Exchange

IEA International Energy Agency
IED Industrial Emissions Directive

IENE Institute of Energy of South East Europe

IFC International Finance Corporation

IGCC Integrated Gasification Combined Cycle

IGU International Gas Union

IMF International Monetary Fund

IRR Internal Rate of Return

Kg Kilogram kJ Kilojoule

KS Kosovo (region in the Balkan Peninsula)

LAGIE Hellenic Electricity Market Operator

LCP Least Cost Planning

LCPD Large Combustion Plant Directive

LFC Load Frequency Control

LHV Low Heating Value

LNG Liquefied Natural Gas

LTC Long Term Contract

LTD Limited (responsibility company)

ME Montenegro
MEUR Million Euro
MK Macedonia

MMBTU Million British Thermal Unit
MPT Modern Portfolio Theory

MRC Multi-Regional Coupling
MSB Marginal Social Benefit
MSC Marginal Social Cost
MVA Megavolt Ampere

MW Megawatt

MWh Megawatt hour



NBP National Balancing Point

NG Natural Gas

NPV Net Present Value

NREAP National Renewable Energy Action Plan

NTC Net Transfer Capacity

NW Northwest

OECD Organisation for Economic Co-operation and Development

OMIE Iberian Electricity Market Operator

OPCOM Romanian Electricity and Gas Market Operator

OPEX Operating Expenses

OTC Over the Counter

O&M Operating and Maintenance (cost)

PCR Price Coupling of Regions

PJM Regional Transmission Organization in the East Coast of the USA

PPP Purchasing Power Parity

PSV Virtual natural gas trading point in Italy

PX Power Exchange

RES Renewable Energy Sources

RO Romania

RR Replacement Reserves

RS Serbia

SE South East

SEE South-East Europe

SEEPEX South East European Power Exchange

SL Slovenia

SO Scheduled Outage

SOR Scheduled Outage Rage

ST Steam Turbine

TAP Trans Adriatic Pipeline
TC Transmission Charge

TSO Transmission System Operator

TTF Tile Transfer Facility (virtual trading point of NG in the Netherlands)

TYNDP Ten Year Network Development Plan

Union for the Coordination of the Transmission of Electricity (former

ENTSO-E)

UGS Underground Gas Storage



UK United Kingdom

US United States

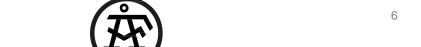
USA United States of America

USD United States Dollar VTP Virtual Trading Point

WACC Weighted Average Cost of Capital

WB World Bank

WGP Wholesale Gas Price
WHP Wholesale Heat Price



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