

Japan International Cooperation Agency (JICA)

Ministry of Industry, Mines and Energy (MIME)

Electricite du Cambodge (EDC)

The Kingdom of Cambodia

Feasibility Study
on
The Sihanoukville Combined Cycle
Power Development Project
in
The Kingdom of Cambodia

FINAL REPORT
(EXECUTIVE SUMMARY)

January 2002

NEWJEC Inc.

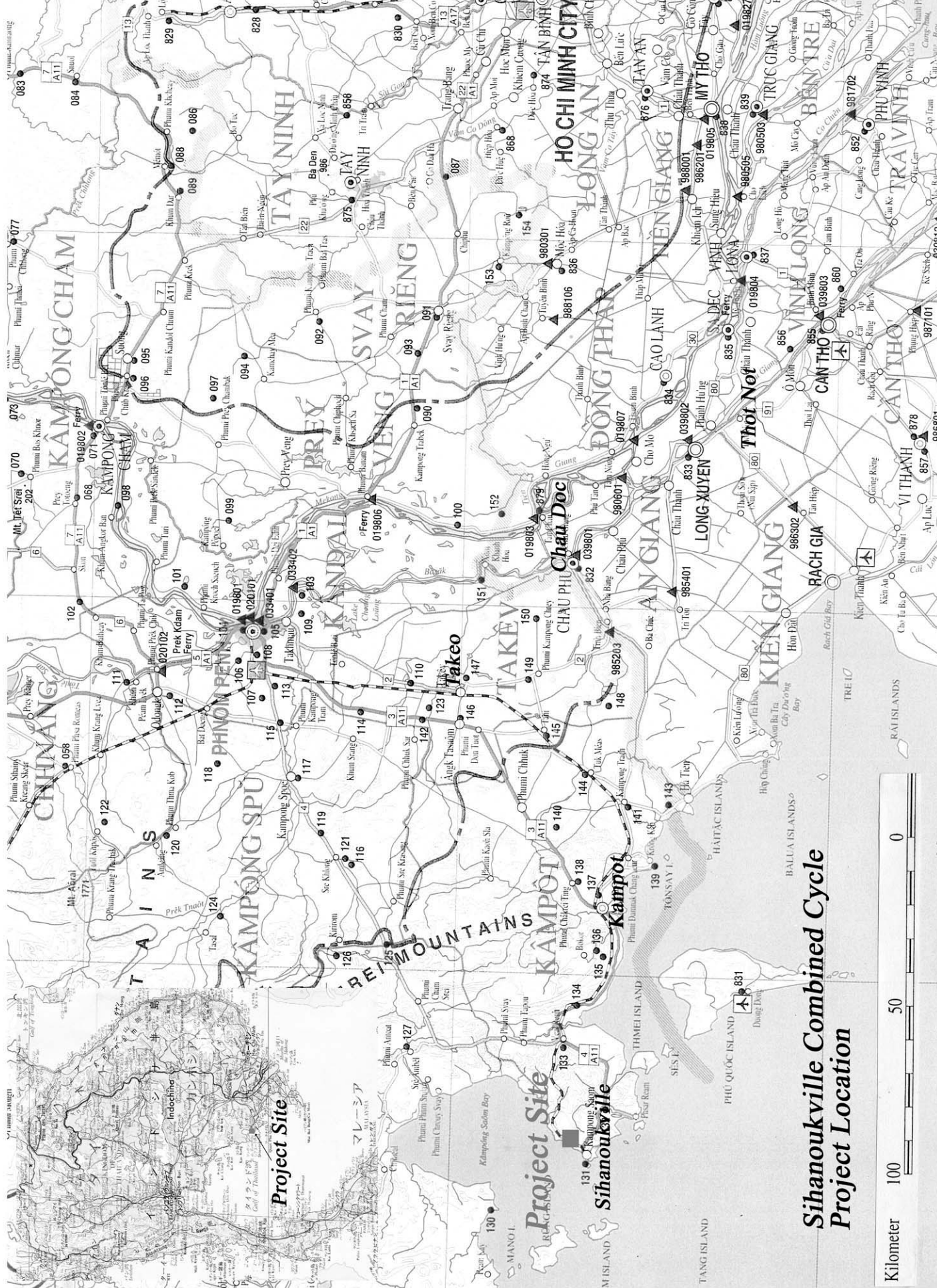
MPN

JR

02-008



180 MW Sihanoukville Combined Cycle Power Plant



Project Site

Project Site

Sihanoukville

Sihanoukville Combined Cycle Project Location



Kilometer



180 MW Sihanoukville Combined Cycle Power Plant Site

Abbreviations and Definitions

ADB	:	Asian Development Bank
CIF	:	Cost, Insurance and Freight
CMAC	:	Cambodian Mine Action Center
CNPA	:	Cambodia National Petroleum Authority
DSCR	:	Debt Service Coverage Ratio
EAC	:	Electricity Authority of Cambodia
EIA	:	Environmental Impact Assessment
EDC	:	Electricite du Cambodge (one of the counterpart)
EIRR	:	Economic Internal Rate of Return
EVN	:	Electricity of Vietnam
GDP	:	Gross Domestic Product
GT	:	Gas Turbine
HHV	:	Higher Heating Value
HRSG	:	Heat Recovery Steam Generator
IBRD	:	International Bank for Reconstruction and Development (The World Bank)
IPP	:	Independent Power Producer
IRR	:	Internal Rate of Return
ISO	:	International Standard Organization
JBIC	:	Japan Bank for International Cooperation
LHV	:	Lower Heating Value
LNG	:	Liquefied Natural Gas
LPC	:	Levelised Production Cost
LPG	:	Liquefied Petroleum Gas
MEF	:	Ministry of Economy and Finance
MIME	:	Ministry of Industry, Mines and Energy
MOE	:	Ministry of Environment
NPV	:	Net Present Value
PSC	:	Production Sharing Contract
ROE	:	Return on Equity
ST	:	Steam Turbine
Stage 1	:	The works of the first 90 MW capacity plant
Stage 2	:	The works of the second 90 MW capacity plant
Stage 3	:	The works of the third 90 MW capacity plant
VAC	:	Ventilation, Air-Conditioning

Units

BCF	:	Billion Cubic Feet ($10^9 \text{ ft}^3 = 28,320,000 \text{ m}^3$)
¢	:	US cent
kcal	:	Kilo-calorie (1 kcal = 4.187 kJ)
kWh	:	Kilo-watt-hour
GWh	:	Giga-watt-hour (10^6 kWh)
M.	:	Million
MW	:	Mega-watt (10^3 kW)
MMBTU	:	Million Btu (1 Btu = 0.252 kcal = 1.055 kJ)
TCF	:	Trillion Cubic Feet ($10^{12} \text{ ft}^3 = 1,000 \text{ BCF}$)

THE KINGDOM OF CAMBODIA
THE SIHANOUKVILLE COMBINED CYCLE POWER DEVELOPMENT PROJECT

FINAL REPORT

EXECUTIVE SUMMARY

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