

**APPENDIX R
DIAGRAMS AND PLANS**

Index

The following Diagrams are provisional and may be updated by 3-C Bulgaria following completion of the detailed design of the Units and adjusted to take into account conditions pertaining during the Performance Tests:

Diagram	Description
R-1A	Net Heat Rate Correction Curve for Ambient Temperature (Dry Bulb)
R-1B	Net Heat Rate Correction Curve for Ambient Temperature (Wet Bulb)
R-1C	Net Heat Rate Correction Curve for Part Load Operation
R-1D	Net Turbine Heat Rate Correction Curve for Condensate Make-up
R-2	Single Line Diagram (three drawings)
R-3	Generator and 400 kV Protection System
R-4	400 kV High Voltage Connection Arrangement
R-5	Maximum Net Load versus Ambient Temperatures
R-6	Location Map of Maritza East Site
R-7	Plan Layout
R-8A	Unit 1 Net Heat Rate Degradation Curve
R-8B	Unit 2 Net Heat Rate Degradation Curve

ТЪПЛОБОРНА ТАБЛИЦА

ДИЯГРАМИ И ПЛАНИ
ДОПЪЛНИТЕЛНИ

11

ТРПЛОБОКА ТАВНА

OPMHNHATA

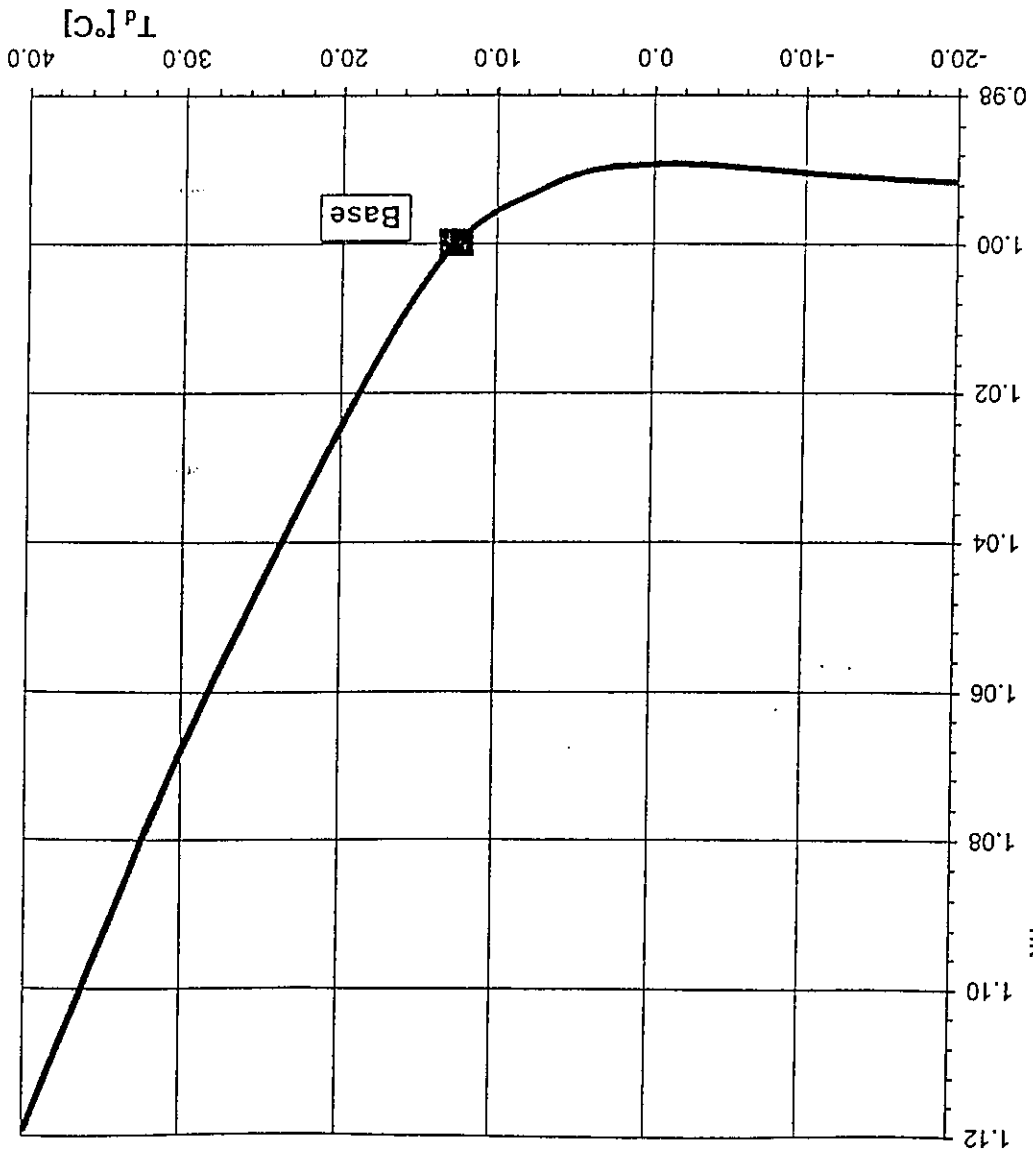
ALSTOM

Revision: B	Project: Maritza East 1	Document No:
Appr: 13-03-01 SPLDE61	Lang: EN	Sheet: 1
Rev: 13-03-01 SPLDE61	Expected rel. ANPHR1+2 vs. dry bulb temperature	Format: A4
Prep: 13-03-01 SPLDE61		

const. ambient conditions:
 rel. hum. = 73 %
 barometric pressure = 1003.5 mbar

f_{HR} = rel. ANPHR₁₊₂ correction
 T_d = dry bulb temperature

$$f_{HR} = \frac{ANPHR}{ANPHR^{1+2} (Base)^{1+2}}$$



We reserve all rights in this document and in the information contained therein. Reproduction, use and disclosure to third parties without express authority is strictly forbidden. © ALSTOM Power Generation AG 2000

Net Heat Rate Correction Curve for Ambient Temperature (Dry Bulb)

R-1A

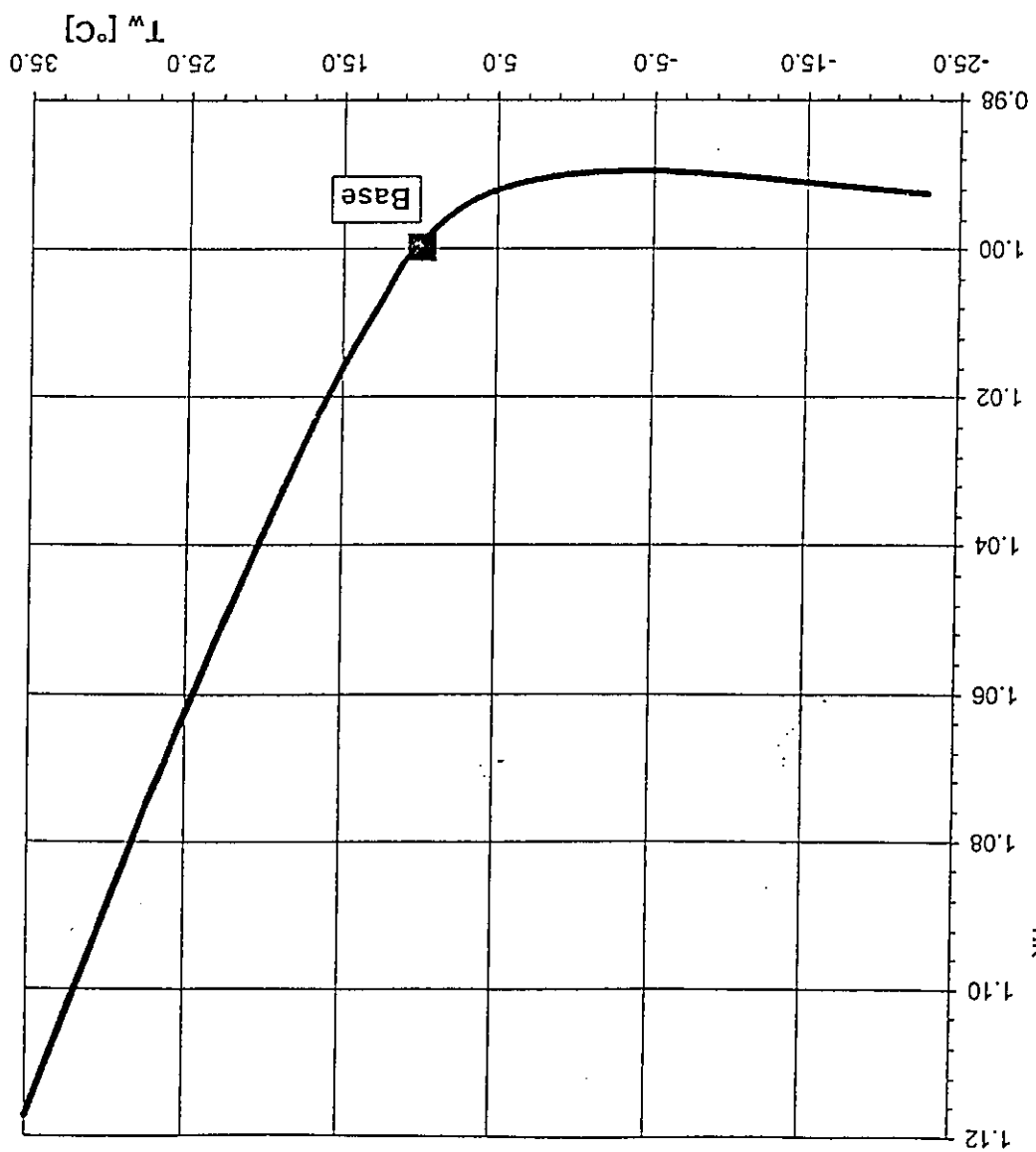
K-1A

Revision: B	Project: Maritza East 1	Document No:
Appr.: 13-03-01	Sheet: 1	
Rev.: 13-03-01	Format: A4	
Prep.: 13-03-01	Expected rel. ANPHR1+2 vs. wet bulb temperature	
SPLDE61		
SPLDE61		
SPLDE61		

barometric pressure = 1003.5 mbar

f_{HR} = rel. ANPHR₁₊₂ correction
 T_w = wet bulb temperature

$$f_{HR} = \frac{ANPHR}{ANPHR^{1+2}(Base)}$$



We reserve all rights in this document and in the information contained therein. Reproduction, use and disclosure to third parties without express authority is strictly forbidden. © ALSTOM Power Generation AG 2000

Net Heat Rate Correction Curve for Ambient Temperature (Wet Bulb)

R-1B

K-1B

KK

ALSTOM

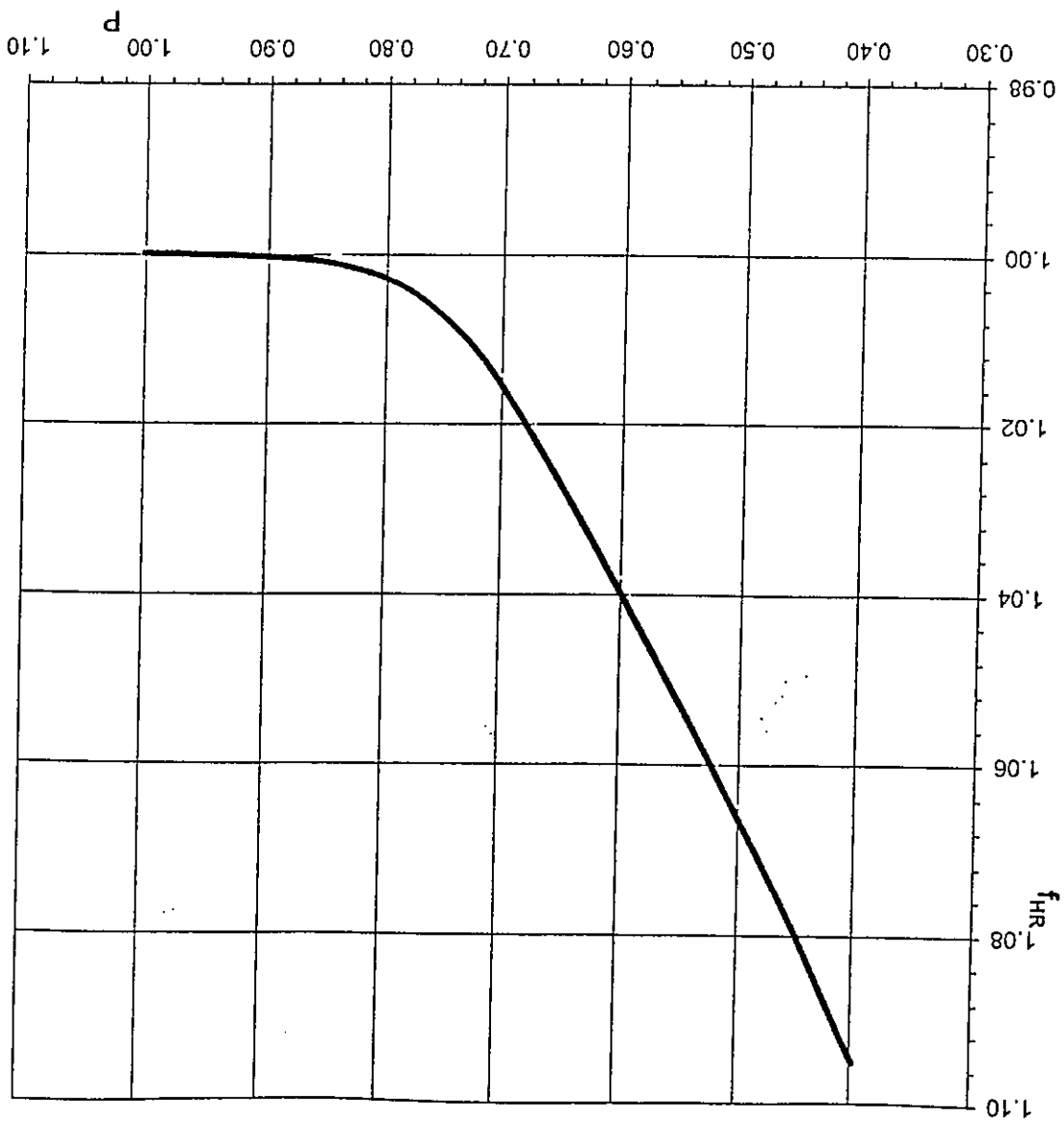
TRITOCOM TAVINA

TRITOCOM TAVINA

Document No.	
Project	Mariza East
Expected ANPHR ¹⁺²	for two units running simultaneously
Formal A4	
Prep: 05-03-01	SPLDE61
Rev: 05-03-01	SPLDE61
Appr: 05-03-01	SPLDE61
Revision:	

f_{HR} = rel. ANPHR¹⁺²
 P = rel. net plant output
 ambient conditions:
 dry bulb temp. = 12.5 °C
 rel. hum. = 73 %
 barometric pressure = 1003.5 mbar

$$f_{HR} = \frac{ANPHR}{ANPHR^{1+2} (Base)^{1+2}}$$



We reserve all rights in this document and in the information contained therein. Reproduction, use and disclosure to third parties without express authority is strictly forbidden. © ALSTOM Power Generation AG 2004

R-1C Net Heat Rate Correction Curve for Part Load Operation

R-1C

APPENDIX

11

TRPOBCKA TAVNA

OPMTHAMA

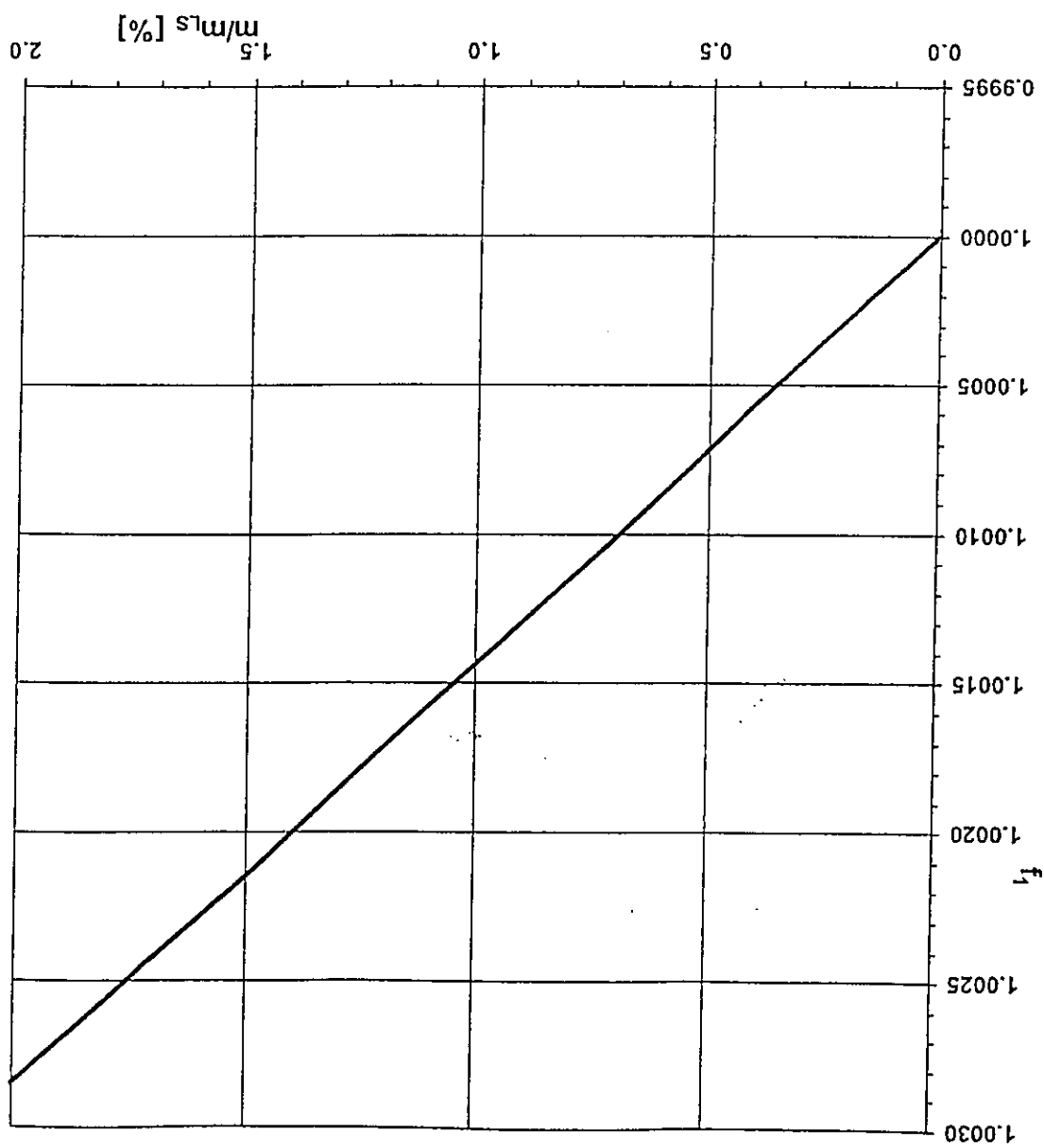
ALSTOM

Revision: B	Project: Maritza East 1	Document No:
Appr: 04-04-2001	Lang: EN	Sheet: 1
Rev: 04-04-2001	vs. condensate make-up	Format: A4
Prep: 04-04-2001	for Turbine Heat Rate	
SPLDE61	Correction factor f_1	
SPLDE61		
Resp. depl:		
Derived from:		

For information only!

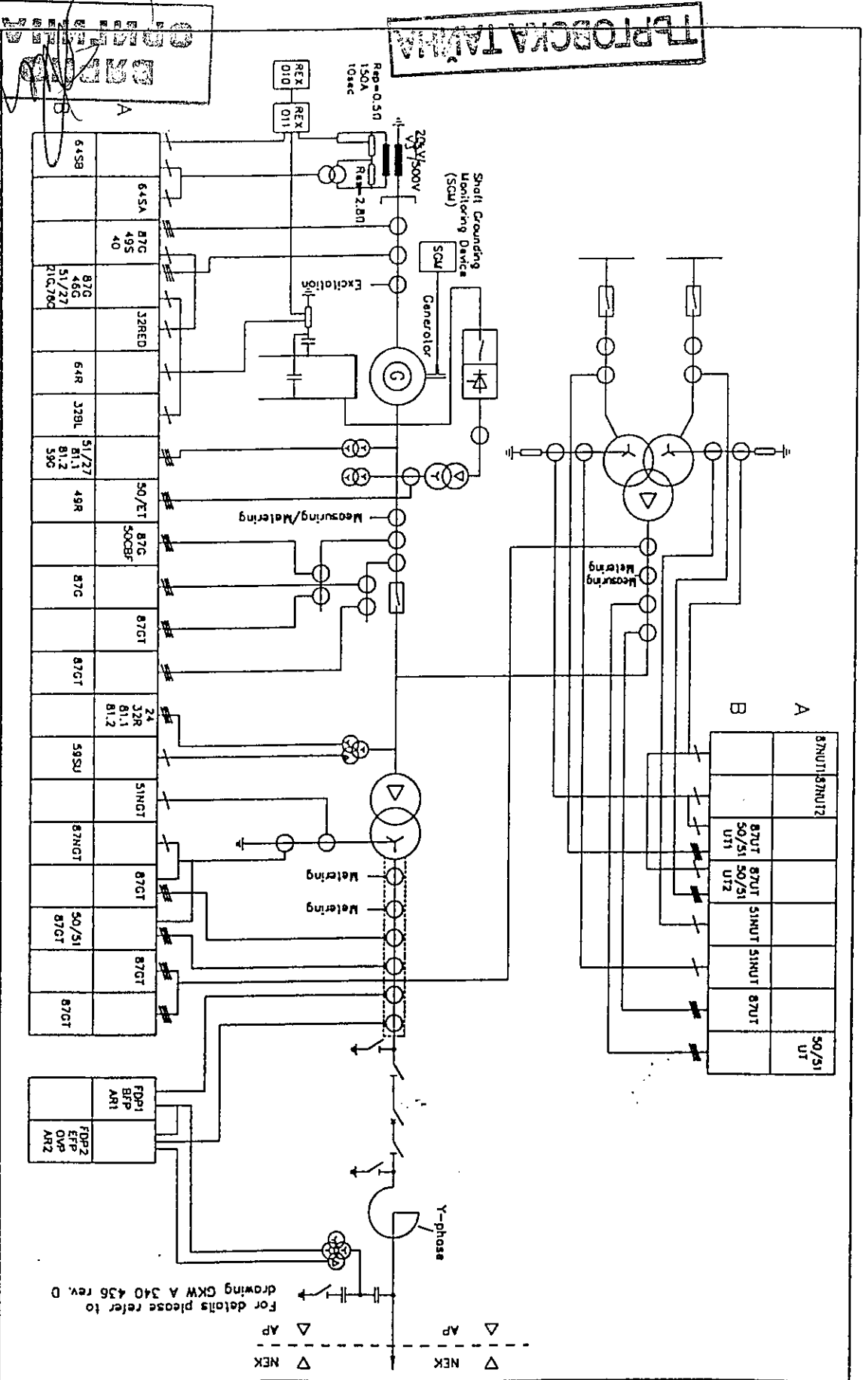
f_1 = Correction factor
 m = Condensate make-up Massflow
 m_{LS} = Live Steam Massflow
 THR_0 = THR at zero condensate make-up

$$f_1 = \frac{THR}{THR_0}$$



We reserve all rights in this document and in the information contained therein. Reproduction, use and disclosure to third parties without express authority is strictly forbidden. © ALSTOM Power Generation AG 2000

Single Line Diagram



Rev	2000-03-30	Dr	ABD	Dr/Rev	2000-03-07	AES Horizons Ltd.	Single Line Diagram Unit & Power Evacuation Line Protection	2000-03-30	2	1
Rev	2001-01-26	Dr	ABD	Dr/Rev	2000-03-07	MARITZA EAST 1 / Bulgaria	Single Line Diagram Unit & Power Evacuation Line Protection	2000-03-30	2	1
Rev	2001-03-23	Dr	ABD	Dr/Rev	2000-03-07	MARITZA EAST 1 / Bulgaria	Single Line Diagram Unit & Power Evacuation Line Protection	2000-03-30	2	1

Handwritten signature

For details please refer to drawing GKW A 340 436 rev. D

Legend

- Protection Group A**
- Differential protection Generator (87G)
 - 95% Generator Stator Earth Fault Protection (64SA)
 - Generator Stator Thermal Overload Protection (49S)
 - Loss of Excitation Protection (40G)
 - Single Phase (Red) Reverse Power Protection (32R)
 - Underfrequency Protection (81.1)
 - Overfrequency Protection (81.2)
 - Generator Circuit Breaker Failure Protection (50CBF)
 - Definite Time Overcurrent Protection HV-Side of Excitation Transformer (50ET)
 - Inverse Time Overcurrent Protection HV-Side of Excitation Transformer (51ET)
- Generator Transformer**
- Differential Protection Generator Transformer (87GT)
 - Definite Time Overvoltage protection (59G)
 - Overfluxing Protection for Generator Transformer (24)
 - Standby Earthfault Protection for Generator Transformer (51GT)
- Unit Auxiliary Transformer**
- Restricted Earthfault Protection for Secondary Winding no.1 (87NUT1)
 - Restricted Earthfault Protection for Secondary Winding no.2 (87NUT2)
 - Definite Time Overcurrent Protection (50UT)
 - Inverse Time Overcurrent Protection (51UT)
- Protection Group B**
- Generator**
- Differential Protection Generator (87G)
 - 100% Generator Stator Earthfault Protection (64SB)
 - Generator Inverse Time Negative Phase Sequence Protection (46G)
 - Voltage Restrained Overcurrent Protection (51/27)
 - Underimpedance Protection (21G)
 - Pole Slip Protection (78G)
 - Rotor Earthfault Protection (64R)
 - Single Phase (Blue) Reverse Power Protection (32BL)
 - Definite Time Overvoltage Protection (59G)
 - Underfrequency Protection (81.1)
 - Overfrequency Protection (81.2)
 - Generator Rotor Overload Protection (49R) (Red from CT on HV-side of the Excitation Transformer)

- Generator Transformer**
- Start-Up Earthfault Protection (59SU)
 - Differential Protection for Generator Transformer (87GT)
 - Restricted Earthfault Protection Generator Transformer (87NGT)
 - Definite/Inverse Time Overcurrent Protection (50/51GT)

- Unit Auxiliary Transformer**
- Three Winding Differential Protection (87UT)
 - Definite Time Overcurrent Protection for Secondary Winding no.1 (50UT)
 - Inverse Time Overcurrent Protection for Secondary Winding no.1 (51UT)
 - Standby Earthfault Protection for Neutral Secondary Winding no.1 (51NUT1)
 - Definite Time Overcurrent Protection for Secondary Winding no.2 (50UT2)
 - Inverse Time Overcurrent Protection for Secondary Winding no.2 (51UT2)
 - Standby Earthfault Protection for Neutral Secondary Winding no.2 (51NUT2)

In addition to the a.m. protection functions the alarm and trip contacts of the protection devices of the generator, generator transformer and unit auxiliary transformer shall also be incorporated into the unit protection scheme.

These alarm & trip contacts shall include but not be limited to:

- For Generators**
- Winding/booring temp. Seal oil&Cooling Plant "Fault", Excitation System "Fault" (Dead machine protection).

- For Transformers**
- Buchholz relay, Top Changer Protection, Oil&Winding Temperature, Oil Level, (Pressure Release Device).

400kV Power Evacuation Line Protection

- Protection Group A**
- FDP1 Full distance protection - 3 zones
 - BFP Breaker Failure Protection
 - AR1 Single phase outerclosing relay (to FDP1)
- Protection Group B**
- FDP2 Full distance protection - 4 zones
 - EFP Directional earth fault relay with definite time delay (3 stages)
 - OVP Reactive Power Controlled Overvoltage relay (2 stages)
 - AR2 Single phase outerclosing relay (to FDP2)

ТЪРТОБСКА ТАВНА

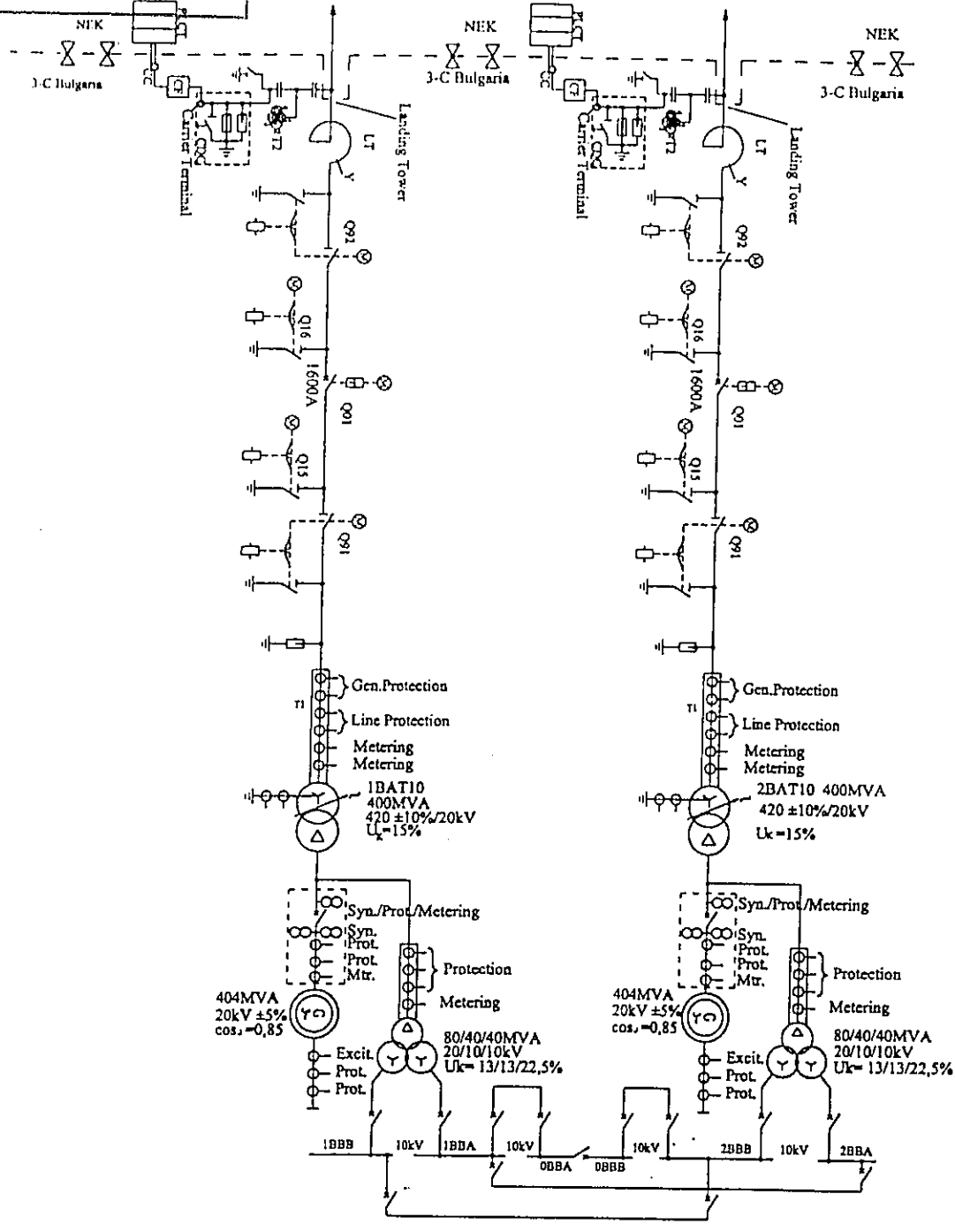
ОПНТАВНА

NO. /REV.	Rev. 01	Rev. 02	Rev. 03	Rev. 04	Rev. 05	Rev. 06	Rev. 07	Rev. 08	Rev. 09	Rev. 10
2000-08-30	09	10	11	12	13	14	15	16	17	18
B 2001-02-28	Line Protection	AS/ASPT	CD/DAIM	CDM/CDKSD	Revised					
C 2001-03-29	139G1	SECC/S4								
AES Horizons Ltd.					MARITZA EAST 1 / Bulgaria					
Single Line Diagram					Unit & Power Evacuation Line Protection					
REVISIONS/LIST OF DRAWINGS					DRAWING NO. / DRAWING NO.					
					GKW F 618 244					
					2					
					2					

ТЪРГОВСКА ТАРИФА

ПРОЕКТ

340436 C-04



- Q01 400kV Circuit Breaker
1600A, 40kA
- Q15, Q16 Grounding Switches
400kV, 40kA
- Q91, Q92 Disconnecting Switch with
Grounding Switch
400kV, 1600A
- T1 Current Transformer
600A/1A/1A/1A/1A/1A
Core 1-4 SP20, 60VA
Core 5+6 FS3, Cl.0.2, 30VA
- T2 Capacitive Voltage Transformers
400kV / 0.1 / 0.1 / 0.1 / 0.1 / 0.1 kV
Winding 1+2: 100VA, Cl.0.2
(Measuring & Synchronizing)
Winding 3+4: 100VA, Cl. 3P (Protection)
- Line Trap with tuning & protection device
(in phase Y only)
- CDC Carrier Drain Coil
and Protective Gap
(inside capacitor voltage transformer)
- Surge Arrester
- CC Coupling Filter in Phase Y only
(Line Matching Unit Phase to Ground Mode)
- PLCT Coax Cable 75 Ohm by 3-C Bulgaria
Power Line Carrier Terminal
(Receivers, Transmitters, etc. by NEK)

App/REV	A 20.01.01
C 01 02.2001	Open
D 01 02.2001	LCST Gen. Cl. verified
E 11 04.2001	Jumped
ab cd	AGI./OC/PT
SEC CD/E3	CCP/OC/CCSD
DATE	2001-01-25
DESIGNER	Kochev
CHECKER	Kochev

АЕС Horizont Ltd.
МАРИЦА EAST 1/ Bulgaria
2x1000MVA(соед) Липак Фрод Power Station

Simple line diagram
400kV Power Evacuation Circuits

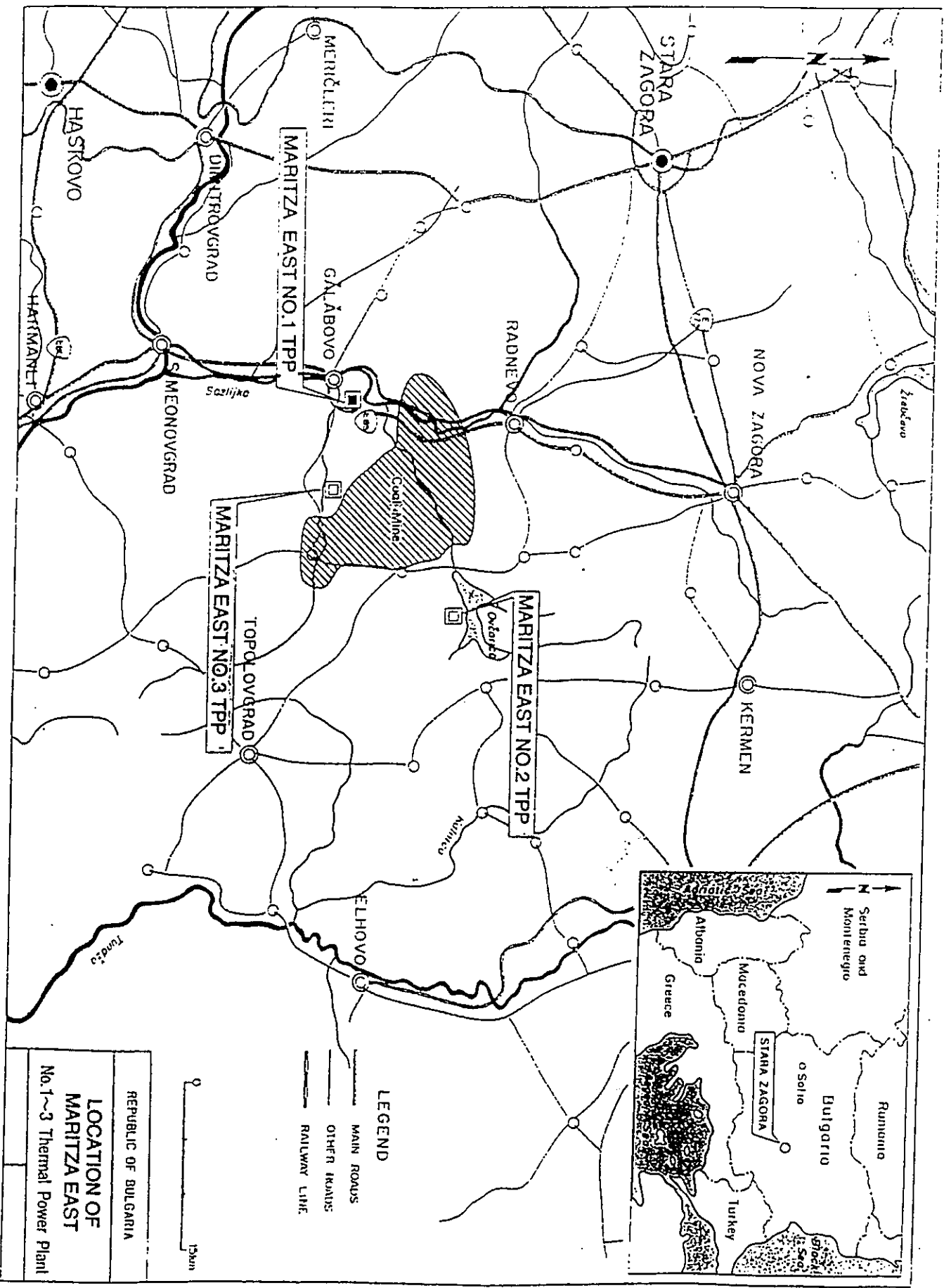
ZEICHNUNGSLIST OF DRAWINGS
ZEICHNUNGS-NR./DRAWING NO.
GKWA 340 436

NO.	1	1	1
DATE			
SHEET			

22

ТЕРМОЕЛЕКТРИЧНА СТАНАЦИЈА

ДРЖАВНО ГИДРОЕЛЕКТРИЧНО ПОДПРЕМНО ПОДРУЧЈЕ



LEGEND

MAIN ROADS

OTHER ROADS

RAILWAY LINE

15km

REPUBLIC OF BULGARIA

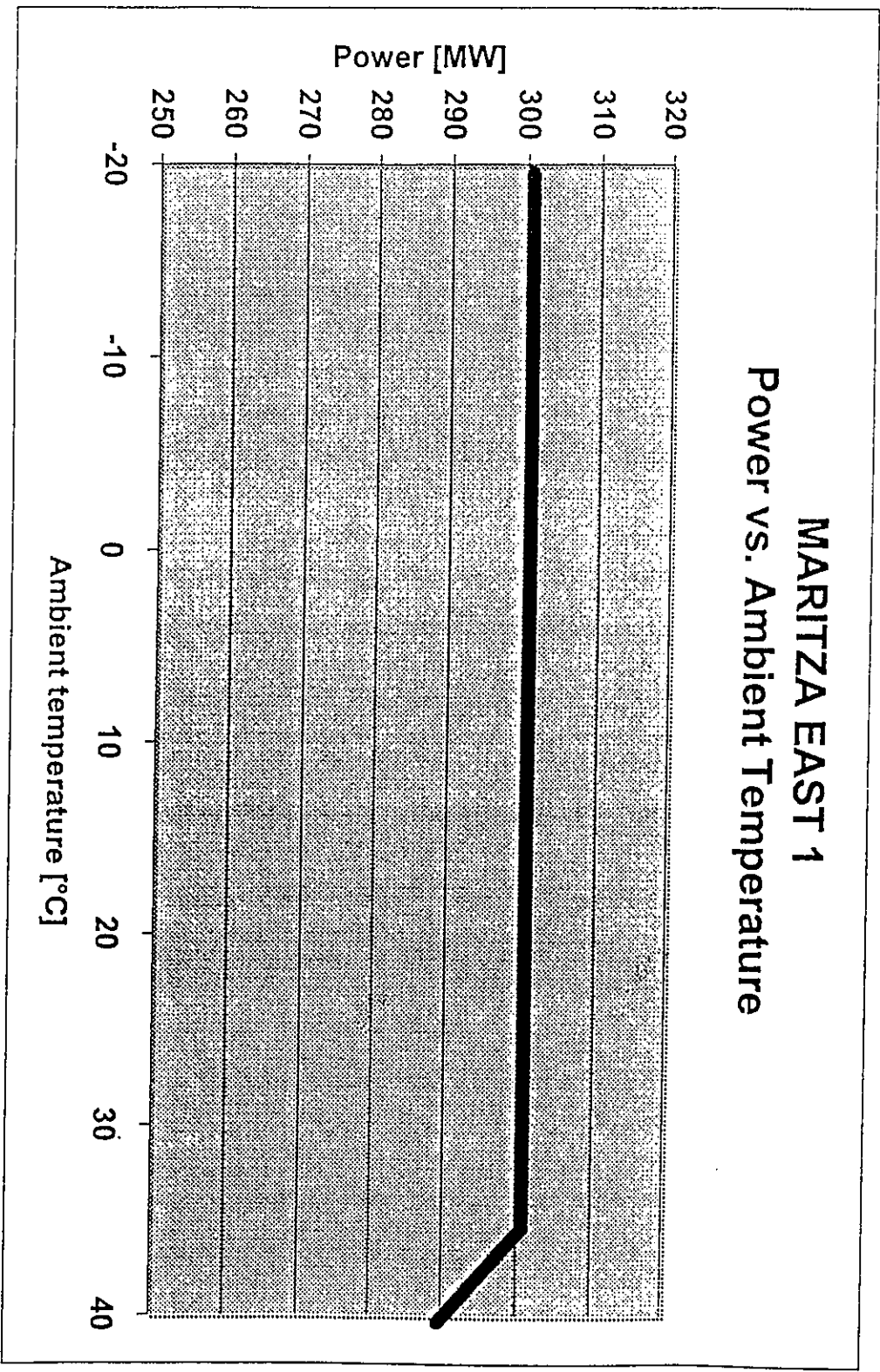
LOCATION OF MARITZA EAST No. 1-3 Thermal Power Plant

22

WK

ТРПТОВСКА ТАЈНА

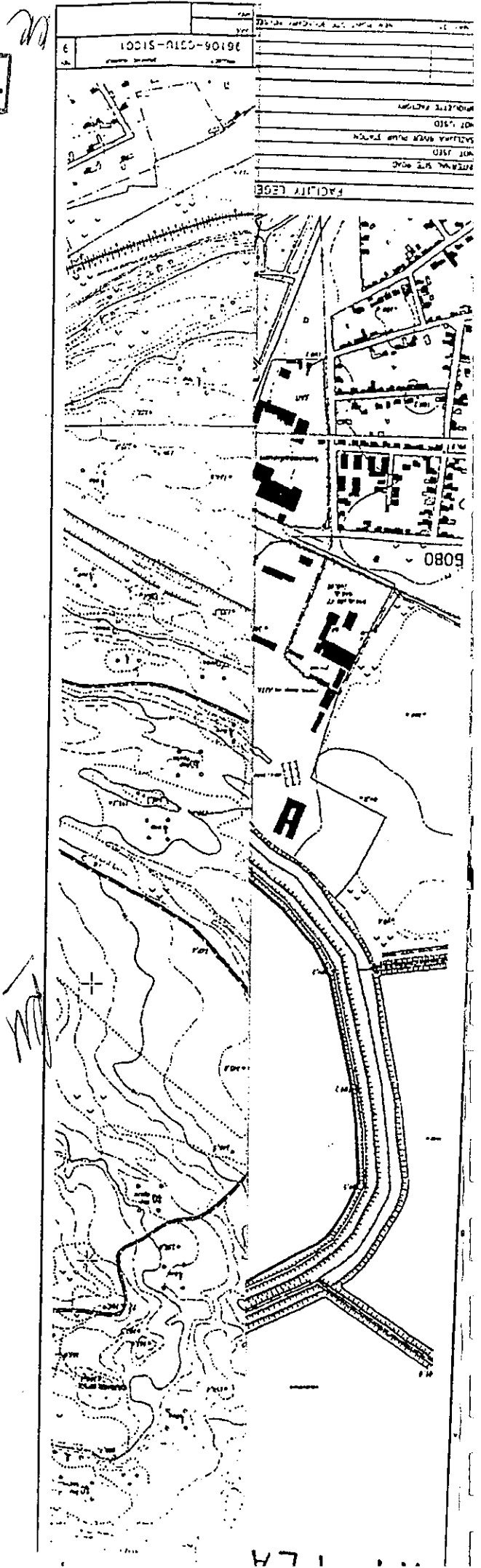
БРПНОС
ОРМТНАНА



1/20

БРПНО
ОПМЛННННА

ТРПЛОБКА ТАМНА

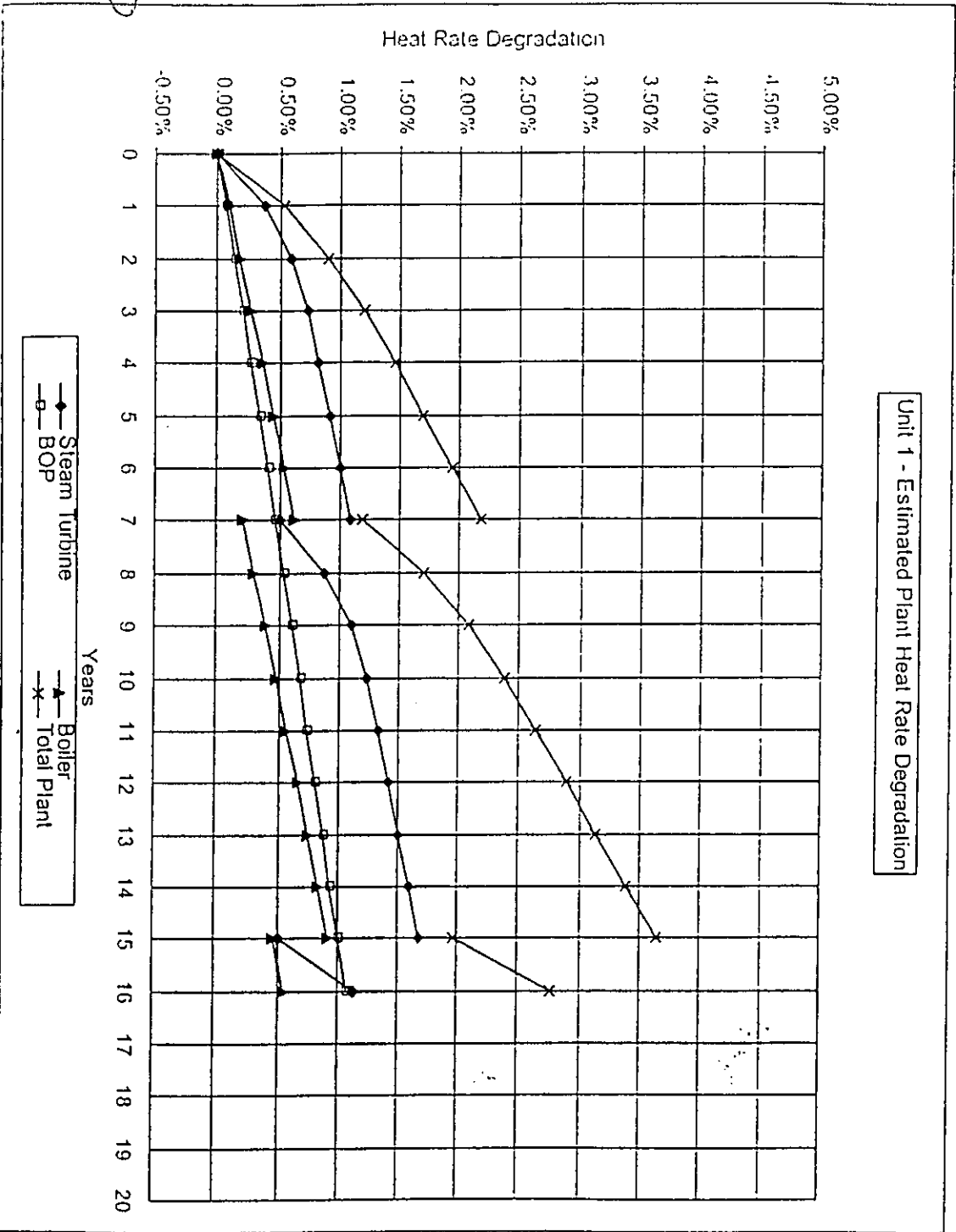


1 LH

Unit 1 Net Heat Degradation Curve

WR

Unit 1 - Estimated Plant Heat Rate Degradation



ТРИТОВСКА ТАМНА

БРАТВО С
ОПНТАМА

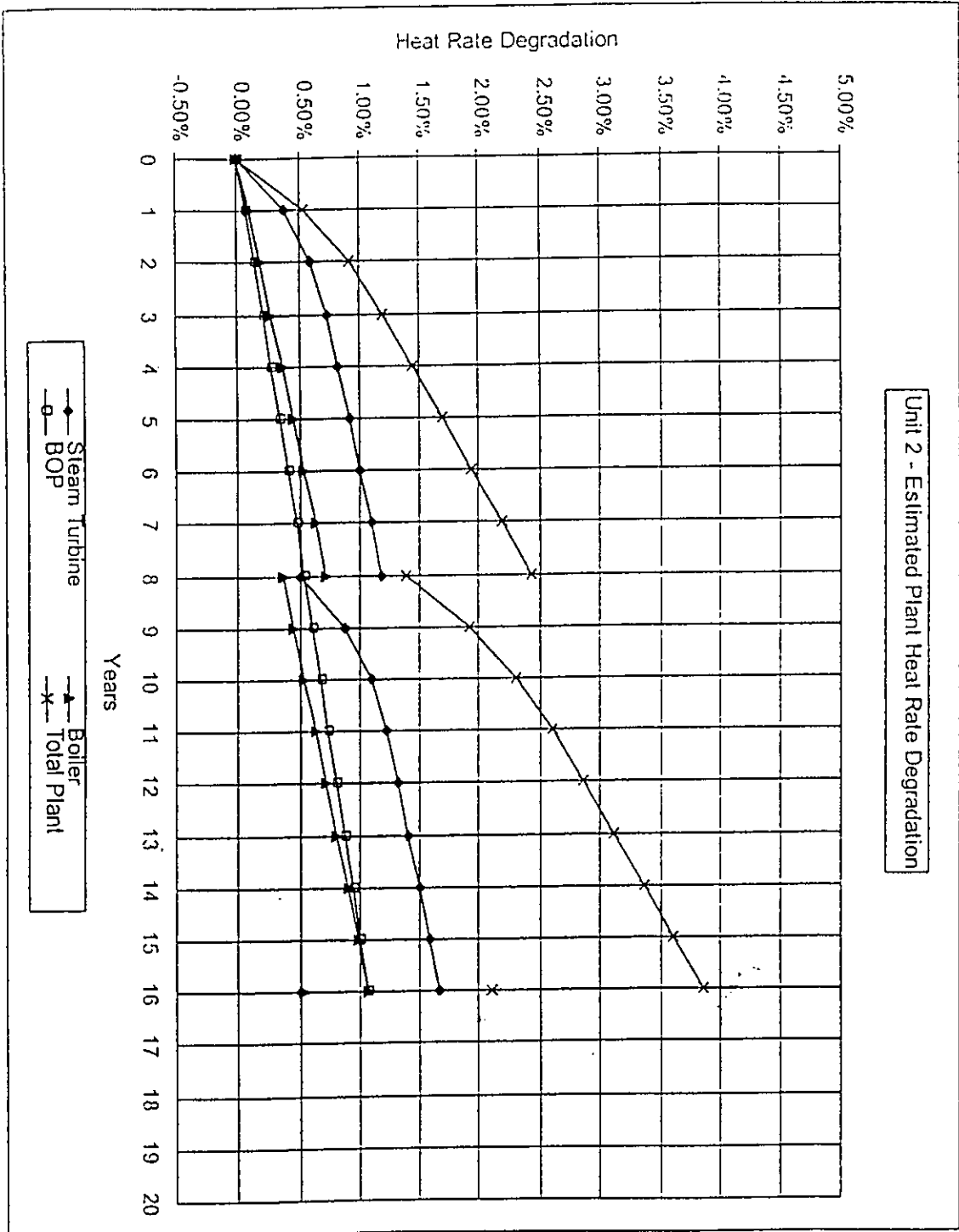
WR

Unit 2 Net Heat Degradation Curve

W

ТРИТОНСКА ТАЊИНА

БАРКО
ОПТИМИЗА



Unit 2 - Estimated Plant Heat Rate Degradation

W

ВЕРИЛИКО
ОПТИМАЛНА

[Handwritten signature]

ТРОБОЧКА ТАЈНА

APPENDIX S
PROJECT SUPPORT LETTER

[Handwritten mark]



РЕПУБЛИКА БЪЛГАРИЯ
ЗАМЕСТНИК МИНИСТЪР-ПРЕДСЕДАТЕЛ
И МИНИСТЪР НА ИКОНОМИКАТА

ПИСМО ЗА ПОДКРЕПА
(проект "Маруца-изток I")

Практическото на Република България,
отчитайки значимостта на проекта за финансиране,
изграждане и експлоатация на нова централа на лъгнитни въглища с
мощност 670 MWt (бруто) на площадката на ТЕЦ "Маруца-изток I"
от "Консолидирани Континенал Комърс Лмд (ЗС)", Мавриций, и
"ЕИ И ЕС - ЗС Маруца-изток I" ЕООД - Гълъбово, България
и след приключване на преговорите и сключване на следните
проектни споразумения:

- Споразумение за закупуване на електрическа енергия;
- Споразумение за доставка на лъгнитни въглища;
- Споразумение за прехвърляне на площадката на "Маруца
изток I",

заявява, че при изпълнението на проекта:

а) ще предприема такива мерки съгласно действащото
законодателство, които според него са икономически обосновани и са
в неговите правомощия за осигуряване дейността на дружестваните
предприятия по проектните споразумения;

ДО
КОНСОЛИДИРАНИ КОНТИНЕНТАЛ КОМЪРС Лмд. (ЗС), МАВРИЦИЙ
"ЕИ И ЕС - ЗС МАРИЦА-ИЗТОК I" ЕООД - ГЪЛЪБОВО, БЪЛГАРИЯ
ЗАМОДАТЕЛИТЕ ПО ПРОЕКТА "МАРИЦА-ИЗТОК I"

ТЪРГОВСКА ТАЙНА

ВРНО
ОРИГИНАЛ

ТЪРГОВСКА ТАЙНА

ВАРНО Е
ОРИГИНАЛ

15.05.2011г.

ПЕТЪР ЖОТЕВ

ЗА ПРАВИТЕЛСТВОТО НА РЕПУБЛИКА БЪЛГАРИЯ

С уважение,

Изпълнението на проекта ще се осъществява и при прилагането на международните договори за насърчване и защита на инвестициите, по които Република България е страна. Това писмо за подкрепа е изготвено на български и на английски език, като и двата текста имат еднаква сила. В случай на различие в тълкуването предимство има текстът на български език. Това писмо за подкрепа се поддържа на българското законодателство.

споразуменя. тези задължения на държавното предприятие по проектните това дружество да продължи да упражнява тези права и да изпълнява "Мини Маруца-изток" ЕАД на техни права и задължения по проекта, дружество от "Национална електрическа компания" ЕАД или от споразуменя, както и в случай на прехвърляне на друго търговско предприятие да продължи да упражнява всички права и да изпълнява всички задължения на държавното предприятие по проектните приватизационен договор да бъде prevedeno приватизационното компания "ЕАД или "Мини Маруца-изток" ЕАД в съответния правомощя, в случай на приватизация на "Национална електрическа е) ще предприеме всички действия, които са в неговите

несъстоятелност; предприятия, бъдат прекратени или бъдат обявени в компания "ЕАД или "Мини Маруца-изток" ЕАД, докато са държавни проектни споразуменя, в случай че "Национална електрическа дружества, които да поемат задълженията по съответните определянето на друго търговско дружество или търговски д) ще осигури своевременно при условията на буква "а"

проектните споразуменя; възприемат изпълнението на задълженията на страните по c) ще се въздържа от действия, които биха могли да на проекта; разрешения, лицензи, съгласия и концесии, необходими за изпълнението издаване от други компетентни държавни органи на всички законодателство ще издава и при необходимост ще съдейства за б) при сизване на изискванията на българското

ВРНО
ОПНЛНА

ТРОБОКА ТАНА

APPENDIX T
FINANCIAL MODEL

AES-3C MARITZA EAST 1
Financial Model

Developed by
INFRASTRUCTURE FINANCE GROUP LLC

Confidential
Draft & Unaudited

ТЪРГОВСКА ТАЛОНА

БРП ЧОС
ОПТИМАЛНА

Handwritten notes and signatures, including "K.L.", "AM", and "M".

Important Notice

This financial model (the "Model") has been prepared by Infrastructure Finance Group LLC ("IFG") at the request of AES Horizons Limited ("AES"). The model is based on information which has not been independently verified and assumptions which have been simplified. AES and IFG do not provide any warranty relating to the accuracy of the Model or to the validity of the results obtained based on the assumptions used (whether or not these are consistent with the assumptions provided).

Any projections using the Model are illustrative only and do not constitute a forecast. They are not and should not be considered as a recommendation by AES or IFG that any lender or investor should lend or invest in the project.

Any projections using the Model should include this "Important Notice", are strictly confidential and should not be distributed, copied or reproduced in any form whatsoever without the express consent of AES and IFG.

AES-3C MARITZA EAST 1
Project Cost & Financing
Assumptions

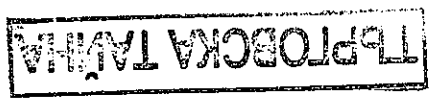
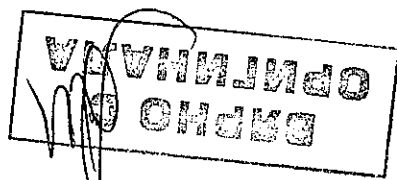
PROJECT COSTS AND OPERATING ASSUMPTIONS

CAPITAL COSTS	Amount	Currency	Extra EPC costs at NEK's request
EPC Cost	€ 656 450 000	Euros	€ 3 191 489
Import Duties	€ 10 300 000	Euros	€ 7 600 000
Remote switchyard (NEK request)	€ 3 191 489	Euros	€ 950 000
Fuel and utilities prior to synchronization/testing	€ 5 200 000	Euros	€ 1 300 000
Stamp taxes	€ 13 785 450	Euros	€ 950 000
Stamp taxes and permitting costs	€ 2 220 000	Levas	€ 13 991 489
Project Supervision	\$ 3 000 000	US\$	
Land	\$ 4 480 000	Levas	
Development costs up to FC	\$ 20 000 000	US\$	
Development costs during construction (monthly)	\$ 250 000	US\$	
Development / financing fees	\$ 10 000 000	US\$	Contingency usage
Contingency	€ 70 000 000	Euros	†
Social Responsibility projects	€ 6 488 950	Levas	(Enter 0 if used, 1 if not)
Working capital	€ 6 000 000	Euros	

OPERATING ASSUMPTIONS	Amount	Currency
Net installed capacity (kW)	600 000	
Contracted capacity (kW)	600 000	
Capacity degradation	see worksheet ASSUM4 for degradation schedule	
Availability factor (net of forced outages)	see worksheet ASSUM4 for annual availability	
Contractual net plant heat rate (at full load)	10 322 kJ/kWh	
Date of Financial Closing	01.12.2001	
Full Commercial Operations Date (both Units)	01.1.2005 Construction period (months)	37
Operations - # of semi-annual periods	30	

REVENUE AND COST ASSUMPTIONS	Amount	Currency
Capacity Payment & Fixed O&M Costs	see worksheet ASSUM5	
Capital Recovery Rate (Euro/kWh)	11 578 000	
Fixed O&M Capacity Payment (Euro/year)	11 578 000	
Fixed O&M cost per year (Euro)	11 578 000	
Fixed O&M cost per year (Lev)		
O&M fee per year (US\$) (included in Fixed O&M Costs)	\$	Escalation: US Inflation
Decommissioning/Transfer cost (Euro)		
Average coal payment / cost (2000 price and stays flat)	Energy Payment	Fuel & Variable Costs
Oil Payment / cost	1,7739000 Lev/GJ	1,7739000 Lev/GJ
Limestone payment / cost	0,0006512 Lev/kWh	0,0006512 Lev/kWh
Waste disposal payment / cost	0,0011410 Lev/kWh	0,0011410 Lev/kWh
Non-Fuel Variable Payment / Cost	780 000 Euro/year	780 000 Euro/year
Heat rate basis	0,0033120 Lev/kWh	0,0033120 Lev/kWh
Escalation for oil, limestone & ash disposal	10 322 kJ/kWh	10 322 kJ/kWh
Cost of NEK security (borne by AES3-C project company)	2 50% p.a.	
Accounts receivable days outstanding	30	
Accounts payable days outstanding	30	

PROJECT COSTS IN EUROS	Amount	Percentage
EPC Cost	656 450 000	62.19%
Import duties	10 300 000	0.98%
Remote switchyard	3 191 489	0.30%
Fuel prior to synchronization/testing	5 200 000	0.49%
Stamp Taxes	13 785 450	1.31%
Stamp taxes and permitting costs	1 145 429	0.11%
Project supervision	3 333 333	0.32%
Land	2 290 857	0.22%
Development costs pre-FC	22 222 222	2.11%
Development costs during construction	10 277 778	0.97%
Development / Financing Fees	11 111 111	1.05%
Contingency	70 000 000	6.63%
Social Responsibility Projects	3 318 087	0.31%
Working Capital (Initial cash)	6 000 000	0.57%
Senior debt service reserve fund	56 905 650	5.39%
Senior debt up-front financing fees	12 736 517	1.21%
Sub debt up-front financing fees	5 606 616	0.53%
Commitment fees	110 528 664	10.47%
Senior interest during construction	64 851 905	6.14%
Sub debt interest during construction	1 059 455 108	101.3%
Total Project Costs	1 059 455 108	
Adjustments during construction	(19 287 934)	
Unit 1 generation	141 707 610	
VAT paid during construction	(136 305 909)	
VAT reimbursed during construction	5 401 701	
Outstanding VAT balance		
Total Adjusted Project Costs	1 055 568 875	100.00%
without contingency	985 568 875	



Handwritten initials and marks.

FINANCING AND DEBT ASSUMPTIONS

FINANCING ASSUMPTIONS		Amount including Contingency	
Senior debt	75%	791 676 656	
Subordinated debt	0%	0	
Equity	25%	263 892 219	
	100%	1 055 568 875	
Interest on cash balances	Bulgaria: 4.0%		Off-shore: 3.5%

SENIOR DEBT ASSUMPTIONS		OPIC	US\$	Lender 2	Euros	KfW (comm)	Euros	KfW (ECAs)	Euro	EBRD	Euro	Total drawn
Currency of financing			\$125 000 000		n/a		n/a		n/a		n/a	
Amount in base currency if not Euros			n/a		n/a		n/a		361 111 111		n/a	
Base Amount excluding premium (if any)			n/a		n/a		n/a		n/a		n/a	
Maximum amounts (if any)			138 898 899		0		0		465 225 031		134 082 716	739 176 656
Amount Drawn (Euros)			10.50%		10.00%		8.84%		6.50%		9.00%	
Rate												
Term			12		12		8		12		12	
Grace (months)			0		0		0		0		0	
Principal payments in year			2		2		2		2		2	
Interest payments in year			2		2		2		2		2	
Mortgage = 1, Level principal = 2			2		2		2		2		2	
Front-end fee			1.00%		1.00%		1.50%		2.00%		1.00%	
Commitment fee			1.00%		0.50%		0.50%		0.375%		1.00%	
Exposure Premium			0.00%		0.00%		0.00%		13.91%		0.00%	
Percentage of IDC & exposure premium funded by ECAs									85.00000%			
Dividend stopper (coverage):			1.2									
Minimum cash balance required by lenders (Eurosharky)			500 000									
Debt service reserve fund (months)			6									

SUBORDINATED DEBT ASSUMPTIONS		Amount
Amount		-
Rate		13.00%
Term		14
Grace (months)		0
Principal payments in year		2
Interest payments in year		2
Mortgage = 1, Level principal = 2		2
Front-end fee		0.00%
Commitment fee		0.50%
Guarantee fee		0.00%
Administrative fees		0.00%

ТЪПТОРСКА ТАВНА

БНПНОВ
ОПТНННННННННН

Ает

AES-3C MARITZA EAST 1

Macroeconomic, Tax and
Depreciation Assumptions

EXCHANGE & INFLATION RATES	YEARS - CONSTRUCTION PERIOD										SEMI-ANNUAL PERIODS												
	At Financial Close 01.12.2001	-3 01.1.2002	-2 01.1.2003	-1 01.1.2004	0 01.1.2005	1 01.7.2005	2 01.1.2006	3 01.7.2006	4 01.1.2007	5 01.7.2007	6 01.1.2008	7 01.7.2008	8 01.1.2009	9 01.7.2009	10 01.1.2010	11 01.7.2010	12 01.1.2011	13 01.7.2011					
FX Movement	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000					
Rate : \$/Euro	2.1729	2.1729	2.1729	2.1729	2.1729	2.1729	2.1729	2.1729	2.1729	2.1729	2.1729	2.1729	2.1729	2.1729	2.1729	2.1729	2.1729	2.1729					
FX Movement	1.9556	1.9556	1.9556	1.9556	1.9556	1.9556	1.9556	1.9556	1.9556	1.9556	1.9556	1.9556	1.9556	1.9556	1.9556	1.9556	1.9556	1.9556					
Rate : Lev/\$	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%					
Inflation (US)	2.00%	2.00%	2.00%	2.00%	2.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%					
Inflation (EU)	2.50%	2.50%	2.50%	2.50%	2.50%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%					
Inflation (Bulgaria)	5.00%	4.50%	4.00%	3.50%	1.50%	1.50%	1.25%	1.25%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%					

TAX & DEPRECIATION ASSUMPTIONS (Bulgarian GAAP)	
Federal income tax rate (in 2002)	15.00%
Municipal income tax rate	10.00%
VAT rate	20.00%
Refund lag (months)	6
Withholding tax (interest)	0%
Withholding tax (dividends)	5%
IRR	17.50%
MAXIMUM TAX DEPRECIATION RATES DEPRECIATION RATES USED	
Equipment	20.0%
Building	4.0%
Development costs	15.0%
IDC, Financing fees and ECA pr	0.0%
Other costs	15.0%
Other costs	8.2%

TRPTOBCKA TAVNA

TRPTOBCKA TAVNA

12

AES-3C MARITZA EAST 1

Macroeconomic, Tax and
Depreciation Assumptions

EXCHANGE & INFLATION RATES		14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
Period Ending:	At Financial Close	01.12.2001	01.1.2012	01.7.2012	01.1.2013	01.7.2013	01.1.2014	01.7.2014	01.1.2015	01.7.2015	01.1.2016	01.7.2016	01.1.2017	01.7.2017	01.1.2018	01.7.2018	01.1.2019	01.7.2019	01.1.2020
FX Movement	Rate : \$/Euro	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000
FX Movement	Rate : Lev/\$	2.1729	2.1729	2.1729	2.1729	2.1729	2.1729	2.1729	2.1729	2.1729	2.1729	2.1729	2.1729	2.1729	2.1729	2.1729	2.1729	2.1729	2.1729
FX Movement	Rate : Lev/Euro	1.9556	1.9556	1.9556	1.9556	1.9556	1.9556	1.9556	1.9556	1.9556	1.9556	1.9556	1.9556	1.9556	1.9556	1.9556	1.9556	1.9556	1.9556
Inflation (US)		1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
Inflation (EU)		1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
Inflation (Bulgaria)		1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%

ТЪРГОВСКА ТЪВНА

БНП Д С
ОПТИМАЛНА

AES-3C MARITZA EAST 1
 Macroeconomic, Tax and
 Depreciation Assumptions

CAPACITY PAYMENT RATES Period Ending	YEARS - CONSTRUCTION PERIOD					SEMI-ANNUAL PERIODS						
	-3	-2	-1	0	1	2	3	4	5	6	7	
01.1.2002	01.1.2003	01.1.2004	01.1.2005	01.7.2005	01.1.2006	01.7.2006	01.1.2007	01.7.2007	01.1.2008	01.7.2008		
Capacity Payment Rates (Euro/MWh)	0.0000	0.0000	0.0000	0.0000	3.0362	2.7334	3.2805	2.7338	3.6384	2.7888	3.7115	
Fixed O&M Component (Implied)	0.0000	0.0000	0.0000	0.0000	32.7500	32.7500	33.2413	33.2413	33.7399	33.7399	34.2460	
Capital Recovery Component	0.0000	0.0000	0.0000	0.0000	35.7862	35.4834	36.5218	35.9751	37.3782	36.5286	37.9575	
Total Capacity Payment Rate	0.0000	0.0000	0.0000	0.0000								
Escalation of Capital Recovery Rate (if any)						1.50%	0.00%	1.50%	0.00%	1.50%		

ТРОБОЧКА ТАЛМА

БРПНО
 ОПИТНИЦА

AES-3C MARITZA EAST 1

Macroeconomic, Tax and
Depreciation Assumptions

CAPACITY PAYMENT RATES	8	9	10	11	12	13	14	15	16
Period Ending	01.1.2009	01.7.2009	01.1.2010	01.7.2010	01.1.2011	01.7.2011	01.1.2012	01.7.2012	01.1.2013
Capacity Payment Rates (Euro/MMM)									
Fixed O&M Component (Implied)	2,844,8	3,149,4	2,902,0	3,212,7	2,960,3	4,850,4	3,019,8	4,947,9	3,080,5
Capital Recovery Component	34,246,0	34,759,7	34,759,7	35,281,1	35,281,1	35,810,3	35,810,3	36,347,4	36,347,4
Total Capacity Payment Rate	37,090,8	37,909,1	37,661,7	38,493,7	38,241,4	40,660,6	38,830,1	41,295,3	39,428,0
Escalation of Capital Recovery Rate (if any)	0.00%	1.50%	0.00%	1.50%	0.00%	1.50%	0.00%	1.50%	0.00%

TEPROCKA TAVIRIK

AC ↓

B2PH...
OPTIM...
A

AES-3C MARITZA EAST 1

Macroeconomic, Tax and
Depreciation Assumptions

CAPACITY PAYMENT RATES	17	18	19	20	21	22	23	24	25
Period Ending	01.7.2013	01.1.2014	01.7.2014	01.1.2015	01.7.2015	01.1.2016	01.7.2016	01.1.2017	01.7.2017
Capacity Payment Rates (Euro/MWh)									
Fixed O&M Component (Implied)	3.4103	3.1425	3.4789	3.2056	4.2863	3.2701	4.3520	3.3358	3.6929
Capital Recovery Component	36.8926	36.8926	37.4460	37.4460	38.0077	38.0077	38.5778	38.5778	39.1565
Total Capacity Payment Rate	40.3030	40.0351	40.9249	40.6517	42.2740	41.2778	42.9298	41.9136	42.8494
Escalation of Capital Recovery Rate (if any)	1.50%	0.00%	1.50%	0.00%	1.50%	0.00%	1.50%	0.00%	1.50%

TRPOBCKA TAИHA

Ac. U.
AN

BRP
OPTIMANA

AES-3C MARITZA EAST 1

Macroeconomic, Tax and
Depreciation Assumptions

CAPACITY PAYMENT RATES	26	27	28	29	30
Period Ending	01.1.2018	01.7.2018	01.1.2019	01.7.2019	01.1.2020
Capacity Payment Rates (Euro/MWh)					
Fixed O&M Component (implied)	3,4028	3,7671	3,4712	5,6874	3,5410
Capital Recovery Component	39,1565	39,7438	39,7438	40,3400	40,3400
Total Capacity Payment Rate	42,5593	43,5110	43,2151	46,0274	43,8810
Escalation of Capital Recovery Rate (if any)	0,00%	1,50%	0,00%	1,50%	0,00%

TRPIONCKA TAVNIA

Handwritten initials/signature

BPPH
OPMTHMATA

Capital Recovery Component - Breakdown

All monetary values in Euros unless otherwise stated

	SEMI-ANNUAL PERIODS										
	1 07.01.05	2 01.01.06	3 07.01.06	4 01.01.07	5 07.01.07	6 01.01.08	7 07.01.08	8 01.01.09	9 07.01.09	10 01.01.10	11 07.01.10
Capital Recovery Component	72 803 250	81 763 690	69 879 224	84 737 265	65 272 070	86 008 324	66 251 151	87 298 449	80 839 559	88 607 925	82 052 153
Debt Service											
Interest payment	28 478 803	27 398 928	26 310 540	26 217 348	24 117 045	23 009 310	21 893 810	20 770 195	19 638 089	18 497 142	17 346 924
Principal repayment	28 428 847	28 573 697	28 724 778	28 882 804	29 047 942	29 220 511	29 400 845	29 589 295	29 786 224	29 992 016	30 207 068
Total	56 905 650	55 970 484	55 035 319	54 100 153	53 164 987	52 228 821	51 294 655	50 359 489	49 424 323	48 489 157	47 553 992
Taxation											
Central Income tax	-	-	-	-	-	-	-	-	-	-	-
Municipal Income tax	538 494	1 313 827	811 636	1 614 140	691 730	1 790 717	851 860	2 505 754	3 385 397	4 276 401	5 042 776
Withholding tax	538 494	1 313 827	811 636	1 614 140	691 730	1 790 717	851 860	2 505 754	3 385 397	4 276 401	5 042 776
Total	1 076 988	2 627 654	1 623 272	3 228 280	1 383 460	3 581 434	1 703 720	5 011 508	6 770 794	8 552 802	10 085 552
Adjustments for receivables	6 565 956	1 472 942	(1 953 604)	2 442 418	(3 199 758)	3 408 699	(3 247 754)	3 459 830	(1 061 735)	1 276 992	(1 077 661)
Equity Component	8 793 149	23 006 396	15 985 874	26 580 555	14 615 112	28 579 086	17 352 391	25 920 142	23 226 374	27 221 685	25 368 870

TRPOBCKA TAVHHA

Ac. II.

BPPMOG OPTIMATA

Capital Recovery Component - Breakdown

All monetary values in Euros unless otherwise stated

	12	13	14	15	16	17	18	19	20	21	22	23
Period Ending:	01.01.11	07.01.11	01.01.12	07.01.12	01.01.13	07.01.13	01.01.14	07.01.14	01.01.15	07.01.15	01.01.16	07.01.16
Capital Recovery Component	89 937 044	56 272 253	91 286 100	57 116 337	92 555 391	85 800 162	94 045 222	87 087 164	95 455 901	73 528 503	95 987 739	74 631 431
Debt Service												
Interest payment	16 187 029	15 017 021	13 836 445	12 644 825	11 441 655	10 226 446	8 998 624	7 757 632	6 502 878	5 233 743	3 949 579	2 649 711
Principal repayment	30 431 797	30 666 639	30 912 049	31 166 503	31 436 497	31 716 551	32 009 207	32 315 033	32 634 620	32 968 590	33 317 588	33 682 290
Total	46 618 826	45 683 660	44 748 494	43 813 328	42 878 152	41 942 996	41 007 831	40 072 665	39 137 499	38 202 333	37 267 167	36 332 001
Taxation												
Central income tax	6 264 432	1 868 969	6 769 868	2 287 417	7 260 091	6 478 006	7 756 585	6 984 522	8 283 434	5 494 309	9 675 804	9 485 854
Municipal income tax	4 640 320	1 384 421	5 014 717	1 694 383	5 377 845	4 798 523	5 745 619	5 173 720	6 135 877	4 059 859	7 167 262	7 033 986
Withholding tax	1 681 091	529 541	1 757 143	646 102	1 844 557	1 770 470	1 993 989	1 884 904	2 110 976	1 553 035	2 031 495	1 355 926
Total	12 585 843	3 782 931	13 541 728	4 629 902	14 482 493	13 046 998	15 496 193	14 043 146	16 530 287	11 117 202	18 874 561	17 885 746
Adjustments for receivables	1 295 147	(5 533 938)	5 755 701	(5 616 947)	5 842 036	(1 126 887)	1 385 352	(1 143 790)	1 375 683	(3 604 504)	3 839 874	(3 658 571)
Equity Component	29 456 229	12 339 601	27 240 177	14 290 054	29 452 699	31 937 055	36 185 846	34 115 144	38 412 433	27 813 472	36 906 136	24 072 255

TRPPOBCKA TAPMATA

Handwritten signature or initials.

ΕΠΙΧΕΙΡΗΣΙΑΚΗ ΕΠΙΧΕΙΡΗΣΙΑ

**Capital Recovery Component -
Breakdown**

All monetary values in Euros unless
otherwise stated

	24	25	26	27	28	29	30
Period Ending:	01.01.17	07.01.17	01.01.18	07.01.18	01.01.19	07.01.19	01.01.20
Capital Recovery Component	98 341 055	91 065 164	99 816 171	92 431 142	101 313 414	63 390 276	102 833 115
Debt Service							
Interest payment	1 333 430	(0)	(0)	(0)	(0)	(0)	(0)
Principal repayment	34 063 405	-	-	-	-	-	-
Total	35 396 835	(0)	(0)	(0)	(0)	(0)	(0)
Taxation							
Central income tax	12 939 013	12 055 106	13 255 248	12 282 800	13 480 760	8 356 710	13 718 614
Municipal income tax	9 584 454	8 929 708	9 818 702	9 083 555	9 985 748	6 190 155	10 161 936
Withholding tax	3 533 689	3 415 613	3 755 654	3 474 460	3 819 549	2 367 734	3 886 941
Total	26 157 135	24 400 427	26 829 605	24 820 815	27 286 057	16 914 600	27 767 491
Adjustments for receivables	3 897 472	(1 196 037)	1 438 522	(1 213 977)	1 460 099	(6 233 940)	6 483 754
Equity Component	32 889 612	67 860 775	71 548 045	68 824 304	72 567 257	52 709 617	68 581 869

ТЪПЛОДОКА ТАМНА

123

Handwritten signature

БНПНДС
ОПНТМАТНА

Loan Summary: EUROS													
Lender: OPIC													
	0	1	2	3	4	5	6	7	8	9	10	11	12
Beginning Balance	138 888 889	133 101 852	127 314 815	121 527 778	115 740 741	109 953 704	104 166 667	98 379 630	92 592 593	86 805 556	81 018 519	75 231 481	69 444 444
Interest Payment	-	7 291 667	6 987 847	6 684 028	6 380 208	6 076 389	5 772 569	5 468 750	5 164 931	4 861 111	4 557 292	4 253 472	3 949 653
Principal Payment	-	5 787 037	5 787 037	5 787 037	5 787 037	5 787 037	5 787 037	5 787 037	5 787 037	5 787 037	5 787 037	5 787 037	5 787 037
Debt Service	-	13 078 704	12 774 884	12 471 065	12 167 245	11 863 426	11 559 606	11 255 787	10 951 968	10 648 148	10 344 329	10 040 509	9 736 690
Ending Balance	138 888 889	133 101 852	127 314 815	121 527 778	115 740 741	109 953 704	104 166 667	98 379 630	92 592 593	86 805 556	81 018 519	75 231 481	69 444 444

Loan Summary: US DOLLARS													
Lender: OPIC													
	0	1	2	3	4	5	6	7	8	9	10	11	12
Beginning Balance	125 000 000	119 791 667	114 583 333	109 375 000	104 166 667	98 958 333	93 750 000	88 541 667	83 333 333	78 125 000	72 916 667	67 708 333	62 500 000
Interest Payment	-	6 562 500	6 289 063	6 015 625	5 742 188	5 468 750	5 195 313	4 921 875	4 648 438	4 375 000	4 101 563	3 828 125	3 554 688
Principal Payment	-	5 208 333	5 208 333	5 208 333	5 208 333	5 208 333	5 208 333	5 208 333	5 208 333	5 208 333	5 208 333	5 208 333	5 208 333
Debt Service	-	11 770 833	11 497 396	11 223 958	10 950 521	10 677 083	10 403 646	10 130 208	9 856 771	9 583 333	9 309 896	9 036 458	8 763 021
Ending Balance	125 000 000	119 791 667	114 583 333	109 375 000	104 166 667	98 958 333	93 750 000	88 541 667	83 333 333	78 125 000	72 916 667	67 708 333	62 500 000

	01.12002	01.01.05	07.01.05	01.01.06	07.01.06	01.01.07	07.01.07	01.01.08	07.01.08	01.01.09	07.01.09	01.01.10	07.01.10	01.01.11	01.01.11
Weighted average life			0.02083	0.04167	0.06250	0.08333	0.10417	0.12500	0.14583	0.16667	0.18750	0.20833	0.22917	0.25000	
Weighted average loan life			6.25 years												
01.12002	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000

FX translation loss (gain) on principal only
 Debt revaluation
 Cumulative debt reval.

ТРОБОКА ТИМА

BANK OF OPTIMUM

Loan Summary: EUROS		Lender: OPIC	
	0	13	14
Beginning Balance	0	69,444,444	63,657,407
Interest Payment	-	3,645,833	3,342,014
Principal Payment	-	5,787,037	5,787,037
Debt Service	-	9,432,870	9,129,051
Ending Balance	139,888,889	63,657,407	57,870,370
		57,870,370	52,083,333
		52,083,333	46,296,296
		46,296,296	40,509,259
		40,509,259	34,722,222
		34,722,222	28,935,185
		28,935,185	23,148,148
		23,148,148	17,361,111
		17,361,111	11,574,074
		11,574,074	5,787,037
		5,787,037	303,819
		303,819	5,787,037
		5,787,037	6,090,856

Weighted average life	0	13	14	15	16	17	18	19	20	21	22	23	24	
Weighted average loan life	0.1,2002	0.1,0105	0.27093	0.29167	0.31250	0.33333	0.35417	0.37500	0.39583	0.41667	0.43750	0.45833	0.47917	0.50000
	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000

Loan Summary: US DOLLARS		Lender: OPIC	
	0	13	14
Beginning Balance	0	\$ 62,500,000	\$ 57,291,667
Interest Payment	-	3,281,250	3,007,813
Principal Payment	-	5,208,333	5,208,333
Debt Service	-	8,489,583	8,216,146
Ending Balance	\$125,000,000	\$ 57,291,667	\$ 52,083,333
		\$ 52,083,333	\$ 46,875,000
		\$ 46,875,000	\$ 41,666,667
		\$ 41,666,667	\$ 36,458,333
		\$ 36,458,333	\$ 31,250,000
		\$ 31,250,000	\$ 26,041,667
		\$ 26,041,667	\$ 20,833,333
		\$ 20,833,333	\$ 15,625,000
		\$ 15,625,000	\$ 10,416,667
		\$ 10,416,667	\$ 5,208,333
		\$ 5,208,333	\$ 273,438
		\$ 273,438	\$ 5,208,333
		\$ 5,208,333	\$ 5,208,333
		\$ 5,208,333	\$ 5,481,771

FX translation loss (gain) on principal only	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Debt revaluation	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cumulative debt reval.	-	-	-	-	-	-	-	-	-	-	-	-	-	-

ТЪПРОДОЖКА ТАКЪМА

BRIDGE CAPITAL

Handwritten initials/signature

Handwritten initials/signature

Loan Summary
Lender: **KW (ECAS)**

	01.01.05	07.01.05	01.01.06	07.01.06	01.01.07	07.01.07	01.01.08	07.01.08	01.01.09	07.01.09	01.01.10	07.01.10	01.01.11
Beginning Balance	0	466 225 051	446 799 007	427 372 963	407 946 919	388 520 876	369 094 832	349 668 788	330 242 744	310 816 700	291 390 657	271 964 613	252 538 569
Interest Payment	-	15 152 314	14 520 968	13 889 621	13 258 275	12 626 928	11 995 582	11 364 236	10 732 889	10 101 543	9 470 196	8 838 850	8 207 503
Principal Payment	-	19 426 044	19 426 044	19 426 044	19 426 044	19 426 044	19 426 044	19 426 044	19 426 044	19 426 044	19 426 044	19 426 044	19 426 044
Debt Service	-	34 578 358	33 947 012	33 315 665	32 684 319	32 052 972	31 421 626	30 790 279	30 158 933	29 527 587	28 896 240	28 264 894	27 633 547
Ending Balance	466 225 051	446 799 007	427 372 963	407 946 919	388 520 876	369 094 832	349 668 788	330 242 744	310 816 700	291 390 657	271 964 613	252 538 569	233 112 525

TRPOBCKA TAVHA
OPIMIAJTA
BRPHO C

Handwritten signature

Loan Summary
Lender: **KIW (ECAS)**

	01.01.05	07.01.11	01.01.12	07.01.12	01.01.13	07.01.13	01.01.14	07.01.14	01.01.15	07.01.15	01.01.16	07.01.16	01.01.17
Beginning Balance	0	233 112 525	213 686 482	194 260 438	174 834 394	155 408 350	135 982 306	116 556 263	97 130 219	77 704 175	58 278 131	38 852 088	19 426 044
Interest Payment	-	7 576 157	6 944 811	6 313 464	5 682 118	5 050 771	4 419 425	3 788 079	3 156 732	2 525 386	1 894 039	1 262 693	631 346
Principal Payment	-	19 426 044	19 426 044	19 426 044	19 426 044	19 426 044	19 426 044	19 426 044	19 426 044	19 426 044	19 426 044	19 426 044	19 426 044
Debt Service	-	27 002 201	26 370 854	25 739 508	25 108 162	24 476 815	23 845 469	23 214 122	22 582 776	21 951 429	21 320 083	20 688 737	20 057 390
Ending Balance	456 225 051	213 686 482	194 260 438	174 834 394	155 408 350	135 982 306	116 556 263	97 130 219	77 704 175	58 278 131	38 852 088	19 426 044	0

K. J. J.

13

Банк КИВ
ОПНОВА

ТБПРОВОКА ТАМНА

Loan Summary

Lender: EBRD

	0 01.01.05	1 07.01.05	2 01.01.06	3 07.01.06	4 01.01.07	5 07.01.07	6 01.01.08	7 07.01.08	8 01.01.09	9 07.01.09	10 01.01.10	11 07.01.10	12 01.01.11
Beginning Balance	134 062 716	134 062 716	130 846 950	127 486 474	123 974 777	120 305 053	116 470 192	112 462 762	108 274 998	103 898 784	99 325 640	94 546 706	89 552 719
Interest Payment	-	6 032 822	5 888 113	5 738 891	5 578 865	5 413 727	5 241 159	5 060 824	4 872 375	4 675 445	4 469 654	4 254 602	4 029 872
Principal Payment	-	3 215 766	3 380 476	3 511 697	3 669 724	3 834 861	4 007 430	4 187 764	4 376 214	4 573 143	4 778 935	4 993 987	5 218 716
Debt Service	-	9 248 589	9 248 589	9 248 589	9 248 589	9 248 589	9 248 599	9 248 589	9 248 589	9 248 589	9 248 589	9 248 589	9 248 589
Ending Balance	134 062 716	130 846 950	127 486 474	123 974 777	120 305 053	116 470 192	112 462 762	108 274 998	103 898 784	99 325 640	94 546 706	89 552 719	84 334 002

Handwritten marks:
 13
 K. J. G. M.

ТЪРГОВСКА ТАВНА

БРННО С
ОПНОВАТА

Loan Summary
Lender: EBRD

	0	73	14	15	16	17	18	19	20	21	22	23	24
	01.01.05	07.01.11	01.01.12	07.01.12	01.01.13	07.01.13	01.01.14	07.01.14	01.01.15	07.01.15	01.01.16	07.01.16	01.01.17
Beginning Balance	0	84 334 002	78 880 444	73 181 475	67 226 053	61 002 637	54 499 167	47 703 041	40 601 089	33 179 549	25 424 040	17 319 534	8 850 324
Interest Payment	-	3 795 030	3 549 620	3 293 166	3 025 172	2 745 119	2 452 463	2 146 637	1 827 049	1 493 080	1 144 082	779 379	398 265
Principal Payment	-	5 453 589	5 698 989	5 955 422	6 223 416	6 503 470	6 796 126	7 101 952	7 421 540	7 755 509	8 104 507	8 489 210	8 850 324
Debt Service	-	9 248 589	9 248 589	9 248 589	9 248 589	9 248 589	9 248 589	9 248 589	9 248 589	9 248 589	9 248 589	9 248 589	9 248 589
Ending Balance	134 062 716	78 880 444	73 181 475	67 226 053	61 002 637	54 499 167	47 703 041	40 601 089	33 179 549	25 424 040	17 319 534	8 850 324	(0)

Handwritten initials and marks:
 K...
 M

ТЪПЛОБЪРСКА ТАРИФА

БРОЈО С ОПИШНАТА

Debt Schedule

All monetary values in Euros unless otherwise stated

Period Ending	SEMI-ANNUAL PERIODS												
	0	1	2	3	4	5	6	7	8	9	10	11	12
01.01.05	07.01.05	01.07.06	07.01.06	01.01.07	07.01.07	01.01.08	07.01.08	01.01.09	07.01.09	01.01.10	07.01.10	01.01.11	07.01.11
SENIOR DEBT													
Beginning Balance	739 176 656	710 747 809	682 174 252	653 449 474	624 656 659	595 618 727	566 298 217	538 897 371	507 308 077	477 521 853	447 529 837	417 322 769	386 890 972
Interest Due	-	28 476 803	27 396 828	26 310 540	25 217 248	24 117 045	23 009 310	21 893 810	20 770 195	19 638 099	18 497 142	17 346 924	16 187 029
Principal Payment	-	28 428 847	28 573 557	28 124 778	28 882 804	29 041 942	29 220 511	29 400 845	29 589 295	29 786 224	29 982 016	30 207 068	30 431 797
Debt Service	-	56 905 650	55 970 484	55 035 319	54 100 153	53 164 987	52 229 821	51 294 655	50 359 489	49 424 323	48 489 157	47 553 992	46 618 826
Ending Balance	739 176 656	710 747 809	682 174 252	653 449 474	624 656 659	595 618 727	566 298 217	538 897 371	507 308 077	477 521 853	447 529 837	417 322 769	386 890 972
Debt Service Reserve													
Funded from project costs - notional value													
DSR Requirement													
BOF DSR Balance	-	56 905 650	55 970 484	55 035 319	54 100 153	53 164 987	52 229 821	51 294 655	50 359 489	49 424 323	48 489 157	47 553 992	46 618 826
Increase/Decrease in DSR	-	(935 166)	(935 166)	(935 166)	(935 166)	(935 166)	(935 166)	(935 166)	(935 166)	(935 166)	(935 166)	(935 166)	(935 166)
EOP DSR Balance	56 905 650	55 970 484	55 035 319	54 100 153	53 164 987	52 229 821	51 294 655	50 359 489	49 424 323	48 489 157	47 553 992	46 618 826	45 683 660
Interest income on DSR	-	995 849	979 483	963 118	946 753	930 387	914 022	897 656	881 291	864 926	848 560	832 195	815 829
SUBORDINATED DEBT													
Beginning Balance	-	-	-	-	-	-	-	-	-	-	-	-	-
Interest Due	-	-	-	-	-	-	-	-	-	-	-	-	-
Principal Payment	-	-	-	-	-	-	-	-	-	-	-	-	-
Debt Service	-	-	-	-	-	-	-	-	-	-	-	-	-
Ending Balance	-	-	-	-	-	-	-	-	-	-	-	-	-

Handwritten initials/signature

BRAND C OPTIMIZATA

TRPTOBCKA TAVNA

Debt Schedule

All monetary values in Euros unless otherwise stated

Period Ending	13	14	15	16	17	18	19	20	21	22	23	24
SENIOR DEBT	07.07.11	01.07.12	07.07.12	01.07.13	07.07.13	01.07.14	07.07.14	01.07.15	07.07.15	01.07.16	07.07.16	01.07.17
Beginning Balance	386 890 972	356 224 333	325 312 283	294 143 780	262 707 283	230 990 733	198 981 526	166 666 493	134 031 873	101 063 283	67 745 695	34 063 405
Interest Due	15 017 021	13 836 445	12 644 825	11 441 665	10 226 446	9 098 624	7 757 632	6 502 878	5 233 743	3 949 579	2 649 711	1 333 430
Principal Payment	30 663 639	30 912 049	31 168 503	31 436 497	31 716 531	32 008 207	32 315 033	32 634 620	32 968 590	33 317 588	33 662 290	34 063 405
Debt Service	45 683 650	44 748 494	43 813 328	42 878 162	41 942 996	41 007 831	40 072 655	39 137 489	38 202 333	37 267 167	36 332 001	35 396 835
Ending Balance	356 224 333	325 312 283	294 143 780	262 707 283	230 990 733	198 981 526	166 666 493	134 031 873	101 063 283	67 745 695	34 063 405	0
Debt Service Reserve												
Funded from project costs - notional value												
DSR Requirement	45 683 650	44 748 494	43 813 328	42 878 162	41 942 996	41 007 831	40 072 655	39 137 489	38 202 333	37 267 167	36 332 001	35 396 835
BOP DSR Balance	45 683 650	44 748 494	43 813 328	42 878 162	41 942 996	41 007 831	40 072 655	39 137 489	38 202 333	37 267 167	36 332 001	35 396 835
Increase/Decrease in DSR	(935 166)	(935 166)	(935 166)	(935 166)	(935 166)	(935 166)	(935 166)	(935 166)	(935 166)	(935 166)	(935 166)	(335 396 835)
EOP DSR Balance	44 748 494	43 813 328	42 878 162	41 942 996	41 007 831	40 072 655	39 137 489	38 202 333	37 267 167	36 332 001	35 396 835	0
Interest income on DSR	799 464	783 099	766 733	750 368	734 002	717 637	701 272	684 906	668 541	652 175	635 810	619 445
SUBORDINATED DEBT												
Beginning Balance	-	-	-	-	-	-	-	-	-	-	-	-
Interest Due	-	-	-	-	-	-	-	-	-	-	-	-
Principal Payment	-	-	-	-	-	-	-	-	-	-	-	-
Debt Service	-	-	-	-	-	-	-	-	-	-	-	-
Ending Balance	-	-	-	-	-	-	-	-	-	-	-	-

TRPOBCKA TAVHMA

TRPOBCKA TAVHMA

Handwritten signature

Handwritten mark

Capacity & Energy Payment

All monetary values in Euros unless otherwise stated

Period Ending	YEARS - CONSTRUCTION PERIOD							SEMI-ANNUAL PERIODS										
	-3	-2	-1	0	1	2	3	4	5	6	7	1	2	3	4	5	6	7
	01.01.03	01.01.04	01.01.05	07.01.05	01.01.06	07.01.06	01.01.07	07.01.07	01.01.08	07.01.08	01.01.08	07.01.08	01.01.08	07.01.08	01.01.08	07.01.08	01.01.08	07.01.08
O&M Escalation factor (Ley)	1.05	1.05	1.05	1.04	1.04	1.02	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Cumulative O&M Escalation factor (Ley)	1.10	1.15	1.03	1.03	1.03	1.26	1.29	1.31	1.34	1.32	1.32	1.35	1.34	1.35	1.35	1.35	1.35	1.35
Escalation factor for O&M (Euro)	1.03	1.03	1.08	1.10	1.03	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Cumulative O&M escalation (Euro)	1.05	1.08	1.09	1.12	1.13	1.14	1.17	1.18	1.20	1.19	1.19	1.20	1.20	1.21	1.21	1.21	1.21	1.21
Cumulative O&M escalation (80-20 Euro/Ley)	1.06	1.09	1.09	1.12	1.13	1.17	1.19	1.20	1.23	1.22	1.22	1.23	1.23	1.24	1.24	1.24	1.24	1.24
CAPACITY PAYMENT																		
Implied Fixed O&M Fee (Euros/MW-hour)	0.00	0.00	0.00	0.00	0.00	3.04	2.73	2.73	2.79	3.64	2.79	2.79	2.79	3.71	3.71	3.71	3.71	3.71
Availability of Contracted Capacity (MW-hour/half-year)	0	0	0	0	0	2 223 000	2 496 600	2 549 160	2 549 160	1 934 568	2 549 160	2 549 160	1 934 568	2 549 160	1 934 568	2 549 160	1 934 568	2 549 160
Fixed O&M Capacity Payment	-	-	-	-	-	6 749 540	6 824 322	6 996 263	6 968 970	7 038 660	7 109 047	7 180 137	7 038 660	7 180 137	7 180 137	7 180 137	7 180 137	7 180 137
Capital Recovery Fee (Euros/MW-hour)	-	-	-	-	-	32.75	32.75	33.24	33.24	33.74	33.24	33.74	33.74	34.25	34.25	34.25	34.25	34.25
Availability of Contracted Capacity (MW-hour/half-year)	0	0	0	0	0	2 223 000	2 496 600	2 549 160	2 549 160	1 934 568	2 549 160	2 549 160	1 934 568	2 549 160	1 934 568	2 549 160	1 934 568	2 549 160
Capital Recovery Capacity Payment	-	-	-	-	-	72 803 250	81 763 650	84 737 265	84 737 265	65 272 070	86 006 324	86 251 151	65 272 070	86 251 151	66 251 151	66 251 151	66 251 151	66 251 151
Total Capacity Payment	-	-	-	-	-	79 552 790	88 587 972	91 706 235	91 706 235	72 310 730	93 117 370	93 431 289	72 310 730	93 431 289	73 431 289	73 431 289	73 431 289	73 431 289
Total Capacity Fee (Euros/MW-hour)	-	-	-	-	-	35.79	35.48	35.98	35.98	37.38	35.53	35.53	37.38	35.53	37.38	35.53	37.38	35.53

ТЪРГОВСКА ТАРИФА

ДИПЛОМ С ОПИТИАЛНА

Capacity & Energy Payment

All monetary values in Euros unless otherwise stated

Period Ending	8	9	10	11	12	13	14	15	16	17	18	19	20
	01.01.09	07.01.09	01.01.10	07.01.10	01.01.11	07.01.11	01.01.12	07.01.12	01.01.13	07.01.13	01.01.14	07.01.14	01.01.15
O&M Escalation factor (Lev)	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Cumulative O&M Escalation factor (Lev)	1.39	1.38	1.39	1.40	1.42	1.43	1.45	1.46	1.48	1.49	1.51	1.52	1.54
Escalation factor for O&M (Euro)	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Cumulative O&M escalation (Euro)	1.23	1.24	1.25	1.26	1.27	1.28	1.30	1.31	1.33	1.34	1.35	1.37	1.38
Cumulative O&M escalation (80-20 Euro/Lev)	1.25	1.27	1.28	1.29	1.30	1.32	1.33	1.34	1.36	1.37	1.38	1.40	1.41
CAPACITY PAYMENT													
Implied Fixed O&M Fee (Euros/MW-hour)	2.84	3.15	2.90	3.21	2.96	4.85	3.02	4.95	3.08	3.41	3.14	3.48	3.21
Availability of Contracted Capacity (MW-hour/year)	2 549 160	2 325 672	2 549 160	2 325 672	2 549 160	1 571 400	2 549 160	1 571 400	2 549 160	2 325 672	2 549 160	2 325 672	2 549 160
Fixed O&M Capacity Payment	7 251 938	7 324 458	7 397 702	7 471 679	7 546 396	7 621 860	7 698 079	7 775 060	7 852 810	7 931 338	8 010 662	8 090 758	8 171 666
Capital Recovery Fee (Euros/MW-hour)	34.25	34.76	34.76	35.28	35.28	35.81	35.81	35.35	36.36	36.89	36.89	37.45	37.45
Availability of Contracted Capacity (MW-hour/year)	2 549 160	2 325 672	2 549 160	2 325 672	2 549 160	1 571 400	2 549 160	1 571 400	2 549 160	2 325 672	2 549 160	2 325 672	2 549 160
Capital Recovery Capacity Payment	87 298 449	80 839 559	88 607 925	82 052 153	89 937 044	56 272 253	91 286 100	57 116 337	92 655 391	85 800 162	94 045 222	87 087 164	95 455 901
Total Capacity Payment	94 550 387	88 164 017	96 005 628	89 523 832	97 483 441	63 894 114	98 984 179	64 891 397	100 508 202	93 731 500	102 055 874	95 177 922	103 627 566
Total Capacity Fee (Euros/MW-hour)	37.09	37.91	37.66	38.49	38.24	40.66	38.83	41.30	39.43	40.30	40.04	40.92	40.65

ТЪРГОВСКА ТАРИФА

ОПТИМАЛНА

Handwritten signatures and initials.

Capacity & Energy Payment

All monetary values in Euros unless otherwise stated

Period Ending	21	22	23	24	25	26	27	28	29	30
	07.01.15	01.01.16	07.01.16	07.01.17	07.01.17	01.01.18	07.01.18	01.01.19	07.01.19	01.01.20
O&M Escalation factor (Lev)	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Cumulative O&M Escalation factor (Lev)	1.55	1.57	1.58	1.60	1.61	1.63	1.65	1.66	1.68	1.70
Escalation factor for O&M (Euro)	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Cumulative O&M escalation (Euro)	1.39	1.41	1.42	1.44	1.45	1.47	1.48	1.49	1.51	1.52
Cumulative O&M escalation (80-20 Euro/Lev)	1.43	1.44	1.45	1.47	1.48	1.50	1.51	1.53	1.54	1.56
CAPACITY PAYMENT										
Implied Fixed O&M Fee (Euros/MW-hour)	4.27	3.27	4.35	3.34	3.69	3.40	3.77	3.47	5.69	3.54
Availability of Contracted Capacity (MW-hour/half-year)	1 934 568	2 549 160	1 934 568	2 549 160	2 325 672	2 549 160	2 325 672	2 549 160	1 571 400	2 549 160
Fixed O&M Capacity Payment	8 293 392	8 335 916	8 419 275	8 503 468	8 588 503	8 674 398	8 761 132	8 848 743	8 937 231	9 028 603
Capital Recovery Fee (Euros/MW-hour)	38.01	38.01	38.58	38.58	39.16	39.16	39.74	39.74	40.34	40.34
Availability of Contracted Capacity (MW-hour/half-year)	1 934 568	2 549 160	1 934 568	2 549 160	2 325 672	2 549 160	2 325 672	2 549 160	1 571 400	2 549 160
Capital Recovery Capacity Payment	73 528 503	96 887 739	74 631 431	98 341 055	91 065 164	98 816 171	92 431 142	101 313 414	63 390 276	102 833 115
Total Capacity Payment	81 781 886	105 223 655	83 050 706	106 844 523	99 653 667	108 490 539	101 192 274	110 162 157	72 327 507	111 859 718
Total Capacity Fee (Euros/MW-hour)	42.27	41.28	42.93	41.91	42.85	42.56	43.51	43.22	46.03	43.88

ПРОФОРМА

Dr. D. J. M.

БНРО С
ОПТИМА

