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10000/136/451

REF
JAN

10000/136/451

REPORTS, ELECTRICITY IN ITALY
JAN. 1945 - NOV. 1946

HEADQUARTERS ALLIED COMMISSION

APO 794

Communications Division

LHH/jc

T.49.0D

9 November 1946

SUBJECT: Electric Power Shortage.

TO : The Minister
Ministry of Posts and Telecommunications.

1. Allied Military Signal Officers report that information has been received from TSTI of its inability to furnish communications services for the entire daily periods during which electric power service will be restricted under the conservation program scheduled for next week.
2. TSTI reported to the Rome Area Allied Command Signal Officer that it would be able to operate 5 or 6 hours daily when electric power is turned off. It is presumed that similar difficulties exist for the other communication operating agencies and concessionary companies.
3. You are requested to impress upon these agencies and companies the absolute necessity that communication service for Allied Military Forces continue without interruption. It is desirable also that continuous communication service be supplied for all Italian Governmental agencies.

3571

Continuous service can be supplied in several ways.

- a. Requests should be presented to the Electric Power boards for exemption of the telephone services from electric power restriction.
- b. Residential and other non-essential commercial telephone service should be restricted to the extent necessary to insure that batteries and other stand-by facilities will be sufficient to supply essential military and Governmental communications during the periods of electric power curtailment.

c. At many locations there are gasoline driven electric generators that were installed by Allied Military Forces for

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emergency and standby use in case of electric power failure. These generators were operated under military supervision in previous years. However, they have been turned over to Italian agencies under the terms of the agreement whereby the Italian Government has undertaken to purchase the allied military telephone system. These generators should be placed in operation by the telephone operating agencies as required.

5. It is requested that this office be notified of developments.

L.R. Humbert

L.R. HUMBERT
Lt. Col. Sig. C.
Director.

Copies to: Chief Commissioner ✓
Chief Signal Officer
L.E.L.O.
Industry and Utilities SD.

3570



MINISTERO DEI LAVORI PUBBLICI

~~SEZIONE DEL CONSIGLIO SUPERIORE~~~~UFFICIO MOBILITAZIONE ENERGIA ELETTRICA~~COMMISSIONE CENTRALE PER LA DISCIPLINA ED IL
CONTROLLO SULLA DISTRIBUZIONE DELL'ENERGIA E
LETTRICA

Vs. _____

Ns.

ROMA 31/5/1946

Allego alla presente copia delle assegnazioni di energia elettrica per l'Italia Centro Meridionale per il mese di giugno, con preghiera di segnalare se codesto Ufficio desidera che gli venga ancora fatta o meno questa comunicazione per i mesi venturi.

IL PRESIDENTE
(M. Visentini)

3569

Giugno 1946

TAVOLA IV

ITALIA CENTRALE

Dettagli delle ripartizioni di energia tra i singoli centri
di prelievo (Valori riferiti alle Centrali)

ore	6-19 KW x 10 ³	19-22 KW x 10 ³	22-6 KW x 10 ³	KWh x 10 ⁶
<u>TERNI</u>				
Stabilimenti Sociali	33.5	33.5	33.5	21.9
Utenze diretto	5.5	5.5	5.5	4.2
	39.-	39.-	39.-	26.-
<u>FF.SS.</u>	11.-	11.-	11.-	5.-
<u>S.R.E.+A.C.E.A.</u>				
Roma città 45% ACEA 55% SRE	68.-	78.-	36.-	40.-
Roma provincia	2.8	4.-	1.6	1.7
Frosinone	5.1	8.-	2.4	3.1
Viterbo	2.6	4.-	2.-	1.8
Civitavecchia-Latina	11.5	20.-	8.-	7.4
	90.-	110.-	50.-	54.-
<u>U.N.E.S.</u>				
Spoletto	3.8	4.4	4.1	3.1
Perugia & Foligno	5.3	4.1	5.1	3.7
Ancona, Rimini & Costa				
Adriatica Nord	13.9	17.2	8.3	9.1
Aquila & Costa				
Adriatica Sud	5.-	5.4	3.1	3.1
Rieti	1.7	1.9	1.8	1.4
Orvieto	0.8	1.-	0.6	0.6
	30.5	34.-	23.-	21.-
<u>S.E.V.</u>	100.-	80.-	45.-	50.-
<u>S.M.E.</u>	35.5	35.5	45.5	29.-
Per consumo	35.5	35.5	9.2	20.7
Per invaso nei serbatoi Sila	—	—	36.3	8.3

3568

Giugno 1946TAVOLA VIITALIA MERIDIONALE

Disponibilità di energia nelle centrali di produzione

ZONA SERVITA	DISPOSIZIONE DI	CARICO MASSIMO 15 Minuti KW x 10 ³	ENERGIA KWh x 10 ⁶
PUGLIA	LL.PP.	41.2	22.3
U.N.E.S.	LL.PP.	1.5	0.5
NAPOLI	LL.PP.	42.5	23.-
CAMPANIA:			
1) Frattamaggiore	LL.PP.	3.5	1.4
2) Pomigliano	LL.PP.	2.5	1.2
3) Salerno-Torre Castellammare	LL.PP.	21.-	10.5
4) Benevento	LL.PP.	3.-	1.3
5) Calore	LL.PP.	1.-	0.7
6) Santa Maria	LL.PP.	5.-	2.2
7) Maranola	LL.PP.	1.-	0.7
LUCANIA	LL.PP.	4.-	1.9
CALABRIA	LL.PP.	7.-	2.8
FERROVIE: Zona Napoli	M.R.S.	3.-	1.-
Foggia-Benevento	M.R.S.	8.-	2.4
Salerno-Torre	M.R.S.	3.5	1.5
Villa Literno	M.R.S.	1.5	0.4
Salerno-Reggio	M.R.S.	10.-	2.9
<u>SAVUTO</u>	-	3.-	0.9
<u>MONTECATINI</u>	LL.PP.	8.-	5.4
<u>PERTUSOLA</u>	LL.PP.	2.5	1.8
TOTALE IN SOTTOSTAZIONE		172.7	84.8
TOTALE IN CENTRALE		185.-	97.3

3567

Fattore di contemporaneità 90%

Perdite in potenza 16%

Perdite in energia 13%

MAY 28 1946

Maggio 1946

TAVOLA IV

ITALIA CENTRALE

Dettagli delle ripartizioni di energia tra i singoli centri
di prelievo (Valori riferiti alle Centrali)

Ore	6-19 KW x 10 ³	19-22 KW x 10 ³	22-6 KW x 10 ³	KWh ₆ x 10 ⁶
<u>TERNI</u>				
Stabilimenti Sociali	30.7	25.5	34.5	24.3
Utenze dirette	5.5	5.5	5.5	4.1
	36.2	39.-	40.-	28.4
<u>F.F.S.S.</u>	11	11	11	5
<u>S.R.E.+A.C.E.A.</u>				
Roma città { 45% ACEA 55% SRE	64	78	37	40.6
Roma provincia	2.7	4	1.6	1.7
Frosinone	4.8	8	2.4	3.1
Viterbo	2.5	4	2	1.8
Civitavecchia-Latino	11	20	8	7.4
	85.-	110.-	51.-	54.6
<u>U.N.E.S.</u>				
Spoleto	4.2	4.8	4.5	3.4
Perugia & Foligno	5.8	4.5	5.55	4
Ancona, Rimini e Costa				
Adriatica Nord	15.3	18.8	9	10.1
Aquila e Costa Adriatica				
Sud	5.5	5.9	3.4	3.4
Rieti	1.9	2	1.95	1.5
Orvieto	0.8	1	0.6	0.6
	33.5	37.-	25.-	23.-
<u>S.E.V.</u>	100.-	90.-	49.-	52.-
<u>S.M.E.</u>	27.-	27.-	28.-	19.5
Per consumo (1)	27.-	27.-	6.-	17.7

(1) - La rimanenza va inviata nei serbatoi della SILA.-

3568

5/10/46

gcr

Maggio 1946

TAVOLA VI

ITALIA MERIDIONALEDisponibilità di energia nelle centrali di produzione
CARICO

ZONA SERVITA	DISPOSIZIONE DI	MASSIMO 15 minuti KV x 10 ³	ENERGIA KWh x 10 ⁶
<u>PUGLIA</u>	LL.PP.	40.-	22.4
<u>U.N.E.S.</u>	LL.PP.	1.5	0.5
<u>NAPOLI</u>	LL.PP.	42.3	24.9
<u>CAMPANIA:</u>			
1) Fbattamaggiore	LL.PP.	3.5	1.5
2) Pomigliano	LL.PP.	2.5	1.2
3) Salerno - Torre Castellammare	LL.PP.	21.-	11.-
4) Benevento	LL.PP.	3.-	1.-
5) Calore	LL.PP.	1.-	0.7
6) Santa Maria	LL.PP.	5.-	2.3
7) Maranola	LL.PP.	1.-	0.7
<u>LUCANIA</u>	LL.PP.	4.-	2.-
<u>CALABRIA</u>	LL.PP.	7.-	3.2
<u>PT. SS. NAPOLI</u>	M.R.S.	3.-	1.-
Foggia - Benevento	M.R.S.	8.-	2.4
Salerno-Torre	M.R.S.	3.5	1.5
Villa Literno	M.R.S.	1.5	0.4
Salerno-Reggio C.	M.R.S.	10.-	3.-
<u>SAVUTO</u>	LL.PP.	3.-	1.4
Montecatini-Crotone	LL.PP.	8.-	5.5
Pertusola	LL.PP.	2.5	1.8
		171.3	88.8
TOTALE IN CENTRALE		182.5	102.-

Fattore di contemporaneità 90%
 Perdite in potenza 16%
 Perdite in energia 13%

3565

BO 439-SIGB 66
6MAY1015B

RESTRICTED

H/2697
6MAY1200B
ROUTINE

AFHQ LONG LINES LIAISON OFFICE BOLOGNA F C.
DIRECTOR COMMS SUB-COMMISSION A C

RESTRICTED.

1. AT 0200 HRS ON 26/4/46 THE INTERNAL CABLING AT UDINE MC BETWEEN EXTERNAL O/H ROUTES AND THE MDF CAUGHT FIRE. SHORTLY AFTERWARDS SEVERE ARCING AND BURNING OF QUAD CABLES ON THE TERMINAL POLE OF DAF-M/C ROUTE WAS SEEN.
2. 9109 FIRE FIGHTING SECTION WAS CALLED AND QUENCHED FIRE WITHIN THE BUILDING BUT WAS UNABLE TO CONTROL FIRES ON O/H ROUTES DUE TO CONTINUED PRESENCE OF VERY HIGH VOLTAGES.
3. BOTH THE CIVILIAN RAILWAY AND ELECTRICITY COMPANIES WERE CONTACTED BY PHONE AND REQUESTED TO SWITCH OFF HIGH TENSION FOR A SHORT PERIOD TO ALLOW LINEMEN TO CUT CCTS TO LOCALISE FIRES. THEY REPORTED NO EXCESS LOADS ON ANY FEEDERS. THE ELECTRICITY COY SENT A REPRESENTATIVE WHO MADE A CHECK WITH IT MAXFIELD R SIGNALS OF ALL REE CCTS BETWEEN M/C AND DAF HQ AS THIS ROUTE WAS SUSPECTED AS THE CAUSE OF THE INITIAL DAMAGE. NO VISIBLE EVIDENCE COULD BE FOUND.
4. AT 0630 HRS THE HIGH VOLTAGES AND FIRES ON TAIL OF ALL O/H ROUTES CEASED AND LINE PARTIES COMMENCED TO RE-LAY QUAD TAILS FROM TERMINAL POLES TO THE MDF.
5. ³⁵⁰VE 12 ROUTE WAS FOUND TO BE UNDAMAGED AFTER TAILS WERE REPLACED AND ALL CCTS ON THIS ROUTE WERE THROUGH AND WORKING BY 1530 HRS.
6. DAF ROUTE. WHEN THE BURNED TAILS WERE CUT AWAY ONLY 2 QUADS WERE FOUND TO BE THROUGH. OTHER PAIRS WERE BURNED AT RAILWAY CROSSING. NO EVIDENCE WAS FOUND THAT POWER HAD CONTACTED THIS ROUTE.
7. B ROUTE NORTH. PONTIETTA TP SUFFERED BURNED TAILS AND FRAME. LINE PARTY REPORTED CABLE BURNED OUT ON VARIOUS PAIRS AT ARTEGNA. OSPIDALETTO. AND FERARIA BRIDGE. AT TIME OF THIS REPORT PHYSICAL CHECK OF B ROUTE NORTH IS NOT COMPLETED. BUT SO FAR NO EVIDENCE OF

RESTRICTED

SHEET 2

H/2697

RESTRICTED

POWER CONTACTS HAD BEEN FOUND.

8. 0 0 F A ROUTE APPEARS UNDAMAGED AFTER TALLS HAVE BEEN REPLACED 3 FKS ARE NOW WORKING. 8 AIR FORMATION SIGNALS ARE PHYSICALLY CHECKING THIS ROUTE BUT SO FAR HAVE DISCOVERED NOTHING.

9. 88 DIV U S ARMY COTS. THE QUAD LEAD - INS TO M/C WERE BURNED. THESE WERE REPLACED BY US ARMY SIGNAL CORPS WHO LOCATED ADDITIONAL FAULTS DUE TO CARRING IN THE VICINITY OF 15 FIELD HOSPITAL (UDINE). THE USA SIG CORPS HAVE FOUND NO EVIDENCE OF CONTACTS WITH MT POWER.

SUMMARY.... AS THE DAMAGE ON EACH AND EVERY ROUTE WAS SEVEREST IN THE IMMEDIATE CIVINITY OF M/C IT APPEARS THAT THE HIGH TENSION POWER WAS CONTACTED LOCALLY. BUT EXTENSIVE INVESTIGATION AS SHOWN PROVIDES NO INDICATION OF THE POINT OF CONTACT.

3563

AC DIST

ACTN: COMMUNICATIONS
INFO: CHIEF COMMISSIONER
FILE
FLOAT

RESTRICTED

Central It. of
Details of the distribution of
energy between the single
centres of deduction

3562

Utilities Division

APR 12 RECD

Aprile 1946

TAVOLA IV

ITALIA CENTRALE

Dettagli delle ripartizioni di energia tra i singoli centri di prelievo (Valori riferiti alle Centrali)

	ore	6-19 $\times 10^3$	19-22 $\times 10^3$	22-6 $\times 10^3$	R. 1. $\times 10^6$
<u>TERMI</u>					
Stabilimenti Speciali	7.5	7.5	7.5	5.50	
Amminicore	1.7	1.7	1.7	0.20	
Utenti diretti	5.6	5.3	5.5	4.10	
	<u>22.8</u>	<u>22.5</u>	<u>22.7</u>	<u>15.80</u>	
<u>S. E. + M. C. E.</u>					
Romp. città	34.7	77.7	34.5	40.20	
Romp. provincia	3.67	3.80	1.13	1.45	
Frosinone	4.1	7.60	1.73	2.60	
Viterbo	2.45	3.80	1.44	1.59	
Civitavecchia-Latina	10.4	17.80	5.70	8.48	
	<u>84.7</u>	<u>110.7</u>	<u>44.50</u>	<u>52.40</u>	
R.F.S.	11.7	11.7	11.7	4.8	
<u>R. F. C.</u>					
Spoleto	3.17	4.30	3.60	3.05	
Perugia e Foligno	4.49	3.88	4.47	3.50	
A. cona, R. ind. e Costa					
Adriatico Nord	11.90	16.70	7.32	8.7	
A. cona e Costa					
Adriatico Sud	4.73	5.26	2.75	3.05	
Rieti	2.43	1.84	1.58	1.36	
Orvieto	0.58	0.94	0.40	0.54	
	<u>25.20</u>	<u>33.10</u>	<u>20.20</u>	<u>20.50</u>	
R.F.V.	101.7	109.7	41.80	50.7	
<u>TOTALE CENTRALE</u>					
	<u>243.20</u>	<u>265.10</u>	<u>139.50</u>	<u>143.50</u>	

5404/10

(Signature)

APRILE 1946

TAVOLA VI

AS EGNAZIO E DI ENERGETICA - APRILE 1946
ITALIA MERIDIONALE

ZONA SERVITA	SOTTOSTAZIONE DI	CA 150 L.V. I.C.	ENL. GHA
		15 Minuti KVA x 10 ³	KVA x 10 ³
PUGLIA	M.L.P.	41.-	22.5
U.M.B.S.	M.L.P.	1.5	0.5
NAPOLI	M.L.P.	42.5	24.-
CAMPANIA:			
1) Frattocchia	M.L.P.	3.5	1.5
2) Pomigliano	M.L.P.	2.5	1.2
3) Salerno - Torre Castellomare	M.L.P.	21.-	11.-
4) Benevento	M.L.P.	3.-	1.4
5) Calore	M.L.P.	1.-	0.7
6) Santa Maria	M.L.P.	5.-	2.2
7) Marone	M.L.P.	1.-	0.7
LUCANIA	M.L.P.	4.-	1.9
FERROVIE: Zona Napoli	M.L.P.	3.-	1.-
Foggia - Benevento	M.L.P.	8.-	2.3
Salerno - Torre	M.L.P.	3.5	1.4
Villa Eterna	M.L.P.	1.5	0.4
TOTAL 150 KV IN SOTTOSTAZIONE		142.-	72.7
CABLAGGI 60 KV:			
1) Savuto		3.-	1.6
2) Calabro	M.L.P.	6.5	2.-
3) Ferrovie	M.L.P.	10.-	2.9
4) Montecatini	M.L.P.	6.-	4.1
5) Pertusola	M.L.P.	2.5	1.8
TOTAL 60 KV IN SOTTOSTAZIONE		28.-	12.4
TOTAL 150 + 60 KV IN SOTTOSTAZIONE		170.-	85.1
TOTAL IN CONTRA		194.-	97.5

Fattore di contemporaneità = 0.94
 Perdite in potenza = 18%
 Perdite in energia = 15%

Marzo 1946

TAVOLA IV[^]ITALIA CENTRALE

Dettagli delle ripartizioni di energia tra i singoli centri
di prelievo (Valori riferiti alle Centrali)

ore	6-17 KW x 10 ³	17-22 KW x 10 ³	22-6 KW x 10 ³	KWh x 10 ⁶
<u>TERMI</u>				
Stabilimenti Sociali	7.5	7.5	7.5	5.5
Ammoniac	9 -	9 -	4 -	5.4
Utenze dirette	5.5	5.5	5.5	4.1
	<u>22 -</u>	<u>22 -</u>	<u>17 -</u>	<u>15 -</u>
<u>S.R.E. + A.C.E.A.</u>				
Roma Città { 45% ACEA { 55% SRE	56.5	77 -	33.6	39.7
Roma provincia	1.93	2.70	0.95	1.3
Frosinone	3.24	5.27	1.45	2.4
Viterbo	1.76	2.70	1.22	1.42
Civitavecchia e Littoria	7.57	12.33	4.78	5.78
	<u>71 -</u>	<u>103 -</u>	<u>42 -</u>	<u>50.6</u>
	11 -	11 -	9 -	4.2
<u>U.N.E.S.</u>				
Spolet	1.97	3.1	2.40	2.05
Perugia e Foligno	2.70	3.18	3.25	2.64
Ancona Rimini e Costa				
Adriatica Nord	7.93	13.6	5.32	6.50
Aquila Costa Adriatica				
Su3	2.65	4.22	2 -	2.30
Rieti	1 -	1.45	1.15	0.97
Orvieto	6.58	0.94	0.48	0.54
	<u>16.8</u>	<u>26.6</u>	<u>14.6</u>	<u>15 -</u>
	78.1	105.4	43.3	48 -
<u>S.E.V.</u>				
	198.9	268 -	125.9	132.8
<u>TOTALE GENERALE</u>	<u>=====</u>	<u>=====</u>	<u>=====</u>	<u>=====</u>

5406/2

MARZO 1946

TAVOLA VI^

ASSEGNAZIONE DI ENERGIA ELETTRICA - MARZO 1946
ITALIA MERIDIONALE

ZONA SERVITA	RESPONSABILITA' DI	CARICO MASSIMO 15 minuti kW x 103	ENERGIA kWh x 106
PUGLIA	LL.PP.	41 -	22.9
U.N.E.S.	LL.PP.	1.5	0.5
NAPOLI	LL.PP.	42.5	24.9
CAMPANIA :			
1) Frattamaggiore	LL.PP.	3.5	1.6
2) Pomigliano	LL.PP.	2 -	1 -
3) Salerno-Torre			
Castellammare	LL.PP.	21 -	11.4
4) Benevento	LL.PP.	3 -	1.5
5) Salerno	LL.PP.	1 -	0.7
6) Santa Maria	LL.PP.	5.5	2.6
	LL.PP.	4.5	2 -
IRCAPIA			
FERROVIE: Zona Napoli	M.R.S.	3 -	1 -
Foggia-Benevento	M.R.S.	8 -	2.5
Salerno-Torre	M.R.S.	3.5	1.5
Villa Literno	M.R.S.	1.5	0.4
		141.5	74.5
		=====	=====
TOTALE 150 kV IN SOTTOSTAZIONE			
3598			
CALABRIA 60 kV :			
1) Savuto		3 -	2 -
2) Calabria	LL.PP.	7 -	2.25
3) Ferrovie	M.R.S.	10 -	3 -
4) Crotone Montecatini	LL.PP.	6 -	4.25
5) Crotone Pertusa	LL.PP.	2.5	1.65
		28.5	13.35
		=====	=====
TOTALE 60 kV IN SOTTOSTAZIONE			
		170 -	87.85
TOTALE 150 + 60 kV IN SOTTOSTAZIONE			
		194 -	101 -
TOTALE IN CENTRALE			
		=====	=====
Fattore di contemporaneità = 0.94			
Perdite di potenza = 18 %			
Perdite in energia = 13 %			

RE 309

H/774

MAR 161000 Z

MAR 161630

IMPORTANT

O E DISTWO

(1) OM REAR HQ XIII CORPS (2) O DISTWO (3) 67 ORS WKS (4) 179 ORS WKS

INFO: (5) DM SHQ CMF (6) GE DISTHRE (7) ALCON HOME (8) HQ 59 AREA (10) 269 WKS SEC RE (11) 287 WKS SEC RE (12) 307 WKS SEC RE (13) 363 WKS SEC RE

UNCLASSIFIED.

Subject electricity rationing. Following decisions taken at special meeting of north Italy electricity committee 1500 hrs 15 March. Electricity supply in north Italy improved sufficiently to lift all restrictions WEF 16 Mar except as follows. Supply to be suspended on weds thurs and frids to 13rd of dist in turn from 0730 to 1100 and 1330 to 1800. Steam production by electricity forbidden during hrs of daylight. All users not to exceed 87 per cent of Nov figs. Will GE XIII corps arrange with sede to lift restrictions without delay. Will O DISTWO cancel orders on conservancy of energy. Supply of energy from north to centre and south Italy will be maintained and improved shortly. Prof Bottani notifying all prefects of new conditions today.

AC DIST.

ACTION: NOON SEC 4

INFO: CHIEF COMMISSIONER

FILE 2

FLOAT

MAR 1 1946

to. b. m.

Ref: 5404/114/80.

28 February 1946.

SUBJECT: Electric Power.

TO : Hq Commandant.

The Chief Commissioner directs that AFR Direction
AG 675 -0 dated 19 February 1946 be brought to the immediate
and personal attention of all officers, MS/ORs. The electric
power situation is so serious that every endeavour must be made
to conserve light and power. The instructions in the directive
will be rigorously enforced, particularly in hotels and private
living quarters, and disciplinary action will be taken against
offenders.

B. LUSH

Brigadier,
Executive Commissioner.

MSL/JC.

5404/114

3556

FB

Febbraio 1946

ITALIA CENTRALE

TAVOLA IV B

Dettagli delle ripartizioni di energia tra i singoli centri di prelievo (Valori riferiti alle centrali)

	6-17 kw x 10 ³	17-22 kw x 10 ³	22-6 kw x 10 ³	Kwh x 10 ⁶
<u>TERNI</u>				
Stat. sociali	7.5	7.5	7.5	5.2
Immunizza	9	9	9	6.1
Carburo	—	—	—	—
Utenze locali	5.5	5.5	5.5	3.5
	<u>22</u>	<u>22</u>	<u>22</u>	<u>14.8</u>
<u>S.R.E.+A.C.E.A.</u>				
Roma città (45% ACE)	68.2	87	37	41.7
Roma Provincia (55% SRE)	2.47	3.06	0.91	1.35
Frosinone	4.1	5.94	1.38	2.52
Viterbo	2.26	3.06	1.16	1.48
Civitavecchia-Littoria	9.67	13.94	4.55	6.05
	<u>86.70</u>	<u>113</u>	<u>45</u>	<u>53.10</u>
<u>FF. SS</u>	13	13	13	5.2
<u>U.N.E.S.</u>				
Spoleto	2.37	3.6	2.50	1.85
Perugia-Foligno	3.25	3.7	3.38	2.38
Ancona-Rimini-Costa				
Adriatica Nord	9.50	15.8	5.54	5.83
Aquila Costa Adriatica Sud	3.18	4.9	2.08	2.08
Rieti	1.20	1.7	1.20	0.875
Orvieto	0.7	1.1	0.50	0.485
	<u>20.2</u>	<u>30.8</u>	<u>15.2</u>	<u>13.5</u>
<u>S.E.V.</u>	78.1	105.4	43.3	48.4
<u>TOTALE ALLE CENTRALI</u>	<u>220</u>	<u>283.4</u>	<u>138.5</u>	<u>135</u>

5406/10

RRE

Febbraio 1946

TAVOLA IV

ITALIA CENTRALE

Dettagli della ripartizione di energia tra i singoli centri di prelievo. - (valori riferiti alle centrali)

CONDIZIONI DI PRIMA EMERGENZA

	6-17 KV x 10 ³	17-22 KV x 10 ³	22-6 KV x 10 ³	KVH x 10 ⁶
<u>TERNI</u>				
Stabilimenti sociali	7.5	7.5	7.5	5.2
Ammoniaci	9 -	9 -	9 -	6.1
Carburo	---	---	---	---
Utenze locali	5.5	5.5	5.5	3.5
	<u>22 -</u>	<u>22 -</u>	<u>22 -</u>	<u>14.8</u>
<u>S.N.E. e A.C.E.A.</u>				
Roma città e	66.2	87 -	47.3	42.2
{ 5% A.C.E.A.				
{ 55% S.N.E.				
Roma provincia	2.4	3.06	1.16	1.35
Frosinone	4 -	5.94	1.76	2.55
Viterbo	2.2	3.06	1.48	1.5
Givitavecchia - Littoria	9.4	13.94	5.8	6.10
	<u>84.2</u>	<u>113 -</u>	<u>57.5</u>	<u>53.7</u>
<u>FF. SS.</u>				
	13 -	13 -	13 -	5.2
<u>U.N.E.S.</u>				
Spoleto	2.38	3.6	2.50	1.90
Perugia - Foligno	3.27	3.7	3.38	2.45
Ancona-kimini-Costa Adriati-				
ca Nord	9.65	15.8	5.54	6 -
Aquila-Costa Adriatica Sud	3.20	4.9	2.08	2.15
Rieti	1.2	1.7	1.20	0.90
Orvieto	0.7	1.1	0.50	0.50
	<u>20.4</u>	<u>30.8</u>	<u>15.2</u>	<u>13.9</u>
<u>S.E.V.</u>				
Pimobino-Grosseto-Larderello				
Firenze-Livorno-Lucca-Pi-	81.8	94.4	47 -	50.5
stola-Prato-arezz				
TOTALE ALLE CENTRALI	<u>221.4</u>	<u>269.2</u>	<u>154.7</u>	<u>138.1</u>

TAVOLA VI A

Febbraio 1956

ITALIA MERIDIONALE

Particolare delle assegnazioni di energia elettrica ai diversi centri di prelievo-----

ZONA SERVITA		CARICO MAX Kw x 10 ³	ENERGIA Kwh x 10 ⁶
	LL.PP.	42.-	22,5
PUGLIA	"	1.-	0,3
BASILICATA	"	4.-	23.-
NAPOLI			
CAMPANIA:	"	3,5	2.-
1) Frattamaggiore	"	2.-	1.-
2) Pomigliano			11.-
3) Salerno-Torre	"	21,5	1,4
Castellammare	"	3,25	0,7
4) Benevento	"	1,25	2,5
5) Calore	"	5,5	
6) Santa Maria	"	5.-	2,2
LUCANIA			1.-
FERROVIE: Zona Napoli	M.R.S.	3.-	2,7
Foggia-Benevento	"	8.-	1,35
Salerno-Torre	"	3,5	0,45
Villa Literno	"	1,5	
TOTALE 150 KV IN SOTTO-STAZIONE		145,00	72,3
CALABRIA 60 KV:			2,8
1) Savuto	"	4.-	2.-
2) Calabria	"	8,50	2,4
3) Ferrovie	M.R.S.	10.-	5.-
4) Montecatini Crotona	LL.PP.	8.-	
TOTALE 60 KV IN SOTTOSTAZIONE		30,5	12,2
TOTALE 150+60 IN SOTTOSTAZIONE		175,5	84,5
TOTALE IN CENTRALE		200.-	97,5
Fattore di contemporaneità	=	0,94	
Perdite di potenza	=	18%	
Perdite di energia	=	13%	

AICOM
ALLIED FORCE HEADQUARTERS
APO 512

AG 675-0

15 February 1946

FEB 23 1946

SUBJECT: Conservation of Electric Power.

TO : All Concerned.

1. The following publications are hereby rescinded:

a. Letter, this headquarters file AG 675/055 CWB-0 dated 18 October 1945, subject: "Electricity Control".

b. Letter, this headquarters file AG 675/047 'Q' (Joint)-0 dated 17 July 1945, subject: "Conservation of Electric Power".

2. While the electric power situation generally has improved, there is still a serious shortage throughout Italy. In order to conserve the supply of electric power available and to meet the military and essential civilian requirements, it is necessary that a strict watch is kept by both military and civilian authorities over its use. For the purposes of this instruction the country is divided into two portions North and South and the dividing line shall be the Northern boundaries of the Provinces of Lucca, Pistoia, Florence, Arezzo, and Pesaro e Urbino.

3. It will be necessary continually to exchange power between North, Central, and Southern Italy and also between districts and corps within these areas in order that the country's legitimate demands for electric power may be met. This will enable national or local shortages of electric power to be averaged out over the country as a whole.

4. a. The generation, transmission, distribution and allocation of electric power is now the responsibility of the Italian Government Provincial committees have been and are being set up which will present the civil demands in their areas to one of two commissions. These two commissions are the North Italy Inter-Regional Commission which is now being set up in Milan under the presidency of Professor Engineer Ercole Bottani and the Central Commission in Rome under the presidency of Professor L. Visentini (Inspector General of Electricity Water and Gas).

b. The Central Commission is responsible for electric power supply policy in Central and Southern Italy and also ratifies the arrangements made by the Milan Commission over which it has over-riding authority. The Milan Commission deals with all electric power supply policy in North Italy. The addresses of these two commissions are: Rome - Italian Control Commission for the Distribution and Utilization of Electric Power, Ministry of Public Works, Via Montana No. 1 Rome; Milan - Ufficio Idrografico del Po, Via Vincenzo Monti No. 25 Milan. Both these commissions meet monthly, and General Headquarters, each military district, and corps will have technical representation to ensure that military interests are met.

c. All matters concerning the allocation of electric power for military installations will in the first instance be referred to appropriate GE district, corps, or to Po Insular Base Section which will ensure that

3552

Ref: 675-0, dtd 19 Feb 40. (Cont'd)

the demands are reasonable and that the spirit of decrees issued by the Italian Government, and Allied Military Government Regional Orders concerning electricity rationing are honored by military users in so far as is reasonable and compatible with the local situation at the time.

5. South of the boundary referred to in paragraph 2 above, the following steps will be taken by Military consumers to reduce loads on commercial electric systems:

a. LIGHTING.

- (1) Offices - No lights will be burned during daylight hours except in cases where natural lighting is insufficient for proper working conditions. Mixture of lamps will be limited to a minimum requirement, and fixtures will be located for the most economical utilization of light source.
- (2) Halls and Stairways - Lamps in halls, corridors and stairways will be of the smallest wattage commensurate with safety, and a minimum number will be illuminated.
- (3) Hotel Rooms and Private Living Quarters - No more than two (2) lamps per private living room and one (1) lamp per bathroom will be connected. No more than one (1) lamp per private living room will be illuminated at the same time. The lamp bulb will not exceed sixty (60) watt rating. Lighting, when permitted in living tents of military personnel, will be limited to one (1) lamp of sixty (60) watt rating in pyramidal or small wall tent.
- (4) Public Space in Hotels, Cafes, Clubs, and Public Buildings - Wattage will be reduced to a bare essential commensurate with area, use, and occupancy. All electric signs or display lighting will be discontinued.
- (5) Other Military Facilities - Lighting of mess halls, kitchens, work shops, etc will not exceed the following scale:

<u>Type of Accommodation</u>	<u>Watts per sq ft.</u>
Store Room, latrine.	0.2
Mess hall, post exchange, hospital ward, bath house.	0.3
Kitchen, recreation building.	0.5

- (6) Outdoor Areas - Guarded areas, Prisoner of War enclosures, storage areas, streets, etc. will be lighted only in accordance with necessity.
- (7) Lights Not in Use - All lights not being used will be turned off. Signs will be posted conspicuously to make every individual economy-minded in the use of electricity.

b. HEATING AND COOKING.

- (1) Electric heating will be permitted only in essential in-

Ltr, AFHQ, AG 675 -0, dtd 19 Feb 46. (Cont'd)

Industrial processes engaged in production for the military effort and in hospitals for the treatment of patients.

- (2) No electric cooking will be permitted.

c. POWER

- (1) Elevators will be operated by electric power only for movement of hospital patients or for heavy freight.
- (2) Electric motors will not be allowed to idle for extended periods.

6. Departure from these instructions will take place only on the written authority of AFHQ, Headquarters AFUSA, CE 2 District, CE 3 District, CE 13 Corps, or PIS.

7. North of the boundary referred to in paragraph 2 above, similar provisions to those in paragraph 5 will pertain. These general restrictions may be lifted during June to November each year when hydrological conditions are normally more favorable for the generation of electric power. This will be done on AFHQ authority only.

BY COMMAND OF LIEUTENANT COL BRAD MORGAN:

Edmund R. Shucart
EDMUND R. SHUCART
Colonel, AGD
Adjutant General

EXEMPTION:

D

3551

AC

RESTRICTED

see

ROME AREA ALLIED COMMAND
APO 794, US ARMY

FEB 15 1946

AG 463.1

TEP/CBM/eph
14 February 1946

SUBJECT:- Electricity

TO :- See Distribution

1. Reference is made to this HQ's circular subject as above dated 18 Jan 46.
2. It is advised that four hourly interruptions will be made in the supply of power to all users forthwith until further notice.
3. The following information is given in order that Formations Units may be advised the daily timings of these interruptions:
 - a. The City of Rome is supplied with electricity by 2 companies known as SRL and ACEA.
 - b. Users on the SRL will be effected as follows:
 - i. Supply from Tor di Quinto Sub Station will be cut off from 0500 - 1030 hrs daily.
 - ii. Supply from Monte Mario Sub Station will be cut off from 0815 - 1230 hrs daily.
 - iii. Supply from Tiburtina and Torpignetta Sub Station will be cut off from 1000 - 1400 hrs daily.
 - iv. Supply from San Paolo Sub Station will be cut off from 1300 - 1700 hrs daily.
 - c. Users on the ACEA:
 - i. Users on preferential cables will be cut off from 0800 - 1200 hrs daily.
 - ii. Users on non preferential cables will be cut off from 1200 - 1600 hrs daily.
 4. The above timings are the maximum daily periods of interruption and Formations/Units are advised that dependant upon a reasonable fall of rain these periods may be reduced from time to time.
 5. Any interruption of supply other than as stated above will be due to technical failures.

355 (1) be cut off from 1300 - 1700 hrs daily.

5406/22

5400/a

1. Reference is made to this HQ's circular subject as above dated 18 Jan 46.
2. It is advised that four hourly interruptions will be made in the supply of power to all users forthwith until further notice.
3. The following information is given in order that Formations Units may be advised the daily timings of these interruptions:
 - a. The City of Rome is supplied with electricity by 2 companies known as SRE and ACRA.
 - b. Users on the SR will be effected as follows:
 - i. Supply from Tor di Quinto Sub Station will be cut off from 0500 - 1030 hrs daily.
 - ii. Supply from Monte Mario Sub Station will be cut off from 0815 - 1230 hrs daily.
 - iii. Supply from Tiburtina and Torpignattara Sub Station will be cut off from 1000 - 1400 hrs daily.
 - iv. Supply from San Paolo Sub Station will be cut off from 1300 - 1700 hrs daily.
 - c. Users on the ACRA:
 - i. Users on preferential cables will be cut off from 0800 - 1200 hrs daily.
 - ii. Users on non preferential cables will be cut off from 1200 - 1600 hrs daily.
4. The above timings are the maximum daily periods of interruption and Formations/Units are advised that dependant upon a reasonable fall of rain these periods may be reduced from time to time.
5. Any interruption of supply other than as stated above will be due to technical failures.

BY COMMAND OF BRIGADIER GENERAL DASHJR:

DISTRIBUTION
"R"

(US and British)



C.B. MURPHY

Major, AGD

Adjutant General

R E S T R I C T E D

cc

Ref. PMU/214

8. February 1946

My dear Mr. Prime Minister:

With reference to your letters of 5 January 56584/13777/7.1.4 and 29 January 59106/13777/7.1.4, I take this opportunity to express my accord with the steps taken by the Italian Government in order to meet the situation which has developed in North Italy with respect to electric power.

The successful handling of this matter will avert far-reaching adverse economic repercussions which would result from a lack of power for industrial and other essential civilian services.

The staff of Allied Commission will continue to advise and give all assistance possible in connection with this matter.

Please accept my personal appreciation for the energetic manner with which this problem has been approached, especially in the case of your appointment of the Commissioner for control of electric power in North Italy.

Very truly yours,

3549

/s/ Ellery W. Stone

ELLERY W. STONE
Rear Admiral, USNR
Chief Commissioner

Dottor Alcide De Gasperi
President of the Council of Ministers
Italian Government
Rome

52106/cc

cc

Ref. PSU/214

8 February 1946

SUBJECT: Electric Power in North Italy

TO : Supreme Allied Commander
Allied Force Headquarters
(Attn: Asst. Chief of Staff - G-5)

1. The following information is submitted with regard to action taken by the Allied Commission and the Italian Government in order to exercise control over the electric power situation in North Italy where a shortage of electricity exists.

2. A letter was directed to the Prime Minister on 28 December 1945, copy enclosed, calling his attention to the seriousness of the power situation in North Italy and recommending:

- (a) the continuation of existing A.M.C. power rationing and control orders, and
- (b) the establishment of a Regional Commission in North Italy for the control of electric power.

3. On 6 January 1946 the Prime Minister replied to the above letter, copy enclosed, stating that certain action had been taken by the government and that plans were being made to establish a Regional Commission in Milan in accordance with Allied Commission's recommendations.

4. On 17 January 1946 a meeting of the Advisory Committee for Electric Power for North Italy was held in Milan, at which were present, in addition to regular Italian members, the representatives of XII Corps, 2 District, Director of Works, (HQ), and Headquarters, Allied Commission. It was still evident that it was necessary, in order for the Italian Government to exercise proper control of electricity in North Italy and to coordinate the operation of the electric companies, that a Regional Authority be established for this purpose. This matter was further emphasized by conversations between Allied Commission and the Ministry of Public Works.

5. On 25 January 1946 the Council of Ministers passed a decree authorizing the appointment of a temporary Commissioner, under the Ministry of Public Works, for the control of electric power in North Italy as stated in the Prime Minister's letter of 28 January, copy of which is enclosed.

3548

5406/11

2--

6. On 30 January, a well-known electrical engineer in Milan, Prof. Ercolo Bottani, was appointed as the Commissioner and is presently coordinating the enforcement of electric power control measures with representatives of the electric companies and the law enforcing agents of North Italy and at the same time is forming a Committee of Advisors. Prof. Bottani has worked informally with representatives of the electric companies in connection with the rationing and control requirements of electric power in North Italy in the past, and some of the members of his Committee will have had considerable experience in this matter already. Consequently, they are qualified to deal with the problems as they exist today.

7. Representatives of Headquarters, Allied Commission, are meeting with the new Commissioner and his Committee in Milan this week, in order to offer all advice and assistance possible.

8. Acknowledgment of the Italian Government's efforts in dealing with this matter has been forwarded to the Prime Minister today, copy attached.

9. The previous arrangement for the control of electric power was provided through individual Provincial Commissions without any central coordinating authority except Rome. It is believed that the establishment of the Regional Commissioner in Milan will greatly facilitate in coordinating the activities of the Provincial Commissions and will serve as the necessary agent in coordinating the operations of the various electric companies for a more equitable distribution of available electricity.

1st ELLERY W. STONE
ELLERY W. STONE
Rear Admiral, USNR
Chief Commissioner

3544

4 Enclosures -

- 1 - PWU/214 of 29 December 1945
- 2 - Prime Minister's letter of 5 January 1946
- 3 - Prime Minister's letter of 29 January 1946
- 4 - PWU/214 of 8 February 1946

Translation

The President of the Council of Ministers

FEB 1 RECD

59106/13777/7.1.4

Rome, 29 January 1946

My dear Admiral,

I refer to my letter of the 5th inst., n. 56584/13777/7.1.4 and confirm to you in the name of the Government and in my own that action has been taken in relations with the regulations for the distribution of electric power in the provinces of Northern Italy, and also for the carrying out of such regulations as have been issued by A.M.G. on such a matter, also after the return of the said provinces to the Italian administration.

On this matter, I may assure you that in a telegram dated January 10th, the Minister of the Interior informed the Prefects of all the Northern provinces that it was necessary strictly to follow a discipline tending to limit the consumption of electric power. Another cable dated January 24th was sent by the same Minister to the Prefects of Piedmont and Liguria, to point out that the strict and speedy enforcement of the above-mentioned regulations was necessary, to prevent the situation from getting worse, for this would greatly prejudice the industrial production and have unfortunate repercussions on the employment of the working masses.

I also inform you that at the meeting of the Council of Ministers of the 25th inst., considering the necessity to assure the strictest discipline in employing electric power and limiting its consumption, in the Northern provinces, the appointment of a temporary Commissioner with considerable inspection and control powers and whose regulations are liable to disclaimer at the Public Works Ministry, has been approved. The said regulation is being completed.

I remain, my dear Admiral,

Sincerely yours,

S. De Gasperi

Admiral Ellery W. Stone
Chief Commissioner
Allied Commission
Rome

e/c

E.C. DIST - 31 Jan

Action: to Rec (2)

Inf: C.C.

E.C.

INCOMING MESSAGE

HEADQUARTERS ALLIED COMMISSION

JAN 22 REC

Originator's Reference: *FX 58983*Message Centre No: *G/7673*Date/Time of Origin *JAN 191055 A*Date Time Rec'd: *JAN 191600*FROM: *AFHQ*Precedence: *URGENT*TO : *ACTION HQ 61 INF BDE INFO HQ 6 ARMD DIV*

CONFIDENTIAL

CONFIDENTIAL.

Personal for General MORGAN.

*Ref your SAC/1 concerning electricity situation in TURIN.
The matter has been discussed with Admiral STONE in Person.
He has undertaken to sort the problem with proper Italian
authorities. The Admiral was informed that unless satisfactory
arrangements made SACMED would take under advisement the
question of resuming military government in the area. Will
follow up and keep you informed.*

AC DIST

INFO ACTION CHIEF COMMISSIONER
INFO EX COMM
ECON SEC
COMMERCE
INDUSTRY
C.A.SEC
LEGAL
SKELETON
FILE

3545

HEADQUARTERS

22 JAN 1946

INFO - ACTION

CONFIDENTIAL

Noted by AC [signature]

Carlo

Cable received but there has been
a new distribution on it. number
is 76 73.

3544 It will be up shortly.
Destroy old one, when
new one gets here.
Went.

INCOMING MESSAGE
HEADQUARTERS ALLIED COMMISSIONOriginator's Reference: FX 58983Message Centre No: G/7673Date/Time of Origin: 191055ADate Time Rec'd: JAN 19 1600Precedence: URGENTFROM: AFHQTO : ACTION HQ 61 INF BDE INFO: HQ 6 ARM DIV PERSONAL FOR GENERAL
MORGAN

CONFIDENTIAL:

~~CONFIDENTIAL~~

REFERENCE YOUR SAC/1 CONCERNING ELECTRICITY SITUATION IN TURIN. THE MATTER HAS BEEN DISCUSSED WITH ADMIRAL STONE IN PERSON. HE HAS UNDERTAKEN TO SORT THE PROBLEM WITH PROPER ITALIAN AUTHORITIES. THE ADMIRAL WAS INFORMED THAT UNLESS SATISFACTORY ARRANGEMENTS MADE SACMED WOULD TAKE UNDER ADVISEMENT THE QUESTION OF RESUMING MILITARY GOVERNMENT IN THE AREA. ~~REEL~~ WILL FOLLOW UP AND KEEP YOU INFORMED.

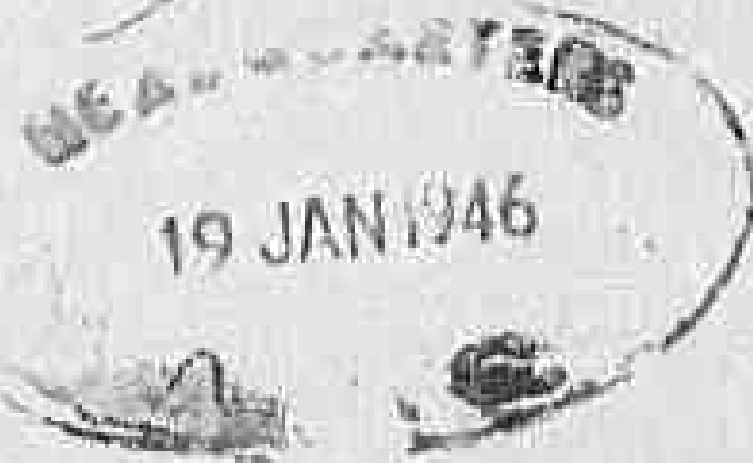
INFO - ACTION

AC DET

INFO/ACTION: CHIEF COMMISSIONER

INFO : EX COMMISSIONER

SKELETON



3543

~~CONFIDENTIAL~~

79
JAN 181010

0/7603
JAN 181300

CE DISTWO DADA (E & M) ATT DISTWO

IMPORTANT

(1) AFIR, INFO: (2) 13 CORPS (3) SACRED (4) CAO GIL CMT (5) CH GIL CMT (6)
05 GIL CMT KX (7) HQ ALCON ROME (8) ALCON MILAN DW GILCMT MORE GIL CMT

UNCLASSIFIED:

Electrical position North Italy now as follows. Meeting of North Italy electrical power advisory Committee held 17 lasting 10 hrs. Following represented Edison, Sip, Sede, Falck, Montecatini, Cieli, AEM Torino, AEM Milano, Alcon, 13 Corps, CE Distwo, DW GILCMT. Main PTS emerging were.

1. Sup position embarrassed by non arrival of coal sups.
 2. Voys sup potential at present rate of demand as follows. Sip 50 days. Sede 65 DAYS Falck 55 days. Montecatini full details not available. AEM Milano 7 days. AEM Torino 36 days. Edison GP with imports 30 days.
 3. Total deficit faced by North Italy or critical period is 485 million KWH. Coal allocation will generate 140 million. Nett deficit 345 million KWH. Following measures proposed to even out individual deficits. Sede will increase exports to Edison from 325,000 to 600,000 KWH day. Falck will increase exports to Edison by 50,000 KWH per day until thermal plants in commission then by 100,000 per day. Sip will increase exports to Edison by 50,000 KWH per day until thermal plants in commission then by 100,000 per day. Hip will increase exports to Edison from 200,000 to 350,000 KWH per day and will give this during peak load periods.
 4. Cooperation between electric sup coys and GPS excellent with the exception of AEM Torino.
 5. All coys embarrassed by attitude adopted by Mayor and Prefect Turin and Gen Lack of official backing in enforcement of regional orders. Most Prefects except Milan reluctant to take a firm line in spite of Italian Cvt instrs.
 6. Sig received 1600 hrs 17 to effect that Prefetto Mayor of Turin have still taken no action to secure compliance with regional orders and have no intention of so doing. Meeting closed. Suggested action required by Italian Cvt.
 1. Failure to enforce regional orders by Prefect should result in disciplinary action by Minister of Interior.
 2. Immediate disciplinary action required against Mayor and Prefect of Turin.
- Alternatively power be vested in CE Distwo to direct transmission of energy as and where required. Must emphasise that unless action is taken on lines indicated electrical situation will deteriorate with ultimate failure of sup for 1 month commencing early March at latest throughout North Italy.

CC DIST

INFO ACTION - INDY & UTIL 2
INFC - CHIEF COMMISSIONER
ECON 2
FILE 2
FLOAT

MIN 21 REG

Ref: 5404/86/EC.

18 January 1946.

SUBJECT: Electric Power in Rome.

TO : Brigadier A. Low, GBE, MC,
Deputy Commander,
HQ, RAAC.

1. Reference memorandum 5404/EC of 10 December 45, addressed to A/Vice President, Economic Section, AG.
2. A copy of his reply is enclosed.

F. H. McCLEARY

Lt. Colonel,
Acting Executive Commissioner.

Incl.

3511

Copy to: A/Vice President,
Economic Section. (Your 214/PWU of 11 Jan. 46 refers)

5406/EC

0011

HEADQUARTERS ALLIED COMMISSION
APO 394
ECONOMIC SECTION

File 214/170

11 January 1946

SUBJECT: Electric Power in Rome.

TO : Executive Coordinator.

1. Ref your 5104/10 dated 10 Dec. 45.

2. The low voltage and low frequency which Rome has been experiencing recently are the result of three conditions which have developed gradually over the past few weeks.

- (a) The prolonged drought, which is the worst that Italy has experienced in the last 20 years, is causing a diminished flow of water in the streams on which the Hydro plants supplying power are situated with a consequent reduction in both energy and capacity output.

For November it was necessary to reduce the power allocations to areas in Central Italy to meet the reduction in generating capacity brought about by diminished output of stream flow electric power plants. Rome's allocation was reduced from 80,000 kw to 65,000 kw in the morning and 75,000 kw in the evening.

This was restored for the month of December to 80,000 kw for both morning and evening on the expectation that the normal rainfall conditions would be realized during that month.

The drought conditions continued up until about the middle of December. In the meantime the load on the Central Italy grid system continued to increase to the point where the generators were being overloaded causing them to operate at a lower speed with a consequent lower frequency and at a lower voltage and very much lower efficiency. Heavy loads on some local distribution circuits also further reduced the voltage to the users of power. To alleviate the situation the power companies arranged, in accordance with instructions from the Ministry of Public Works, for periodic disconnection of large areas for varying periods of time in order to reduce the load on the generators and thereby prevent the frequency and voltage from going any lower. The service being received by the users who had not been disconnected was, even then, far from what would be considered desirable, but it was necessary to maintain some service to many important establishments even if it was of poor quality. Actually, therefore, Rome and other areas of Central Italy were not getting their full allocations.

- (b) The normal seasonal change and shorter days cause an overlap of lighting and industrial loads which result in higher system loads.
- (c) The lack of heating and cooking fuels and the limited artificial gas supply has resulted in abnormal domestic usage for heating and cooking purposes.

3540

- 2 -

3. In anticipation of the conditions outlined in para 2 above A.C. recommended to the Italian Government in letter 10 November 45, Ref. ES/9.09 that immediate steps be taken to set up a rationing program not only in Central Italy but Northern and Southern Italy as well. The Government authorities are working on an effective application of an electric power rationing program and have made considerable improvement since the initial phase of taking over the control of the supply and utilization of electricity. This is just now beginning to get under way and the Electrical Division of Ind. & Util. S.C.A.C. and the Inspectorate Generale for Electricity, Water and Gas of the Ministry of Public Works are collaborating on the matter.
4. The control of electric power, which was formerly handled by A.F.L.R. (I)B, was turned over to Italian Government control in December 1945. It is appreciated that some difficulties would arise in the initial phase of turning over to the Italian authorities, who have given assurance that military and other essential requirements would be given priority and met.
5. With respect to sign lighting and public lighting, specific instructions have already been issued by the Provincial Committee for the Control of Electricity to prohibit the use of such lighting.
6. Other steps which have been taken to get the situation under control are as follows:
- (a) The power companies have been directed by the Italian Government to reduce the use of power by civilians in the areas of Central Italy, outside of Metropolitan Rome, which are more or less uncontrolled.
 - (b) The Ministry of Public Works has been advised to inform the public through the local newspapers, the causes of the present power situation in order to forestall and effect inaccurate rumours.
 - (c) The power companies, through the Italian Government have been advised to reinstitute the system of priority circuits for Rome which were successfully used during the power shortage period after Central Italy was liberated.
7. Central Italy will be short of power for 1946 due to many generating plants not yet being restored to operation on which the area formerly depended for its power. It is expected that there will be more periods of difficulty from power shortages until such time as there is an availability sufficient to meet the demands with a margin for reserve or breakdown. Under present conditions every plant is being operated to maximum capacity - in other words, nothing is being wasted. As a result, when a machine or line fails or must be taken out of service for maintenance or repairs, an equivalent amount of load must be cut off. When a major break-down occurs the equivalent amount of load must stay off until repairs are effected.
- 353 If has been and will be, therefore, simply a matter of making the best use of what is available even if it is poor quality at times. The fact should not be overlooked that the enemy carried out a thorough job of demolition on all power plants in Central Italy and to-day less than 50% of this generating capacity has been restored to service. This, along with a drought condition, has presented problems in electric power that have never existed before in this part of Italy.

(sgd) HARLAN CLEVELAND.
Acting Vice President.

C 13244
JAN 131156 A

G/7311
JAN 131500
IMMEDIATE

AFHQ FROM G-5 FOR EXECUTIVE COMMISSIONER C 12209 OF 9 AND DISTWO R
12 JANUARY .
ALCOM ROME, INFO: DISPER XIII CORPS

UNCLASSIFIED.

Subject is control of electric power in northern ITALY.

1. DISTWO report serious danger breakdown of electric supplies in northern ITALY, unless adequate rationing enforced at once. Situation MILAN will remain most critical unless PIEMONTE begin and enforce rationing to provide 600, 000 KWH daily to other areaspd
2. Request you press Italian government in strongest terms to enforce compliance on civil authorities in PIEMONTE and especially TURIN where rationing reported still not in force. Action required of them is at our C 12209 para 2 and sitwo re 46 para 6.
3. Please treat as urgent and report results this HQ.

5406/cc

3538

AC DIST
ACTION EX COMM 2 INDY UTIL (2)
INFO CHIEF COMMISSIONER
INDY & UTIL 2
FILE 2 EX COMM.
FLOAT ECON SEC.

XXXXXXXXXX RE 46

JAN 120900

0/7236

JAN 121430

IMMEDIATE.

DISTWO DABW E AND M ATT FOR MORE AND DF
 ACTION (1) BW GHQ OMF (2) HQ ALCOM ROME
 INFO: (3) SACRED (4) CAO GHQ OMF (5) G-4 GHQ OMF (6) G-5 GHQ OMF
 (7) XIII CORPS REAS (8) CE XIII CORPS

UNCLASSIFIED.

XXXXXXXXXX Electric position Milan as follows. AEM
 are virtually without water to generate power. This coy supplies
 power for city water and sewage. Instrs given to Edison coy to
 cut load to Genoa and divert power to AEM to safeguard city servi-
 ces. To rectify situation it is essential SIP supply ex Piemonte
 Area about 600,000 KWH per day. They are now supplying only 200,000
 KWH daily and are not rationing properly in Turin Area. Total
 reservoir storage a capacity is falling at alarming rate due to
 non observance of AMG regional orders. Electrical coys must be
 instrd by Italian Govt to disconnect consumers who exceed alloca-
 tions. Delay will result in complete breakdown of electric supply
 in Italy. At present rates of consumption this will be in power
 for expert to XIII corps or cent Italy. ^{There} are 600,000,000 KWH
 in reservoirs today. Weekly demand is KWH 200,000,000 therefore
 only 3 wks supply available at present rates. Meeting held at
 ALCOM Milan 1500 HRS 11 Jan to explore position. Those present
 col Hancock AMG Liaison offr Lombardia. Sindaco Avv Creppi Mayor
 of Milan. Capo Gabinetto Prefettura Avv De Meis. Direttore Com-
 merciale Sec Edison Ing Romagnoli. Assessori Comune Ing Tanzi and CE
 DISTWO SONE E and M DISTWO DABW E and M BW GHQ and Maj Haban

3537

54061cc

(page 2)

1. Mayor and GCP unequivocally undertook to support rigid enforcement of AME orders and authorised Sec Edison to disconnect infringers.
2. GCP agreed names of presidents of prov commissions would be published forthwith.
3. Sec Edison stated 4 reservoirs would be dry in next 20 days and AME 160,000 KW of generating capacity thereby immobilised if economies not effected immediately.
4. 60% power going to industries.
5. Total saving to date only 12% on Nov figures instead of 25 as planned.
6. GCP said local commissions now set up in Brescia and Novara but no names available but to follow. The following action is required urgently by Italian Gvt.

3538 Strict enforcement of rationing in all areas.

2. Direct order to sip to furnish 600,000 KWH daily to Milan coys Edison and ASM.

AC DIST.

ACTION : IND & US SC 2

INFO : CHIEF COMMISSIONER

EX COMM 2

ECON SEC 2

FILE 2

5404
OUTGOING MESSAGE

HQ ALCOM CITE AGEKG

- G-5 A.F.H.O.
 (1) DW GHQ CMF, (2) SACMED, (3) CAO GHQ CMF, (4) G-4 GHQ CMF,
 (5) XIII CORPS REAR, (6) C8 XIII CORPS, (7) INFO CB DISTWO
 (8) ALCOM MILAN MAJOR HASAN
 (9) G-5 GHQ CMF

281

UNCLASSIFIED

SUBJECT IS CONTROL OF ELECTRIC POWER NORTHERN ITALY PD

PARA ONE REFERENCE CABLE CHARLIE ONE THREE TWO FOUR FOUR JANUARY ONE
 THREE ONE ONE FIVE SIX ABLE AND CABLE FROM DADS EASY AND MIKE DISTWO REF
 FOUR SIX DATED JAN ONE TWO ZERO NINE ZERO ZERO AND CABLE FROM AFHQ REF
 GHQ CHARLIE ONE TWO TWO ZERO NINE DATED JAN ZERO NINE ONE NINE ONE FIVE ABLE
 PD

PARA TWO PD MINISTRY PUBLIC WORKS ITALIAN GOVERNMENT CABLED SIP ON JANUARY
 ONE FOUR TO FURNISH AT ONCE SIX HUNDRED THOUSAND KWH DAILY TO EDISON AND
 AEM UTILITIES MILAN PD

PARA THREE PD ON DECEMBER THREE ONE SAME MINISTRY CABLED INSTRUCTIONS TO
 ALL PREFECTS NORTH ITALY DIRECTING THAT STRICT ENFORCEMENT OF ELECTRIC POWER
 RATIONING REGULATIONS BE CARRIED OUT PD

PARA FOUR PD SAME MINISTRY INFORMED OF SITUATION AT TURIN PIEMONTE AND
 GENOVE LIGURIA TODAY WITH URGENT RECOMMENDATION THAT STEPS BE TAKEN TO

3533 INSURE COMPLIANCE WITH RATIONING REGULATIONS

DISTRIBUTION (By hand)

Major Holmes, Executive Commissioner's Office

Priority

Public Works Utilities Dept.

5406/CC

HQ ALCON SITE ACFWU

G-5 A.F.H.Q.

- (1) DM GHO GMP, (2) SACRED, (3) GAO GHO GMP, (4) G-4 GHO GMP,
 (5) XIII CORPS REAR, (6) CR XIII CORPS, (7) INFO CR DISTWO
 (8) ALCON MILAN MAJOR HABAN
 (9) G-5 GHO GMP

201

UNCLASSIFIED

SUBJECT IS CONTROL OF ELECTRIC POWER NORTHERN ITALY PD
 PARA ONE PD REFERENCE CABLE CHARLIE ONE THREE TWO FOUR FOUR JANUARY ONE
 THREE ONE ONE FIVE SIX ABLE AND CABLE FROM DAWN EASY AND MIKE DISTWO REF
 FOUR SIX DATED JAN ONE TWO ZERO NINE ZERO ZERO AND CABLE FROM AFHQ REF
 GHO CHARLIE ONE TWO TWO ZERO NINE DATED JAN ZERO NINE ONE NINE ONE FIVE ABLE
 PD
 PARA TWO PD MINISTRY PUBLIC WORKS ITALIAN GOVERNMENT CABLED SIP ON JANUARY
 ONE FOUR TO FURNISH AT ONCE SIX HUNDRED THOUSAND KWH DAILY TO EDISON AND
 ANM UTILITIES MILAN PD
 PARA THREE PD ON DECEMBER THREE ONE SAME MINISTRY CABLED INSTRUCTIONS TO
 ALL PREFECTS NORTH ITALY DIRECTING THAT STRICT ENFORCEMENT OF ELECTRIC POWER
 RATIONING REGULATIONS BE CARRIED OUT PD
 PARA FOUR PD SAME MINISTRY INFORMED OF SITUATION AT TURIN PIEMONTE AND
 GENOVA LIGURIA TODAY WITH URGENT RECOMMENDATION THAT STEPS BE TAKEN TO
 353* ASSURE COMPLIANCE WITH RATIONING REGULATIONS

DISTRIBUTION (By hand)

Major Holmes, Executive Commissioner's Office

Priority

Public Works Utilities Dept.

5406/cc

206
JAN 14 1830

G/7376
JAN 15 1045A
ROUTINE

DADW E AND M

DW GHQ HQ ALCOM, INFO: 13 CORPS CE II DIST SAC CAO G-5 (GHQ)

UNCLASSIFIED.

At 13 corps for MORE and DW electrical situation as follows. No main feeder cuts been made recently affecting supplies. Power supply situation satisfactory. Dibbiari and PLAVA generating 214.000 and 133.000 KWH daily out of a total of 700.000 KWH required if rationing working properly but generation figures falling in sympathy with stream flow. Given local rain out put of these 2 station sufficient to run all VENEZIA GIULIA and export a little eastwards. Rationing being more strictly enforced here. Economies have amounted to 23 per cent on Nov figures but have now slid back to 9 per cent. HACE meeting with V GIULIOIA electric power advisory committee UNDER CHAIRMAN ship 156 CRE and explained situation in N ITALY. They will cooperate and arrangements made for radio and press appeal for local population to economise. In addition more severe forms if rationing are being explored. Am taking so II E and M 13 corps to MILAN for LIAISON with HABAN and meeting of advisory committee on thursday 17 th at 0930 hours. Staying night 15th at HQ oil GP.

3533

AC DIST
ACTION IND & UTIL 2
INFO CHIEF COMMISSIONER
ECON SEC 2
FILE 2
FLOAT

Translation

The President of the Council of Ministers
36.84/15777/7.14

Rome, 5 January 1946

Dear Admiral,

I refer to your letter n. P.S.U./214, dated December 28th, on the action to be taken for the maintaining of the regulations on the distribution of electric power in force in Northern Italy.

Regarding such a matter, the Minister for Public Works:

1) issued orders some time ago for the publication and enforcement in full of the regional ordinance of A.M.G. for the control and rationing of electric power;

2) took action for the immediate formation in Northern Italy of regional and provincial commissions for the control of the consumption of electric power, and also in relation with previous agreements made with the electricity division of the A.G.;

3) confirmed telegraphically to the prefects of Northern Italy the order for the maintaining on force of the A.M.G. ordinance on such a matter, after the handing over of the said territory to the Italian Government.

Yours sincerely,

S. De Gasperi

Admiral Wilfred G. Stone
Chief of the Allied Commission
Rome

3532

e/c

E.C. DIST - Y Jan. 46

Action: Ec. Acc. (V)

Info: c.c.

E.C.

G 12209

G/7077

091915A

JAN 100845

PRIORITY

AFHQ RE GHQ

HQ ALCOM (PWU ELECT DIVISION) ALCOM MILAN (FOR MAJOR HABAN)

INFO CE DISTWO

UNCLASSIFIED

Subject is control of electric power in north Italy. 1st. Essential immediate and effective action is taken by Italian Government to enforce proper working of electricity rationing scheme in north Italy. In Milan scheme is being rigidly enforced but not in Turin and Genoa. 1 power company in Milan will be without water for power generation in next few days but according to CE 2 DIST mayor of Turin has brought pressure to bear on electricity supply companies to. Transmission of surplus power to Milan. This situation compromises efficiency of military installations, factories water supply railways and all public utilities and must be rectified forthwith. 2nd. Request you draw attention of Italian authorities to need for prompt action to ensure continuity of electricity supply to military and essential services. This should include instructions to power companies to open such main feeder circuits as are required to prevent Turin and Genoa exceeding their permitted demands and such necessary action as to ensure compliance by supply companies. Main transmission lines to 13 Corps will not be interrupted. Contact professor M. Visentini Ministry of Public Works Via Nomentana NO-1 Rome. 3rd. For CE 2 district. Please collaborate with Alcom Milan in helping Italian authorities to put instructions in para (2) above into immediate effect and advise this HQ any difficulty

5406/cc

3531

AC DIST

ACTION: INDUSTRY & UTIL 2

INFO: CHIEF COMMISSIONER

ECON. SEC. 2

FILE 2

FLOAT

PUBLIC WORKS AND UTILITIES DEPARTMENT

AFHQ RM OPR

DECLASSIFIED

9957

SUBJECT IS CONTROL OF ELECTRIC POWER IN ITALY PD
 PARA ONE PD THIS REFERS TO YOUR TELEGRAM CHARLIE FOUR NINE SEVEN
 SIX EIGHT DATED TWO FIVE DECEMBER ONE NINE FIVE PD THIS ALSO
 CONFIRMS TELEPHONE CONVERSATION WITH MAJOR DAVY OF DISCRETE OF
 ROME AND MAJOR LAMBERT OF ELECTRICAL DIVISION ALCON AND ALSO
 CONVERSATION WITH NIS IN ROME PD

PARA TWO PD THE ITALIAN GOVERNMENT IS ESTABLISHING A REGIONAL
COMMISSION IN MILAN SIMILAR TO THOSE ESTABLISHED IN NAPLES AND ROME
 ONE FLORENCE AND WILL BE A PART OF AND RESPONSIBLE TO THE CENTRAL
 COMMISSION FOR THE CONTROL OF ELECTRIC POWER BY THE ITALIAN
 GOVERNMENT LOCATED IN ROME PD

PARA THREE PD THE REGIONAL COMMISSION TO BE ESTABLISHED IN MILAN
 WILL HANDLE ALL MATTERS RELATING TO ELECTRIC POWER IN NORTHERN ITALY
 ONE INCLUDING THE AREA UNDER THIRTEENTH CORPS DASH CONTROL IN WHICH
 ONE CASE THE COMMISSION WILL COORDINATE TO INSURE THE SUPPLY OF ELECTRIC
 POWER TO THAT AREA PD MAJOR HADAM ONE ELECTRICAL OFFICER ALCON HAS
 BEEN INSTRUCTED TO COORDINATE WITH MAJOR OOM ONE THIRTEENTH CORPS

5400/c

3530

9

PAGE TWO

HEAD THIRTEETH AND CHIEF ENGINEER DISTRO TO ENSURE THE SUPPLY OF ELECTRICITY TO ESSENTIAL MILITARY INSTALLATIONS AND AREAS UNDER MILITARY CONTROL PD

PARA FOUR PD THE RATIONING PROGRAM NOW IN EFFECT DOES NOT SEEMING THAT MAIN FEEDERS BE DISCONNECTED AND ANY SUCH MAJOR INTERRUPTIONS ARE BELIEVED TO BE IN ERROR PD MAJOR PARAS WILL COORDINATE WITH THE THIRTEENTH CORPS AND DISTRO IF FURTHER NEGOTIATIONS BECOME NECESSARY PD

PARA FIVE PD IT IS EXPECTED THAT RATIONING IN NORTHERN ITALY WILL BE NECESSARY UNTIL SPRING THAW AND RAINS START SHORTLY IN LATE MARCH OR EARLY APRIL PD

PARA SIX PD INVITATIONS TO ATTEND CENTRAL COMMISSION MEETING CHA ROME CHA TWO NINE DECEMBER BY DIRECTORATE OF WORKS AND CHIEF ENGINEERING DISTRORE HAVE BEEN ISSUED IN SERVICE ONE FIVE ALLIED FORCE ELECTRIC POWER COMMITTEE MEETING CHA TWO FOUR NOVEMBER AND THEIR LETTER ONE FIVE DECEMBER ONE NINE FOUR FIVE FILE LOVE ROSSER XUDAR BLANT TWO ONE FIVE BAKER BLANT TWO NINE SIX AND CONFIRMED BY TELEPHONE INVITATION FROM MAJOR LAUGHLIN PD. THE MILAN

3529

PAGE THREE

REGIONAL COMMISSION OF THE CENTRAL COMMISSION OF THE ~~GENERAL~~
~~COMMISSION~~ FOR NORTHERN ITALY WILL NOTIFY THIRTEENTH CORPS AND CHIEF
ENGINEER DISTRICT OF ALL MEETINGS AND PROCEEDINGS PD IN ADDITION CMA
THEY WILL BE PLACED ON ROLLING LIST AND BE INCLUDED WITH MILITARY
REPRESENTATIVES ON CENTRAL COMMISSION CMA HOME PD
PARK SEVEN PD REFERENCE YOUR PARK SEVEN AND EIGHT CMA SO ADVISE
RECEIVED PD
PARK EIGHT PD MAJOR HAHN^{AM} IS LOCATED IN MONTAGATINI BUILDING MILAN
PD MAILING ADDRESS IS ECONOMIC COMMISSIONER FOR NORTHERN ITALY CMA
MILAN OFFICE PD

3528
DISTRIBUTION
Major Hahn

3528

Public Works and Utilities Department

Q/6557

JAN. 011230

DEC. 31

IMMEDIATE

ECONOMIC COMMISSIONER C/O LOMBARDIA REGION AMG MILAN
 AMG VENEZIA REGION INFO: HQ A C - VICE PRESIDENT ECONOMIC SECTION
 ROME - HQ AMG 13 CORPS

UNCLASSIFIED.

Reference is your cable 31012.

- 1 - Paragraph 4 of letter ref econelec/108/63 does not infer that all thermal electric power terminates at Milan but indicates that thermal electric power is inadequate to fulfill electric deficit.
- 2 - 15-20 percent of thermal electric power for North Italy is or will be generated at Mestre and Porto Marghera in Venezia Region and said power is or will be on the Adriatic grid system.
- 3 - Regional order N. 16 this HQ Art. 9 provides for pooling of all electrical energy.
- 4 - Subject price decree was made in collaboration with Italian Ministry of Rome.
- 5 - Labor and Industry were represented in formulating the price decree on a North Italy scale by CIAI and CGIL.
- 6 - Over-charge rates will be adjusted if price of fuel improves.
- 7 - Costs of operation of steam plants was calculated jointly by the electrical engineer this HQ, by the representative of the Italian Ministry from Rome by all power companies concerned said figures were checked by the price fixing committee of North Italy and by the North Italy industrial committee.

3527

AC DIST
 INFO ACTION : ECON SEC 2
 INFO : CHIEF COMMISSIONER
 FILE 2
 FLOAT

CHIEF COMM

O 49768
241859A6213
6213DEC 25 1960
IMMEDIATE

ATTN: MR. GRC

ALCON ELECT. DIV: PW & U S/C

UNCLASSIFIED

CONTROL OF ELECTRIC POWER IN ITALY IS SUBJECT. THIS CONFIRMS TELEPHONED MESSAGE FOR COL. PARKER THIS MORNING.

1. HOW DO ITALIAN GOVERNMENT PROPOSE TO CONTROL ELECTRICITY IN NORTH ITALY WHEN THIS REVERTS TO THEIR CONTROL IN IMMEDIATE FUTURE.
2. WILL THEY EXTEND FUNCTION OF CENTRAL COMMISSION AND APPOINT LOCAL COMMISSIONS AS IN CENTRAL AND SOUTHERN ZONES. IF SO WHERE WILL THEY BE SITUATED PARTICULARLY THE COMMISSION THAT WOULD CONTROL EAST 13 CORPS AREA LESS UMBRIA AND VENETIA WHICH UNDERSTOOD WILL NOT BE HANDLED BACK YET.
3. ASSURANCE IS REQUESTED THAT NO MAINTENANCE WORK WILL BE MADE AFFECTING 13 CORPS AREA WITHOUT EARLY AND TIMELY WARNING TO 13 CORPS HEAD AND THIS HQ.
4. HOW LONG IS THIS RATIONING GOING TO BE NECESSARY IN NORTH ITALY.
5. INVITATIONS NOT YET RECEIVED TO ATTEND CENTRAL COMMISSION MEETING IN ROME 29 BY BR OR CE 3. 1ST DIST DEPS WILL ATTEND. UNDERSTOOD AT LAST MEETING YOU WOULD ADVISE ALL CONCERNED. 6. CE 2 DIST AND CE 13 CORPS HEADS ARE REQUESTED ON CENTRAL COMMISSION WHEN ITALIAN GOVERNMENT TAKE OVER IN THEIR AREAS. 7. IF YOU ARE UNABLE TO ANSWER MAY ABOVE POINTS BE PUT ON AGENDA FOR THE MEETING PLEASE. 8. INFORMATION REQ. NEEDED MOST URGENTLY IN ORDER THAT 13 CORPS COMBAT CAN BE ADVISED SITUATION.

3526

AC DIST

5406/cc

AG DISSEMINATION

ACTION : IND & C B/C (2)

INFO : CHIEF COMMISSIONER

ROOM SEC (2)

FILE (2)

PLCAT

HEADQUARTERS

26 DEC 1965

3525

[Handwritten signature]

Ref. PWU/214

18 December 1945

My dear Mr. Prime Minister:

Due to the abnormal heavy load demands for electric power in North Italy it has become necessary to publish and place into effect Allied Military Government curtailment and rationing measures, in territory under A.M.G. Control. In order that power conservation measures be uniform throughout North Italy, on 17 December 1945, a copy of the Allied Military Government Regional Orders for rationing and control of electric power was furnished the Minister of Public Works for publishing and placing into effect as a Ministerial Decree in Emilia Region.

In view of the early termination of Allied Military Government control of certain territory in North Italy, and in order that A.M.G. electric power control orders established as emergency measures remain in effect, I recommend that your Government be prepared to put into operation immediately a Ministerial Decree incorporating the general provisions of the existing A.M.G. Orders upon assumption of control of the above territory.

It is further recommended that an electric power Regional Commission similar to the one in Naples, Rome and Florence be established in Milan for coordinating the activities of the Provincial Commissions for distribution and utilization of electric power and to facilitate the operation of the Central Commission established in Rome in accordance with authority contained in Decree No. 95 dated 3 April 1944.

MILNEY W. STONE
Rear Admiral, USNR
Chief Commissioner.

Doctor Alcide De Gasperi
President of the Council of Ministers
Italian Government
Rome.

352

5406/10

29/VG/50
DEC. 171630A

G/5775
181015 DEC.

HAYWARD AMG 13 CORPS
INFO HQ ALCON CITE AC CMN

ROUTINE

UNCLASSIFIED.

Power rationing here 2 hours daily causing little inconvenience at present. Stand by state charging plant adequate for telephone service. Telve can cope no stand by plant but corps obtaining something.

AC DIST

ACTION : COMMUNICATIONS SC
INFO : CHIEF COMMISSIONER
IND & US SC
ECON SEC 2
FILE 2
FLOAT

5400/cc

3523

DEC 11 1945

Ref: 5404/EC.

10 December 1945.

SUBJECT: Electric Power in Rome.

TO : A/Vice President,
Economic Section.

1. The Deputy Commander, Rome Area Allied Command has brought to my attention the very serious view which the Commanding General, RAAC, takes of the electric light and power situation in Rome. He stated that to his knowledge more than twice the amount of power was available and yet the current arriving at the terminals was lamentably weak with the result that delicate machines such as teletypes were suffering. He asked whether the Italian authorities could not be persuaded to exercise more control over extravagant use by civilians - neon signs, shop windows, etc., in order that all could have available to them sufficient power for essential needs.

2. I think there is a great deal in what Brigadier Low said and should be grateful if the Roman authorities could be persuaded to tackle this matter with vigour. The power is available and if not squandered, could be shared equally and adequately by all.

M. S. LUSH

MSL/JG.

Brigadier,
Executive Commissioner.

3522

Copy to: Brigadier A. Low, MC,
Deputy Commander,
RAAC.

KEEP FILED
IN CASE NEEDED
BY C L C

Q

VOLUME TIGHTLY BOUND -
BEST COPY POSSIBLE

THE ELECTRICITY FAMINE
IN CENTRAL ITALY

PUBLIC WORKS AND UTILITIES SUBCOMMISSION

HEADQUARTERS
ALLIED CONTROL COMMISSION

12521

THE ELECTRICITY FAMINE
IN CENTRAL ITALY

PUBLIC WORKS AND UTILITIES SUBCOMMISSION

HEADQUARTERS
ALLIED CONTROL COMMISSION

17521

5406/cc

THE ELECTRICITY FAMINE IN CENTRAL ITALY

The Italian hydroelectric generating scheme was the country's most important natural resource. The entire economic structure of Italy has been built around the availability of electricity. To-day there exists a very serious electricity famine in Central Italy. It began at the time of the Allied occupation and is the result of deliberate destruction of all important electric power facilities by the retreating German armies. By these acts, the enemy has reduced the availability of electricity to a point far below the minimum military and essential civilian needs, and has almost completely retarded Italian reconstruction. 7

This report graphically shows both the cause of the famine and the present meagre, but necessary, electricity requirements. These requirements cannot be satisfied by the small and obsolete electric plants contemptuously spared by the enemy.

In this report nothing has been included for the rehabilitation of electric power needed to operate the large system of electrified railways. These will have to continue to import coal for their operation until other provisions can be made.

No provision is made to overcome any breakdown by violence or otherwise of the electric power supply in Southern Italy, fed as it is from one large hydroelectric power development in the South. Any disruption of this power supply would have the most serious consequences.

Hidden within the graphs of the next few pages are many instances resulting from the electricity shortage. They involve men, restless and unemployed; essential factories that cannot start because there is no power, homes containing unflushed toilets because there is insufficient electricity to pump water. There are plants which are unable to operate at full capacity because electric traction lines do not run, and some men have no other way of going to work in a land where shoes, tires and gasoline are almost non-existent. As for the future, the graphs carry the dark warning that people may starve because there will be insufficient electricity to grind the wheat into flour and to bake the flour into bread.

The present minimum essential electricity requirements represent the energy needed to permit civilian life to continue without starvation and pestilence, and that

needed to reduce Italian dependence upon other nations, still strained in waging war.

Engineers of the Allied Armies, and the Italian electric companies are doing everything possible to increase electricity production through utilizing local resources. Their plans and acts include the repair of plants, the use of parts from badly damaged machinery, the transfer of equipment to points of better utilization, and the completion of projects begun in earlier days.

A serious deficit of generating capacity will exist even after the engineers have done their work. Consequently, it is necessary that additional equipment be brought into Central Italy without delay. This equipment should be of large capacity, mobile, and already manufactured.

power

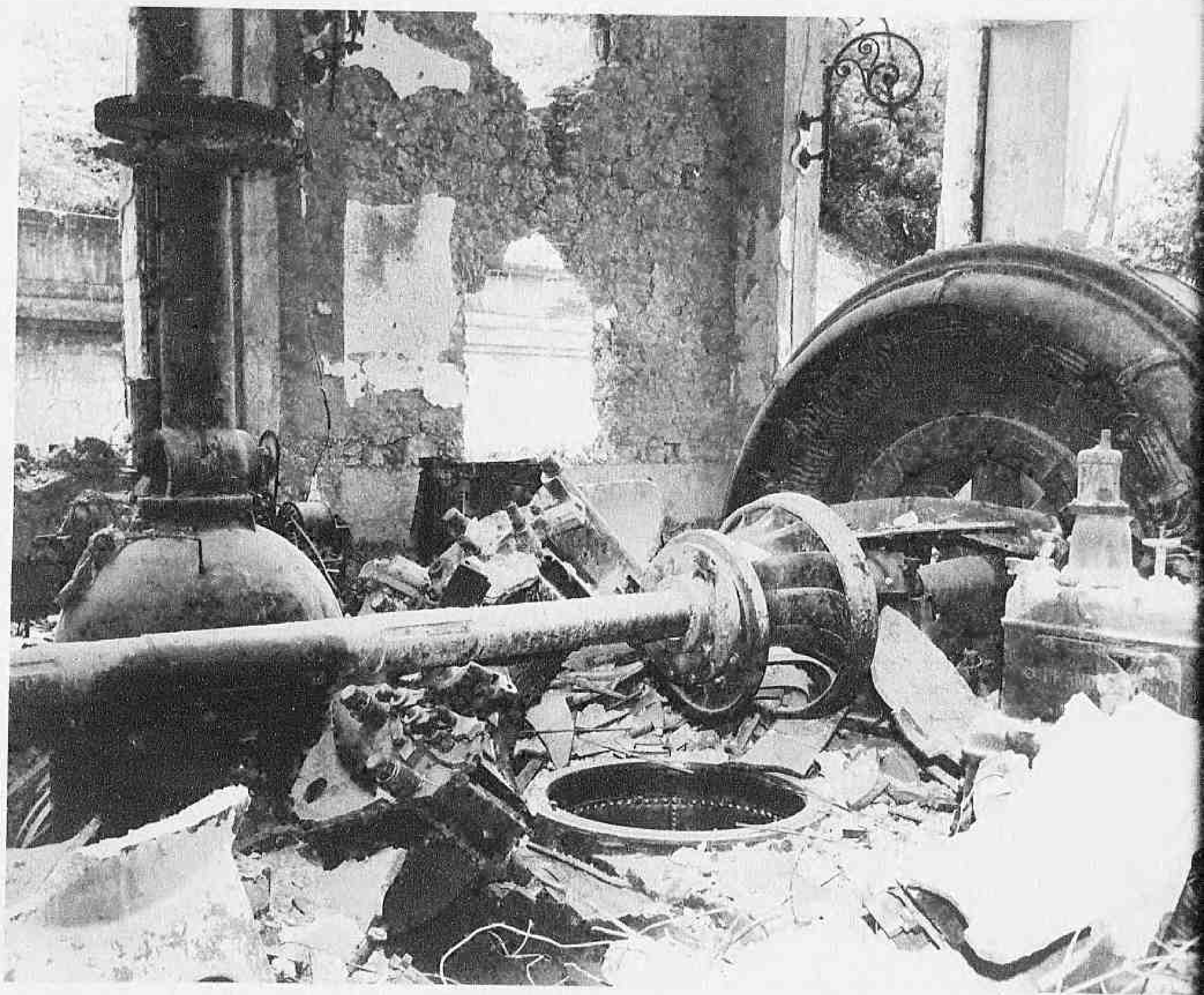
It is understood that four floating steam/plants, each of 30,000 KW capacity were built in America during 1943. These units are self-contained and efficient, and are capable of being towed over water, and moored near the shore for connection to electric transmission lines.

In view of the serious position created by the Central Italian electricity shortage, it is urgently recommended that all necessary action be taken to bring two 30,000 KW floating power plants from America to Central Italy without delay.

L.A. Jenny
L.A. JENNY,
Lt-Colonel, C.E.,
Director.

0269

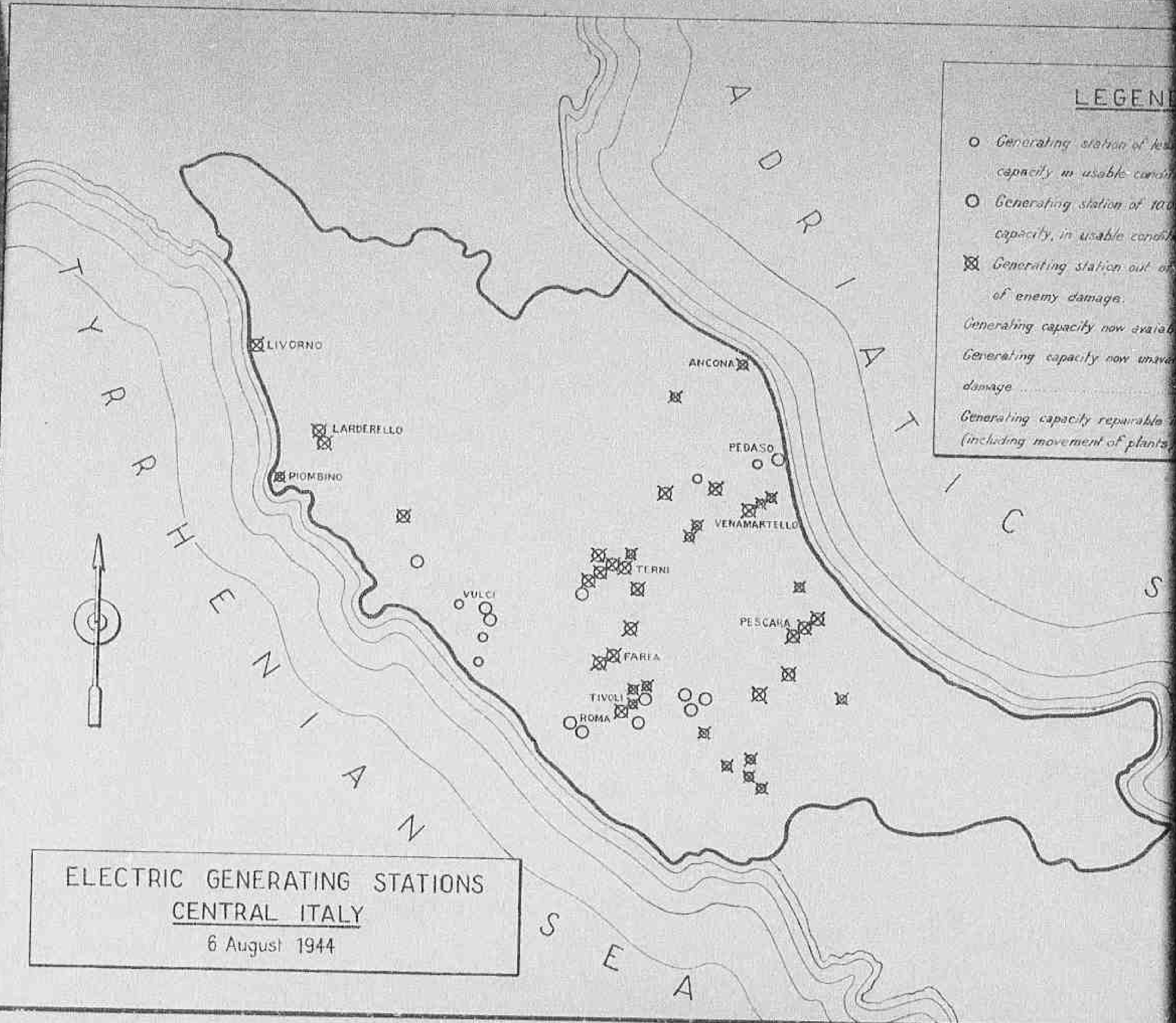
Declassified E.O. 12356 Section 3.3/NND No. 785013



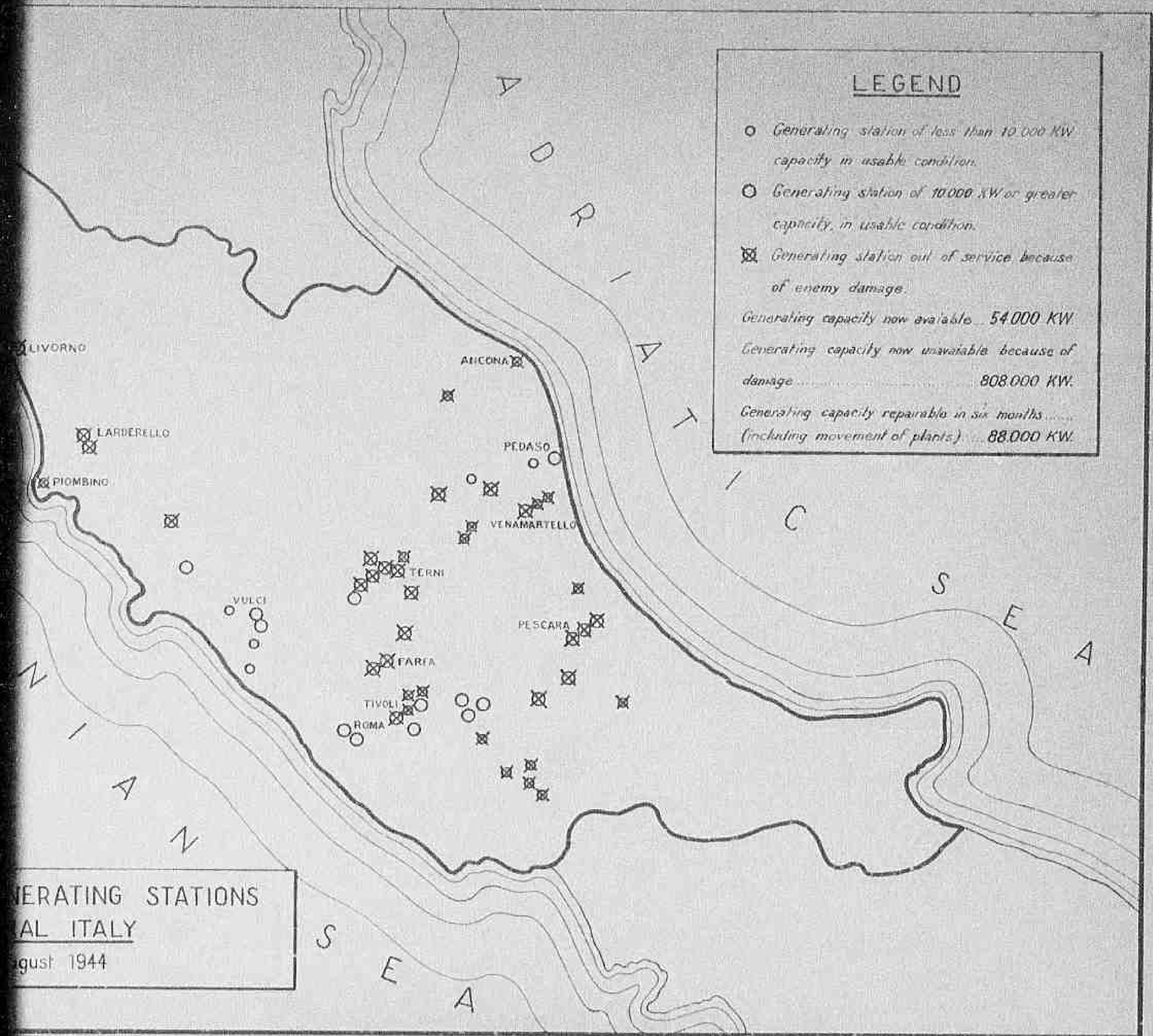
THE CAUSE OF THE ELECTRICITY SHORTAGE

Remains of 3750 KVA Turbine-generator unit.—Mandela Generating Station
Typical example of intentional enemy destruction during his retreat through Central Italy

02701

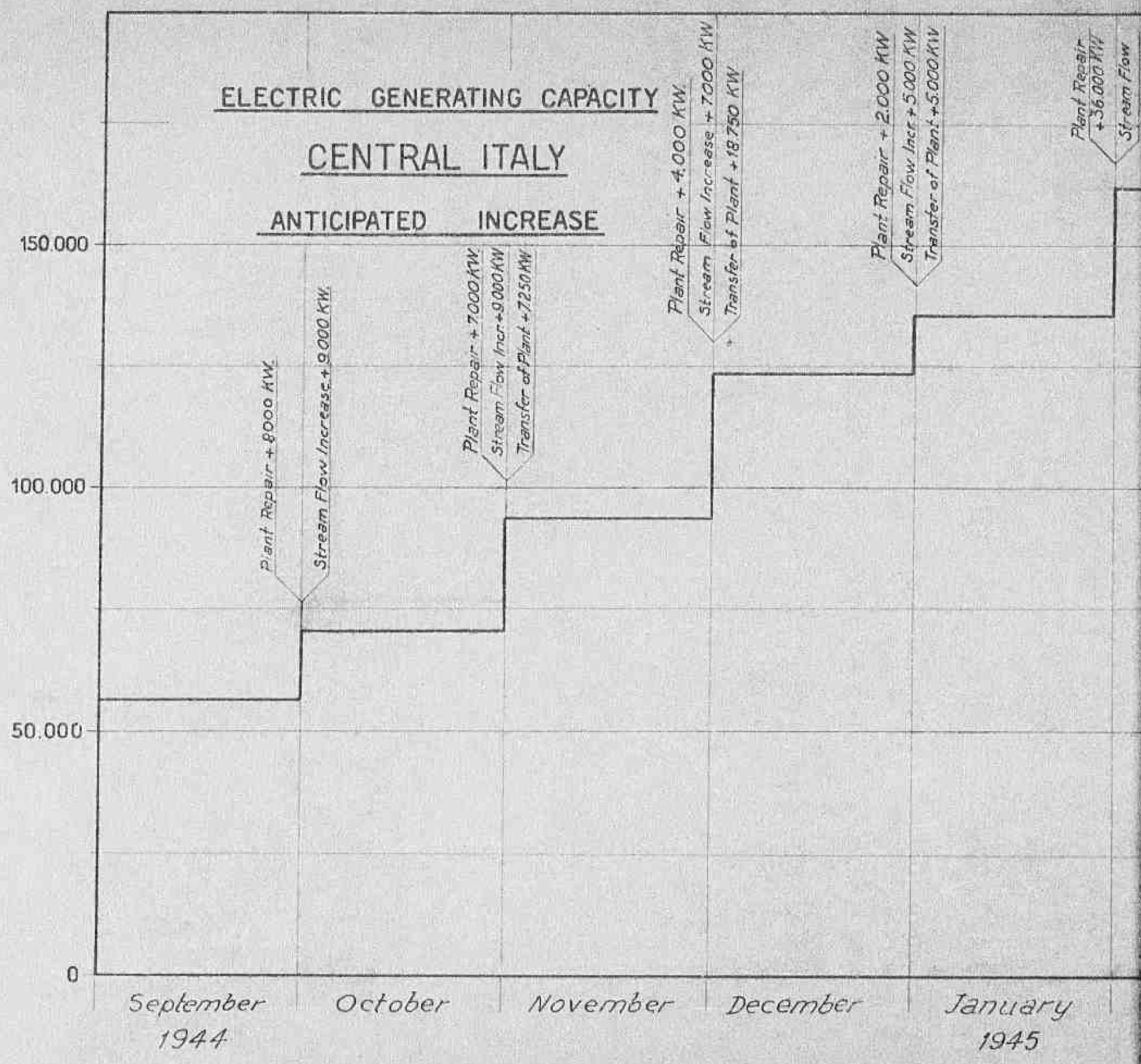


0271



0272

GENERATING CAPACITY - KILOWATTS

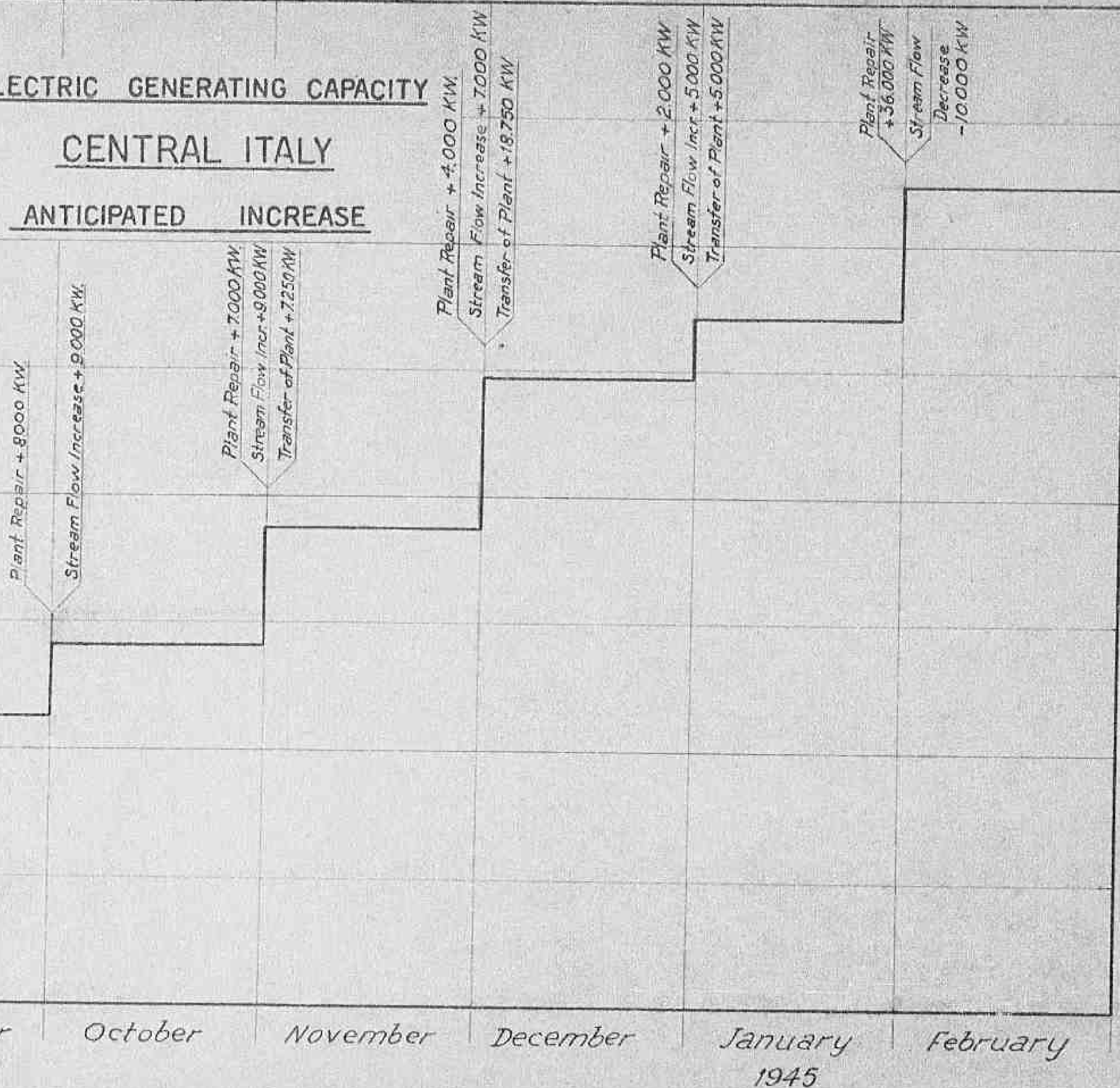


0273

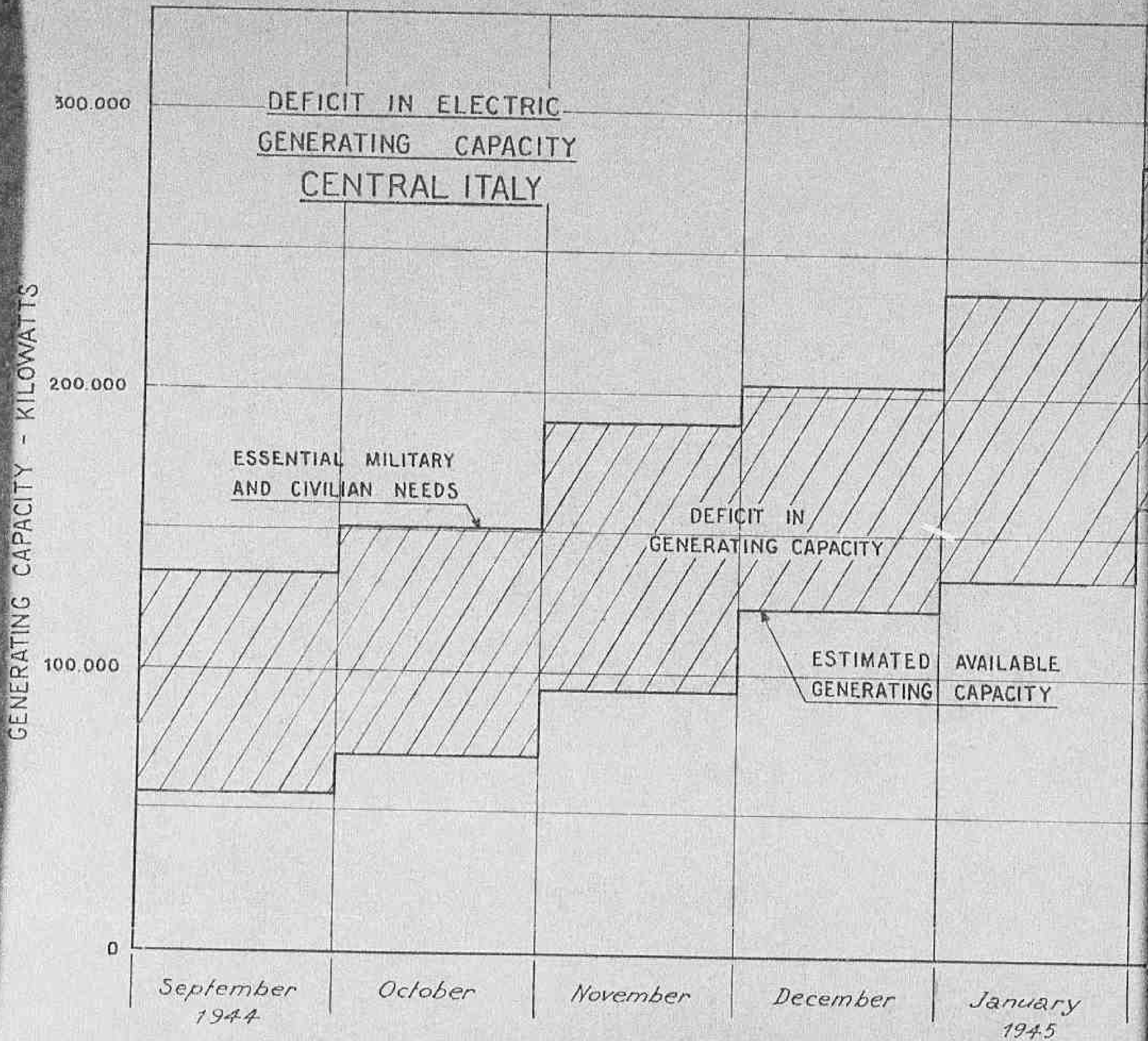
ELECTRIC GENERATING CAPACITY

CENTRAL ITALY

ANTICIPATED INCREASE



0274



Declassified E.O. 12356 Section 3.3/NND No. 785015

DEFICIT IN ELECTRIC
GENERATING CAPACITY
CENTRAL ITALY

ESSENTIAL MILITARY
AND CIVILIAN NEEDS

[illegible]

ESTIMATED GENERATING	AVAILABLE CAPACITY
-------------------------	-----------------------

September 1944	October	November	December	January 1945	February
-------------------	---------	----------	----------	-----------------	----------

1500000000 KWH

1400

1300

1200

1100

1000

900

800

700

600

500

400

300

200

100

ELECTRIC ENERGY AVAILABLE

CENTRAL ITALY

1 SEPT. 1944 - 28 FEB. 1945

COMPARED WITH PRESENT

AND 1939 REQUIREMENTS

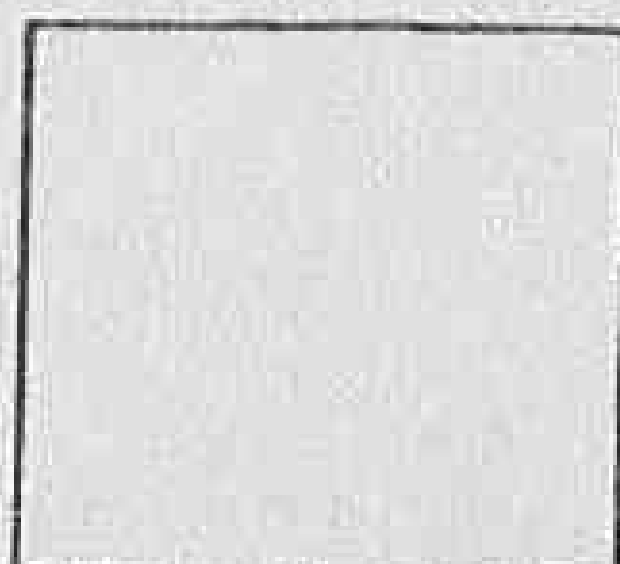
1939 REQUIREMENTS

Various
Agriculture
Public institutions
Mines
Public lighting
Paper
Textile-Silk-Cotton-Flax
Food
Public and private appliances
Electrometallurgie
Building
Chemical
Private lighting
Metallurgical
Electrochemical
Traction

PRESENT REQUIREMENTS

Military
Public institution
Food
Lighting(including military)
Industry
Traction

AVAILABLE



ELECTRIC ENERGY
AVAILABLE
1 SEPT. 1944 - 28 FEB. 1945

MINIMUM ESSENTIAL
ELECTRIC ENERGY
REQUIREMENTS
1 SEPT. 1944 - 28 FEB. 1945

ELECTRICITY CONSUMPTION
CENTRAL ITALY

0277

ELECTRIC ENERGY AVAILABLE

CENTRAL ITALY

1 SEPT. 1944 - 28 FEB. 1945

COMPARED WITH PRESENT

AND 1939 REQUIREMENTS

1939
REQUIREMENTS

1500'000'000 KWH

Various	1400
Agriculture	1300
Public institutions	
Mines	1200
Public lighting	
Paper	1100
Textile-Silk-Cotton-Flax	
Food	1000
Public and private appliances	
Electrometallurgie	900
Building	800
Chemical	700
Private lighting	600
Metallurgical	500
Electrochemical	400
Traction	300

PRESENT
REQUIREMENTS

Military
Public institution
Food
Lighting (including military)
Industry

MINIMUM ESSENTIAL
ELECTRIC ENERGY
REQUIREMENTS

1 SEPT. 1944 - 28 FEB. 1945

ELECTRICITY CONSUMPTION
CENTRAL ITALY
ONE HALF OF 1939

1400
1300
1200
1100
1000
900
800
700
600
500
400
300
200
100

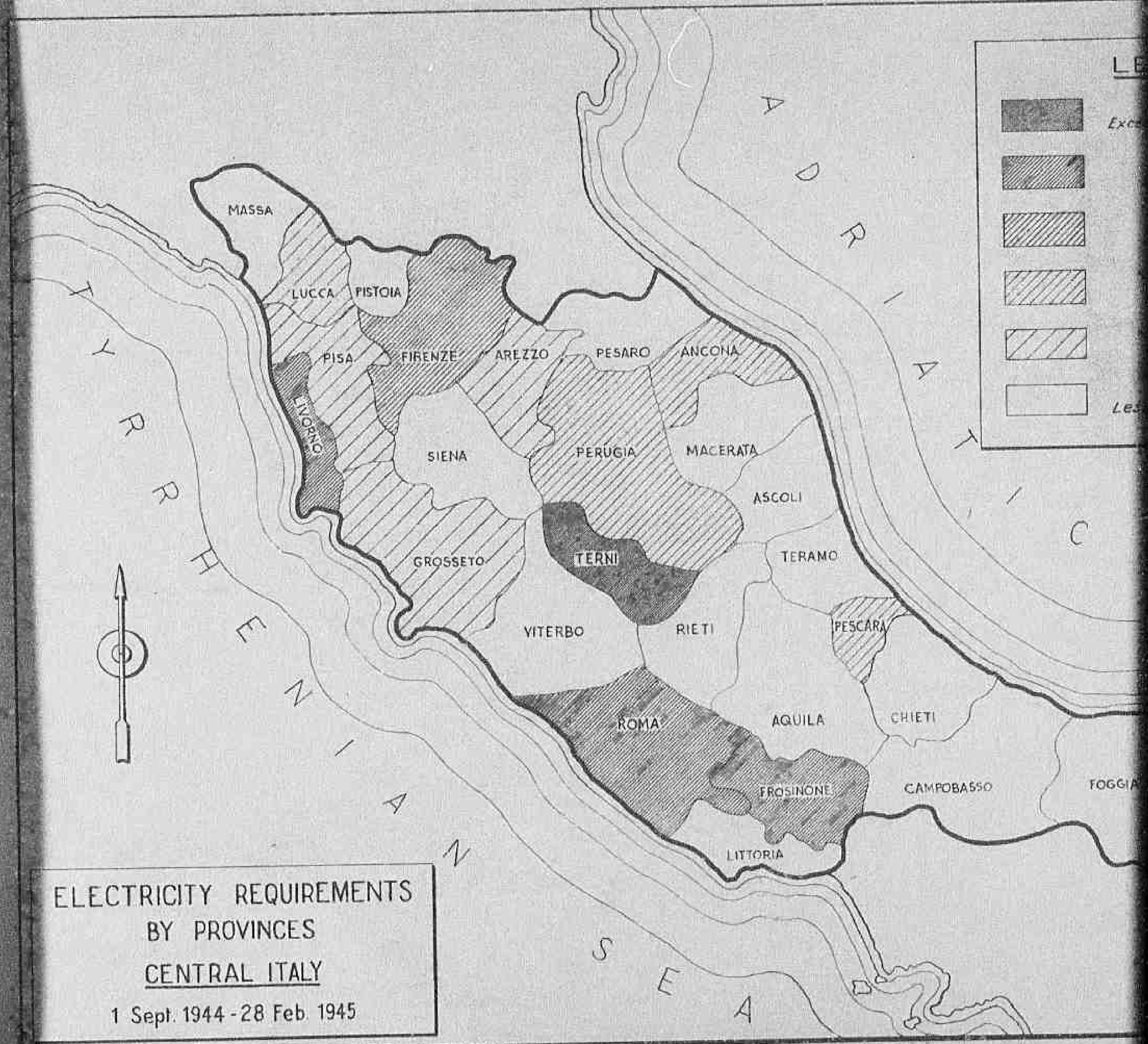
Agriculture

Traction

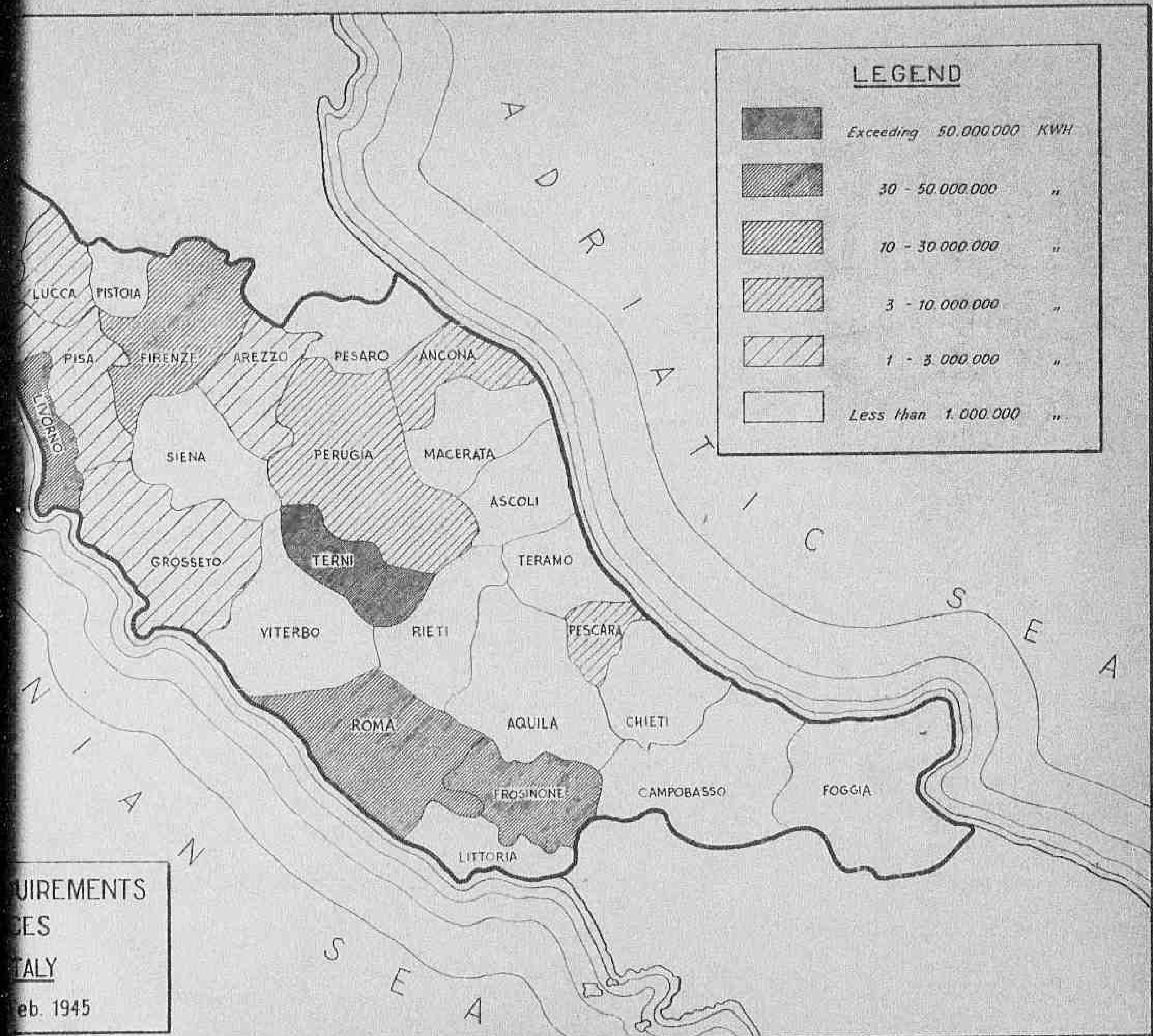
ELECTRIC ENERGY
AVAILABLE
1 SEPT. 1944 - 28 FEB. 1945

ABLE

0278



0279



02801

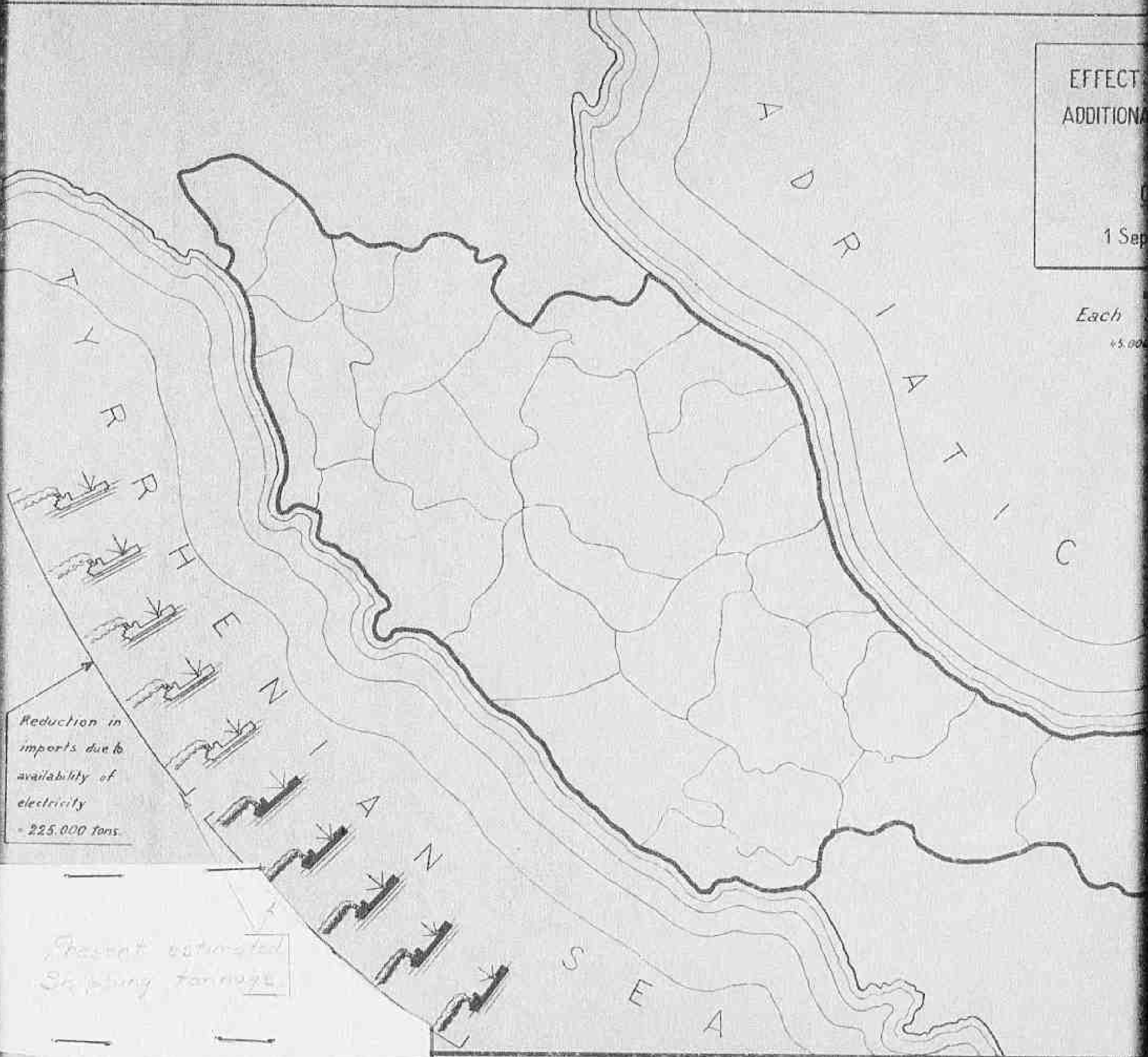
Declassified E.O. 12356 Section 3.3/NND No. 785015

EFFECT
ADDITIONAL

1 Sep

Each

×5.000



0-281

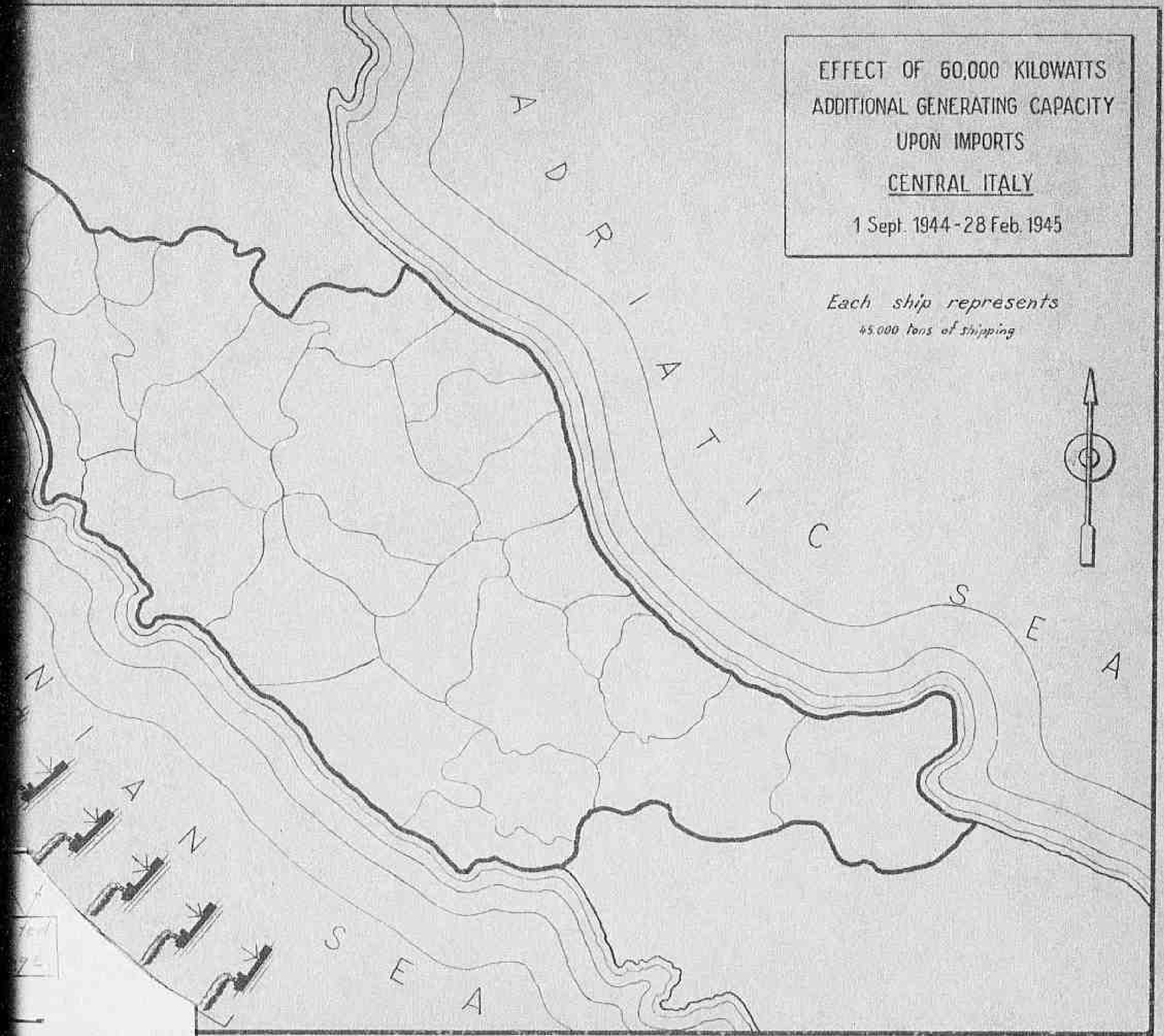
Declassified E.O. 12356 Section 3.3/NND No. 785015

EFFECT OF 60,000 KILOWATTS
ADDITIONAL GENERATING CAPACITY
UPON IMPORTS

CENTRAL ITALY

1 Sept. 1944 - 28 Feb. 1945

*Each ship represents
45,000 tons of shipping*



HEADQUARTERS ALLIED COMMISSION
Public Works and Utilities Sub-Commission
ATO 304

Electrical Division

CENTRAL ITALY ELECTRICITY SCHEME

Operation Programme for the Month of February 1945

C o n t e n t s

- | | |
|---------------------------|---------------------------------|
| Form AC/OP/EL/1 | - Summary of Station operation |
| Form AC/OP/EL/2 | - Table of Station Loading |
| Form AC/OP/EL/3 | - Notes on operation |
| Form AC/OP/EL/4 | - Chart of allocation of energy |
| Form AC/OP/EL/5 | - Diagram of System |
| Operation Memorandum No 1 | - Operating instructions |
| Operation Memorandum No 2 | - Emergency operation |

5406/cc

W.M. LAPPER
Lt-Colonel
Chief Elec. Div.

15th January 1945

5406/cc

C o n t e n t s

Form AC/OP/EL/1	- Summary of Station operation
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Form AC/OP/EL/5	- Diagram of System
Operation Memorandum No 1	- Operating instructions
Operation Memorandum No 2	- Emergency operation

W.M. JAFFER
Lt-Colonel
Chief Elec. Div.

15th January 1945

3520

WIL/ao

CENTRAL ITALY ELECTRICITY SCHEME

MASTER CONTROL CENTRE - ROME

Operation programme for the Month of February 1945

Units to be generated and maximum load to be carried by each generating station connected to the Central Italy Grid System

Name of Station (1)	Units to be Generated (2)	Maximum Demand (3)	Hours in operation (4)
	KWH	KW	Hours
Galleto	13,300.000	25.000	672
Ceprano	3,352.000	3.500	672
Subiaco	2,156.000	3.200	672
Farfa II	3,025.000	4.500	672
Acquoria	2,300.000	3.400	672
Soalilla	2,400.000	3.600	672
Vulci	1,010.000	1.500	672
Salvina	980.000	1.450	672
S. Savino	530.000	800	672
Trapanzo	530.000	800	672
S. Antonio	168.000	250	672
Tarquini	112.000	175	672
Cervara	4,700.000	7.000	672
Veste	1,460.000	2.200	672
Casunacque	2,830.000	4.200	672
Terni Steel	1,290.000	1.900	672
Terni Jute	616.000	900	672
Nera Pontorio	7,570.000	12.000	672
Arci	3,300.000	4.800	408
Rome Steam	3,920.000	10.000	384
Rome Diesel	700.000	5.000	120
Cantorno	560.000	5.000	96

Name of Station (1)	Units to be Generated (2)	Maximum Demand (3)	Hours in Operation (4)
	KWH	KW	Hours
Gallato	13,300.000	25.000	672
Ceprano	2,352.000	3.500	672
Subileo	2,156.000	3.200	672
Parfa II	3,025.000	4.500	672
Acquoria	2,300.000	3.400	672
Scalco	2,400.000	3.600	672
Vulci	1,010.000	1.500	672
Selvina	980.000	1.450	672
S. Savino	530.000	800	672
Trapano	530.000	800	672
S. Antonio	168.000	250	672
Tarquini	412.000	175	672
Cervara	4,700.000	7.000	672
Vesta	1,480.000	2.200	672
Comunacque	2,830.000	4.200	672
Torni Stool	1,230.000	1.300	672
Torni Jute	616.000	900	672
Nera Montorio	7,670.000	12.000	672
Arci	2,300.000	4.500	408
Rome Steam	3,920.000	10.000	384
Rome Diesel	700.000	5.000	120
Canterno	560.000	5.000	96
TOTAL	55,000.000	100.000	

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WMS/ao

CENTRAL ITALY ELECTRICITY SCHEME

MASTER CONTROL CENTRE - ROME

Operation programme for the Month of February 1945

Notes concerning the operation of the system

- 1) - The particulars of generation by the Rome steam and diesel Stations will be as follows :

Name of Station	Type of fuel	Units to be Generated KWH	Maximum load in Month KW	Fuel Required Tons
S. Paolo Montemartini	Coal	3,136,000	8,000 δ	5,000 +
Montemartini	Fuel oil	784,000	2,000	700
Diesel	Diesel oil	700,000	5,000 δ	350

+ this includes for banking.

δ does not include emergency operation

- 2) - The operation programme allows for an equal distribution of generation in order to meet as far as possible emergency conditions in any one district.
- 3) - In order to save fuel the maximum output will be obtained from the hydro stations, using the Steam and Diesel Stations for day load and emergency conditions.
- 4) - A sufficient margin of spare capacity will always be operating to meet emergency conditions. Should a second emergency condition arise before a spare margin of plant has been made available, load will be cut off as laid down in operation Memorandum No 2.
- 5) - One station will be delegated to carry out system frequency control.
- 6) - The frequency and voltage of the system will at all times be maintained at the correct standard.
- 7) - The generated figures shown in the programme form AC/OP/EL/1

3518

1) - The particulars of generation of maximum steam and diesel Stations will be as follows :

Name of Station	Type of fuel	Units to be generated KWH	Maximum load in Month KW	Fuel Required Tons
S. Paul Montemartini	Coal	3,136,000	8,000 δ	5,000 +
Montemartini	Fuel oil	784,000	2,000	700
Diesel	Diesel oil	700,000	5,000 δ	350

+ this includes for banking.

δ does not include emergency operation

- 2) - The operation programme allows for an equal distribution of generation in order to meet as far as possible emergency conditions in any one district.
- 3) - In order to save fuel the maximum output will be obtained from the hydro stations, using the Steam and Diesel Stations for day load and emergency conditions.
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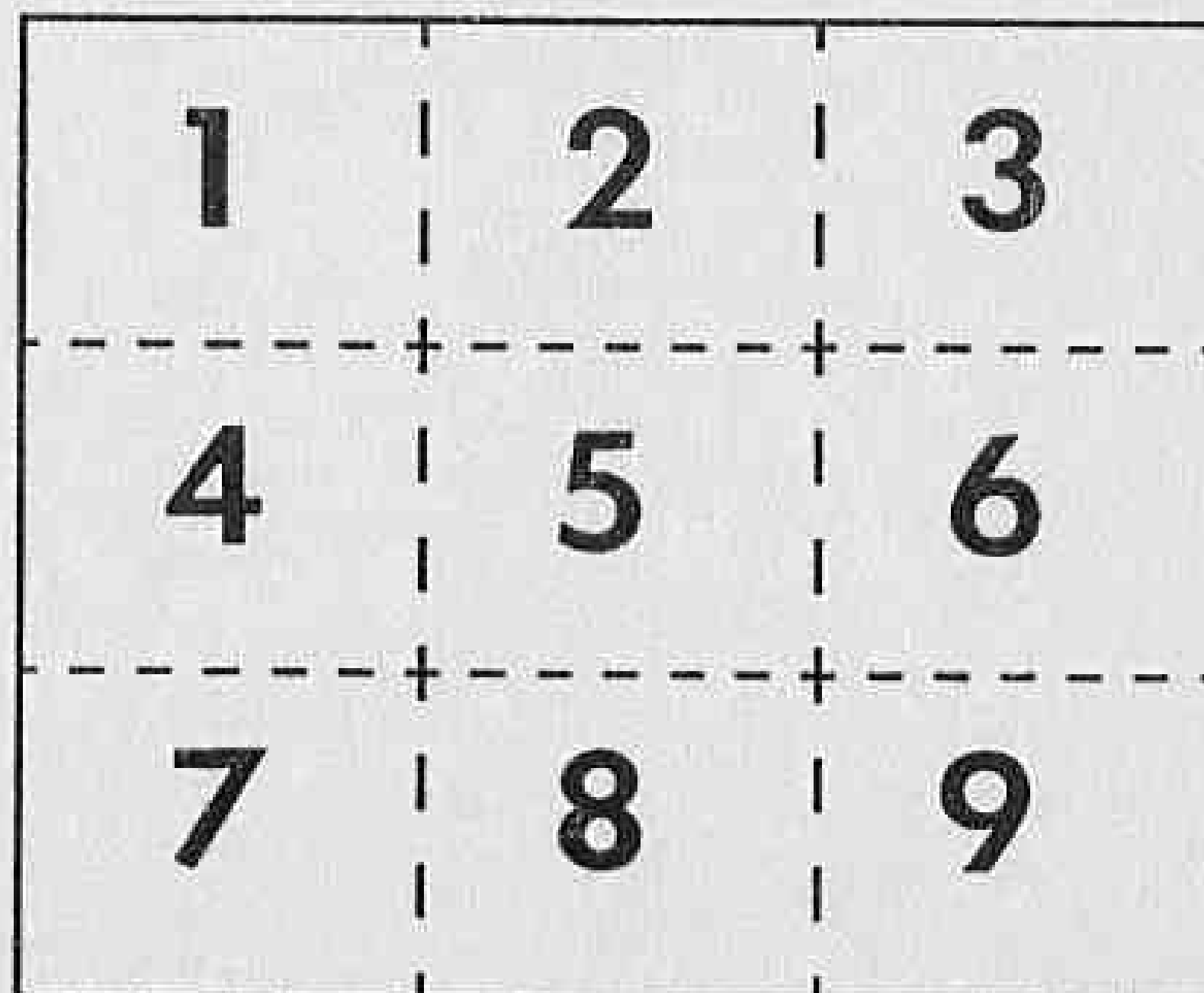
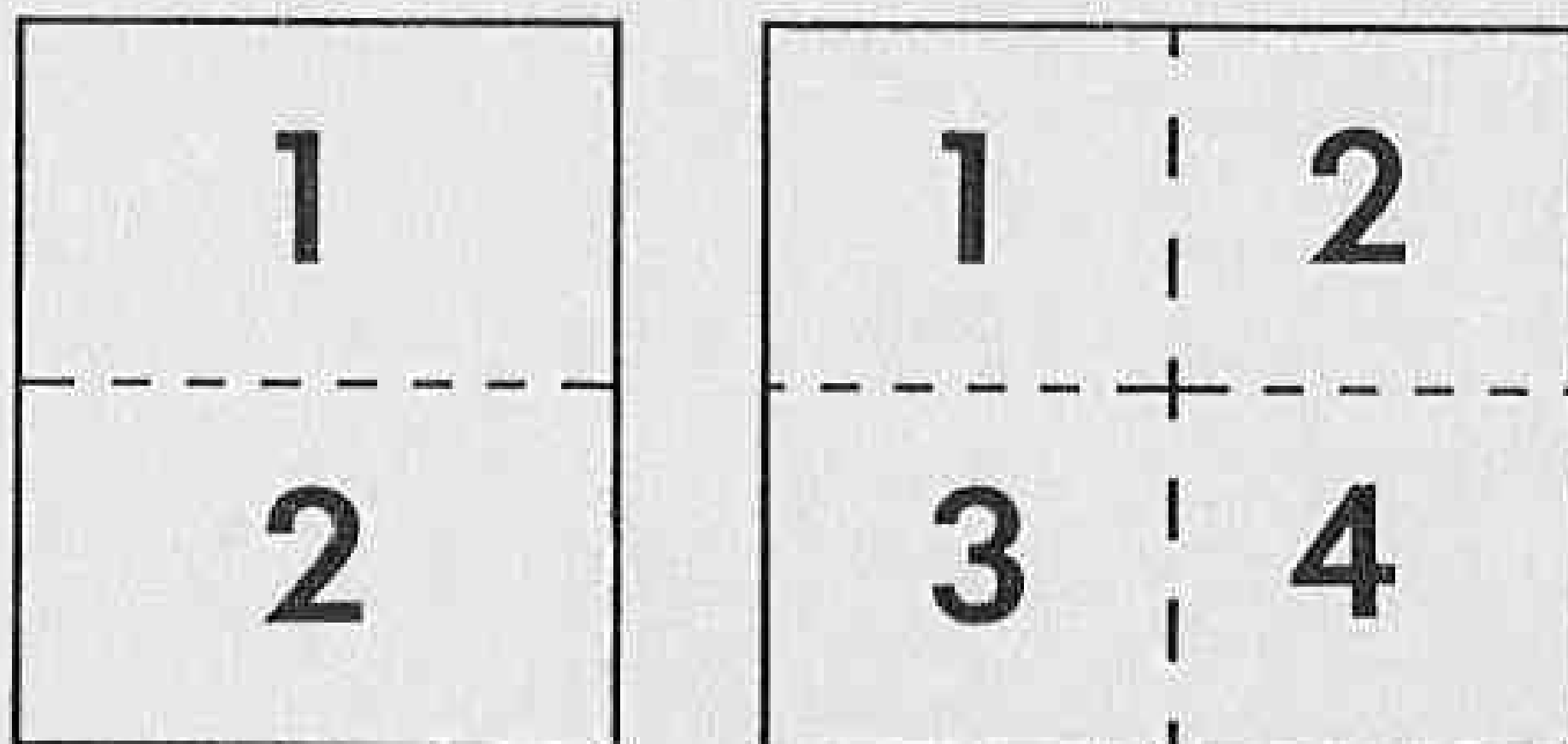
3518

- 5) - One station will be delegated to carry out system frequency control.
- 6) - The frequency and voltage of the system will at all times be maintained at the correct standard.
- 7) - The generated figures shown in the programme form AG/OP/EL/1 and /2 require to be scaled down, to allow for auxiliary power and transmission losses, in order to ascertain the energy available for use, this is shown in the table below :

	Available for consumption
- Total units	46,700,000 KWHr
- Maximum demand	90,000 KW

MAPS AND CHARTS TOO LARGE TO FILM
ON ONE EXPOSURE ARE FILMED CLOCKWISE
BEGINNING IN THE UPPER LEFT CORNER,
LEFT TO RIGHT, AND TOP TO BOTTOM.

SEE DIAGRAMS BELOW.

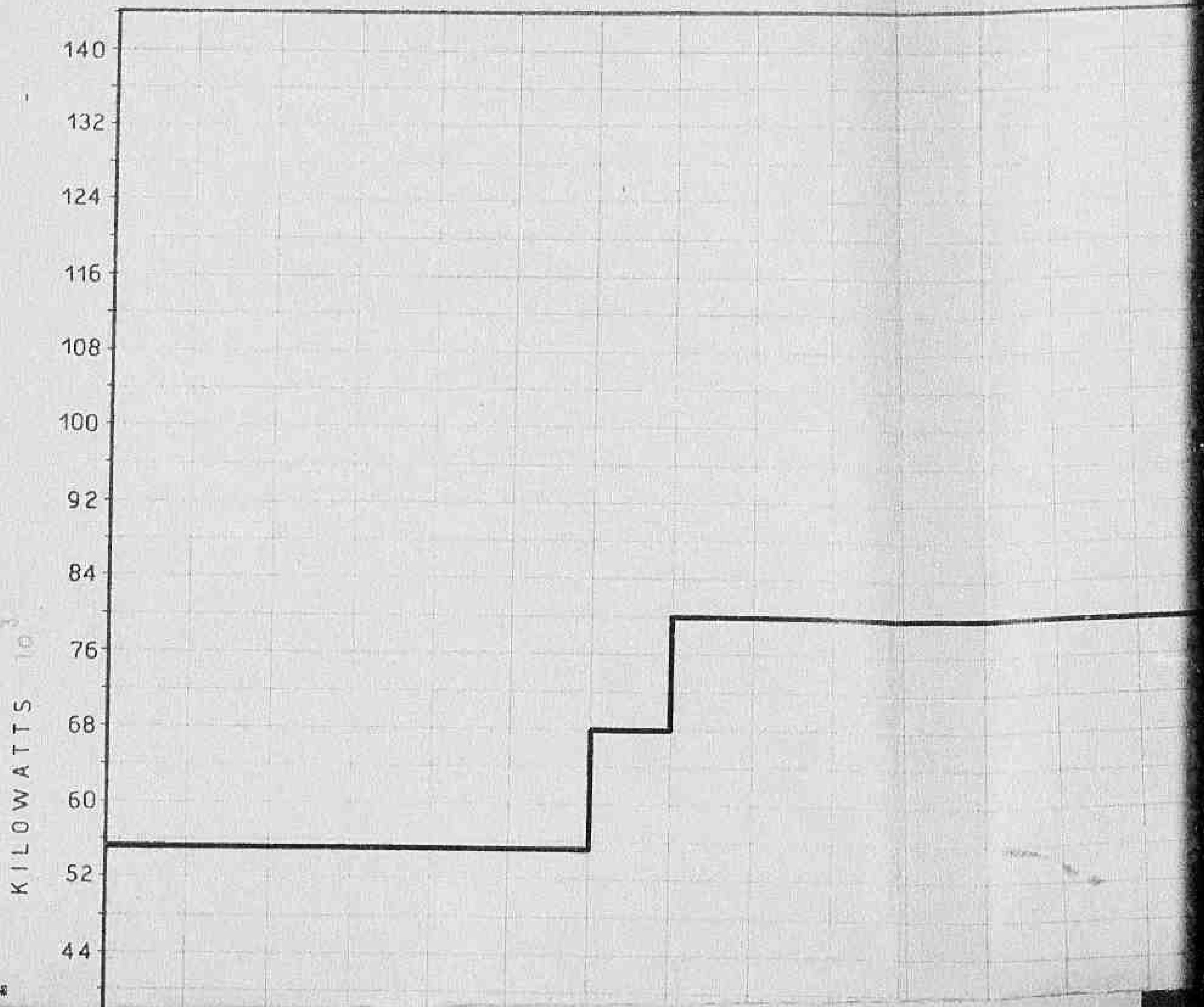


CENTRAL ITALY ELECTRICITY

MASTER CONTROL CENTRE ROME

OPERATION PROGRAMME FOR THE MONTH OF

Chart showing the daily total energy available from the Central Italy Grid System



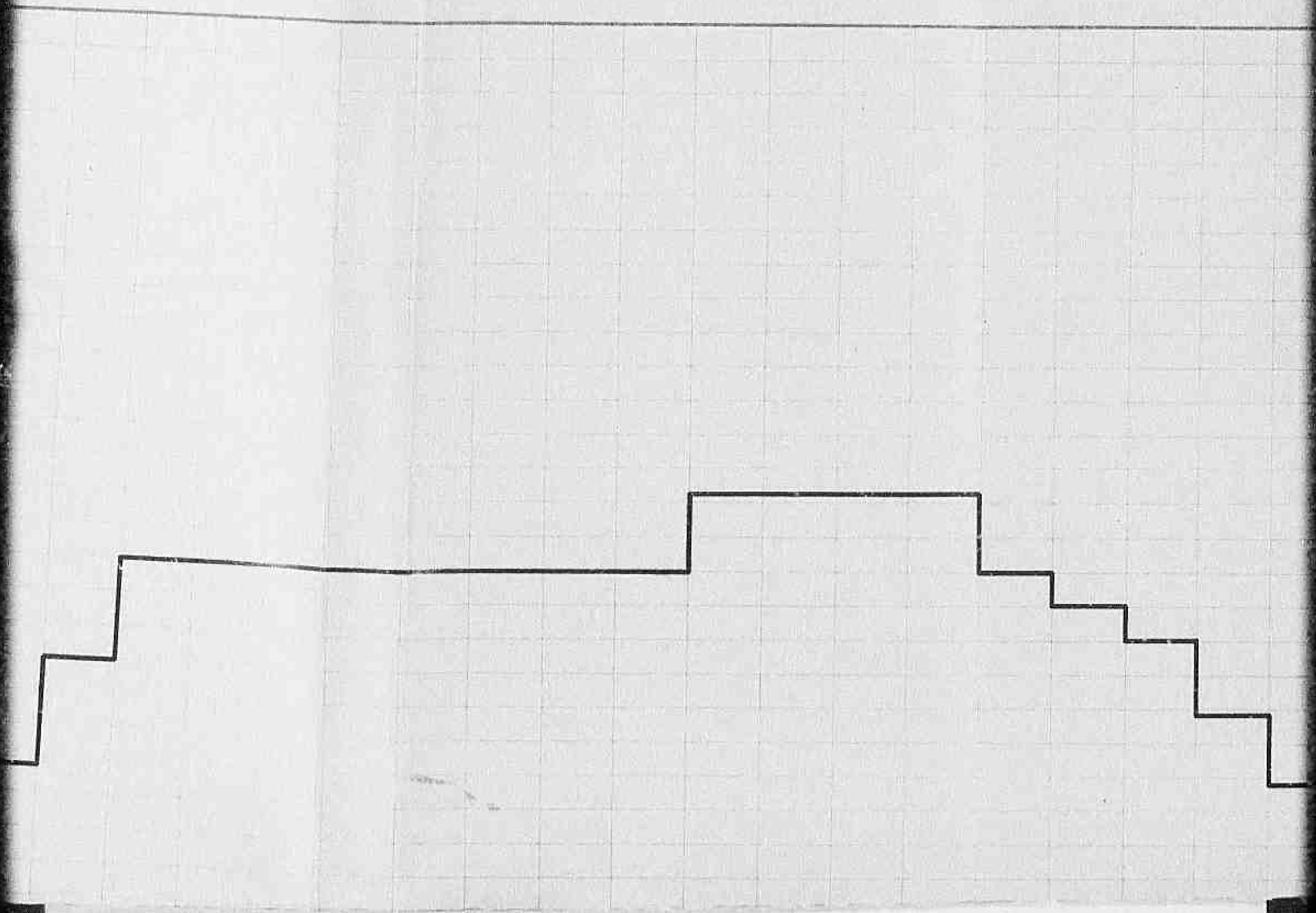
3517

CENTRAL ITALY ELECTRICITY SCHEME

MASTER CONTROL CENTRE ROME

OPERATION PROGRAMME FOR THE MONTH OF FEBRUARY..... 1945

total energy available from the Central Italy Grid System and allocation of this energy to the various services.

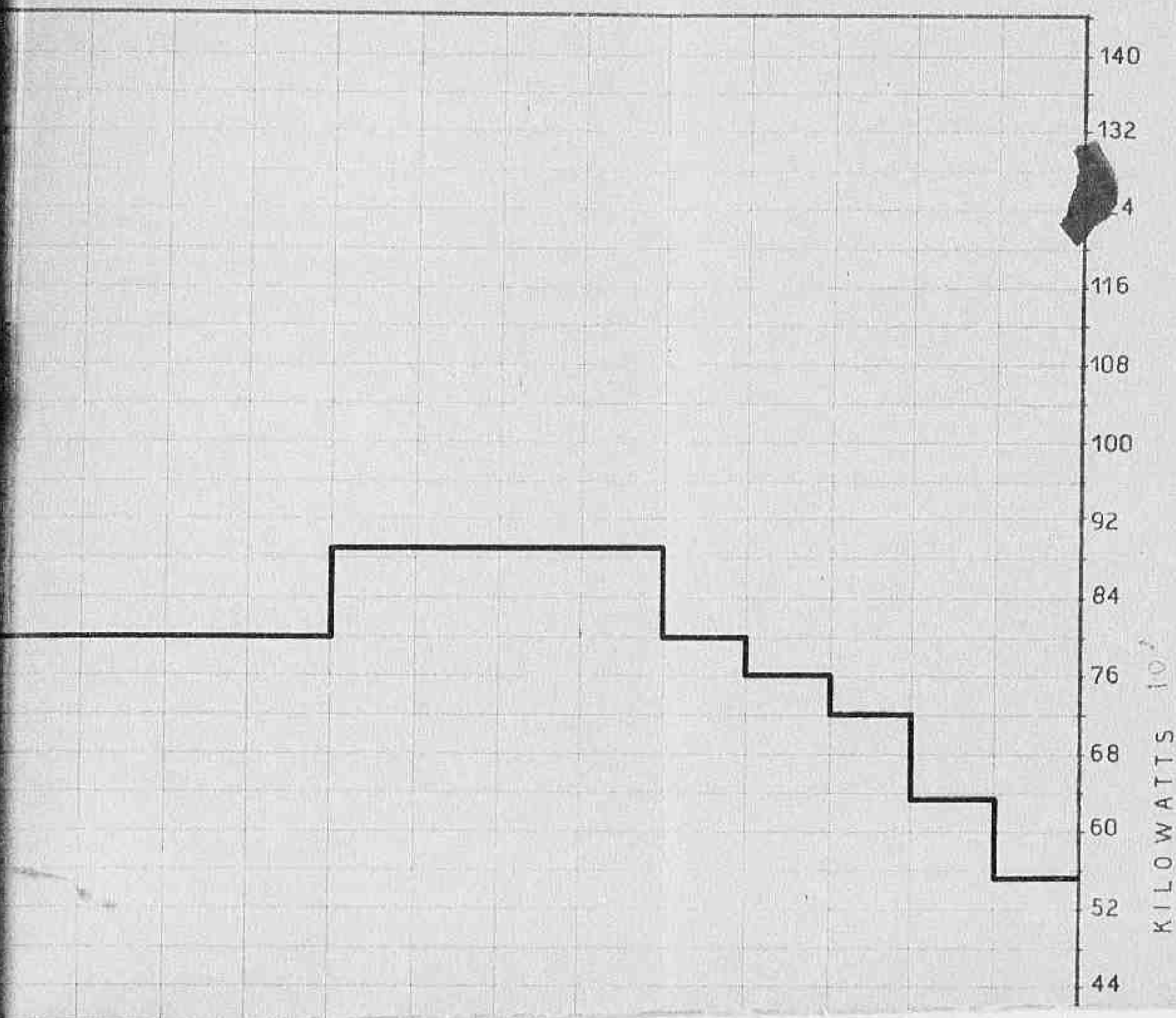


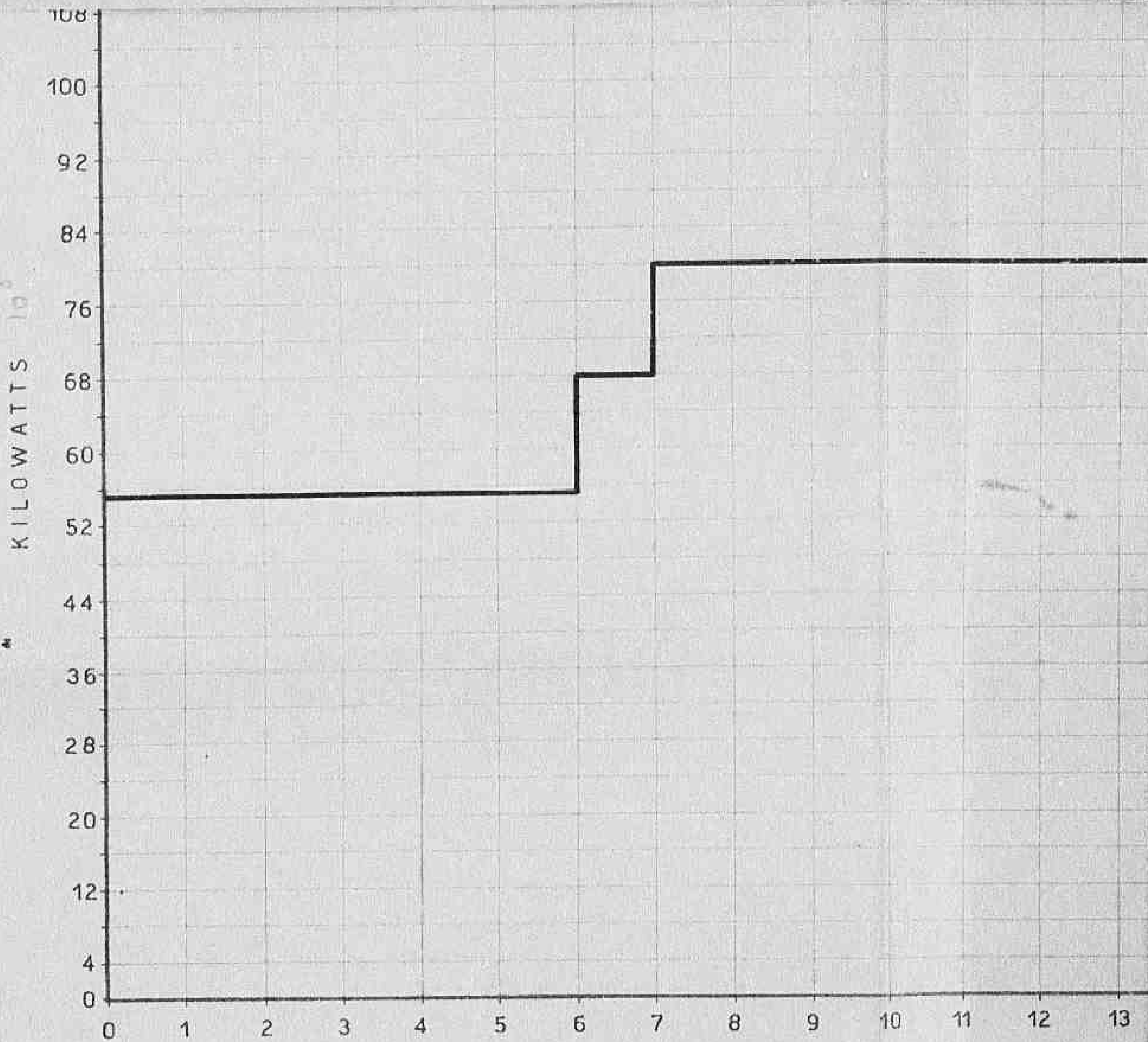
ITALY ELECTRICITY SCHEME

CONTROL CENTRE ROME

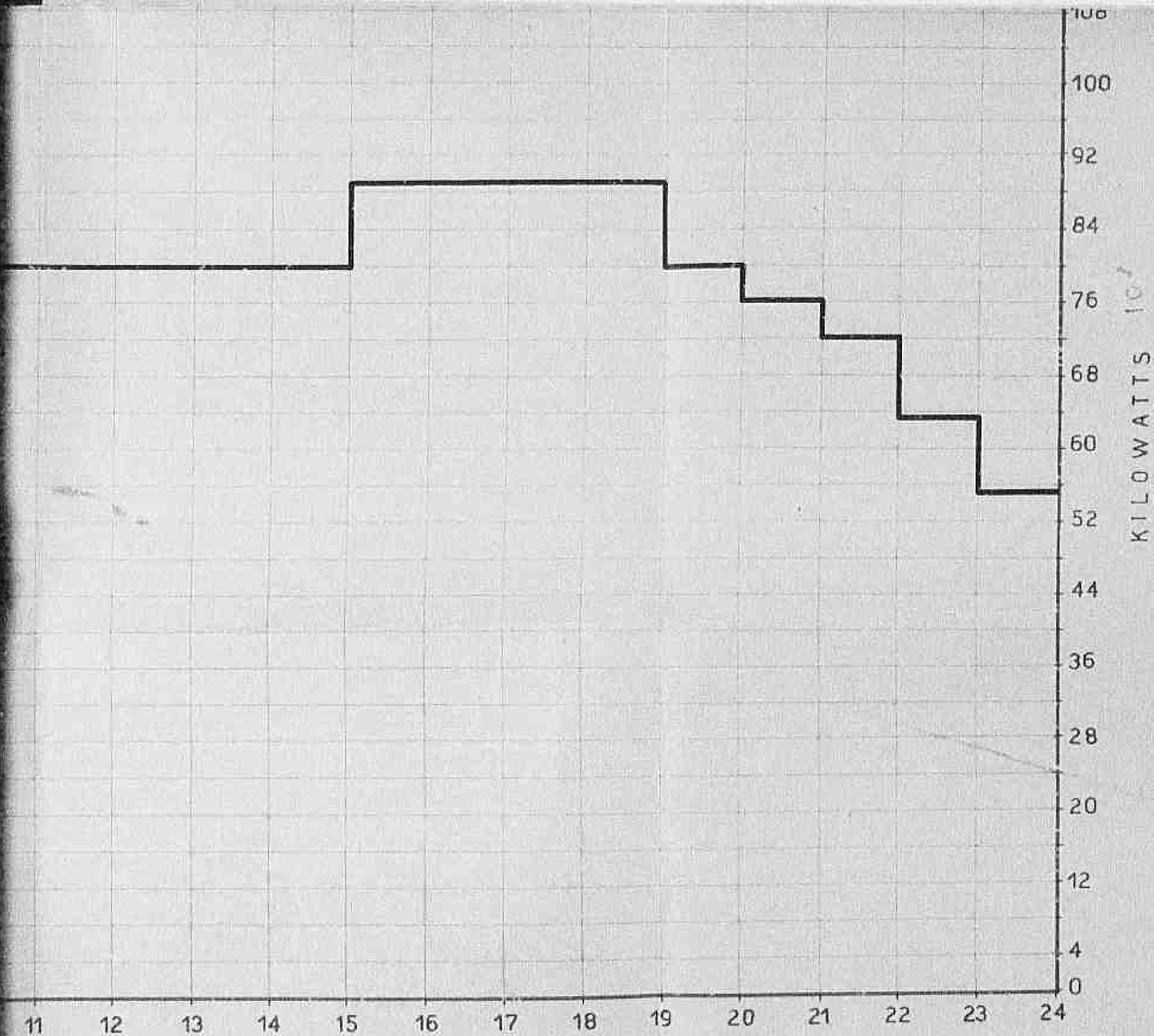
FOR THE MONTH OF FEBRUARY 1945

Central Italy Grid System and allocation of this energy to the various services.









CENTRAL ITALY
SCHEM
OPERATION PR

FIRENZE



NERA MONTORO

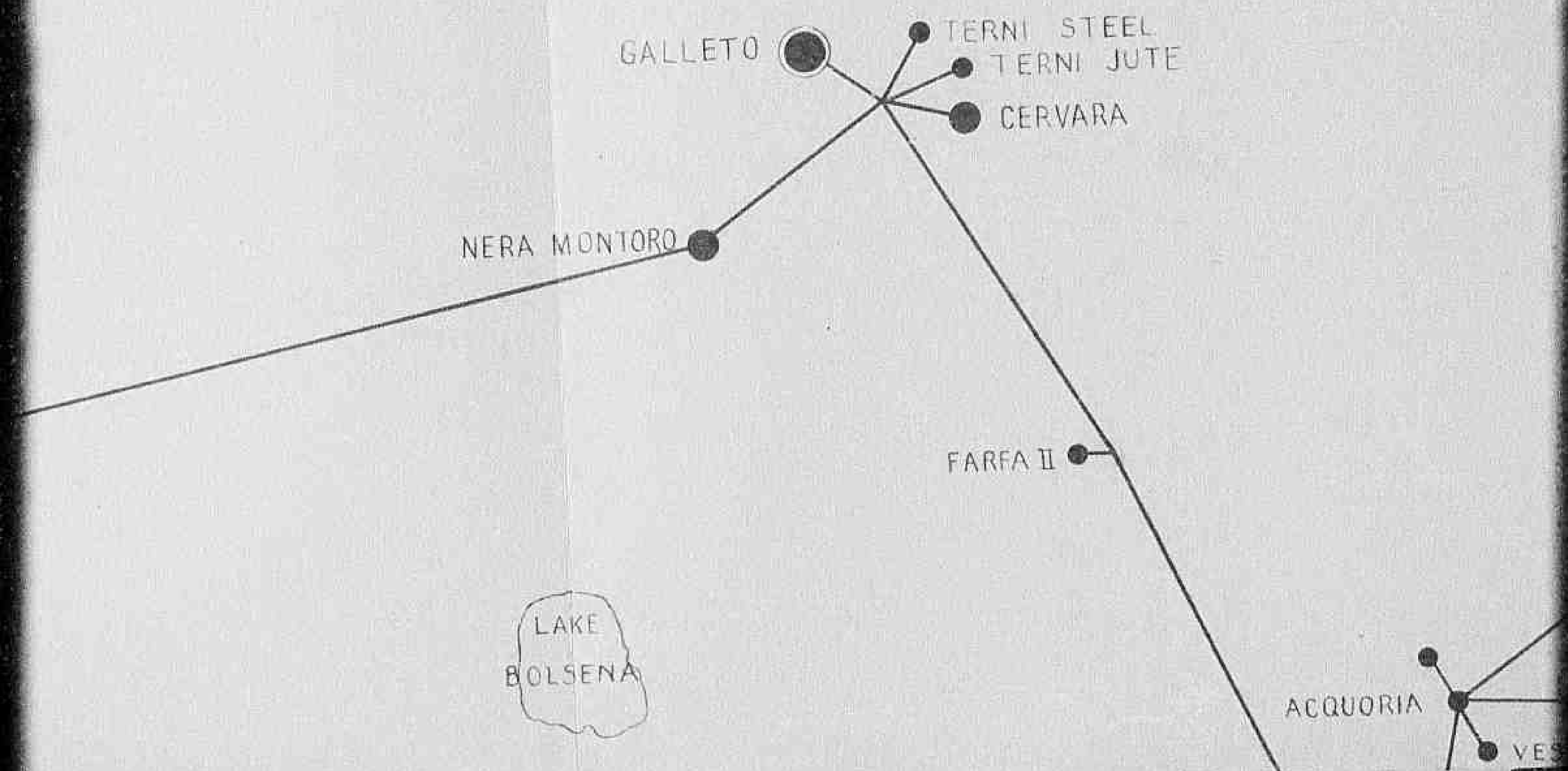
GALLETO



LAKE
BOLSENA

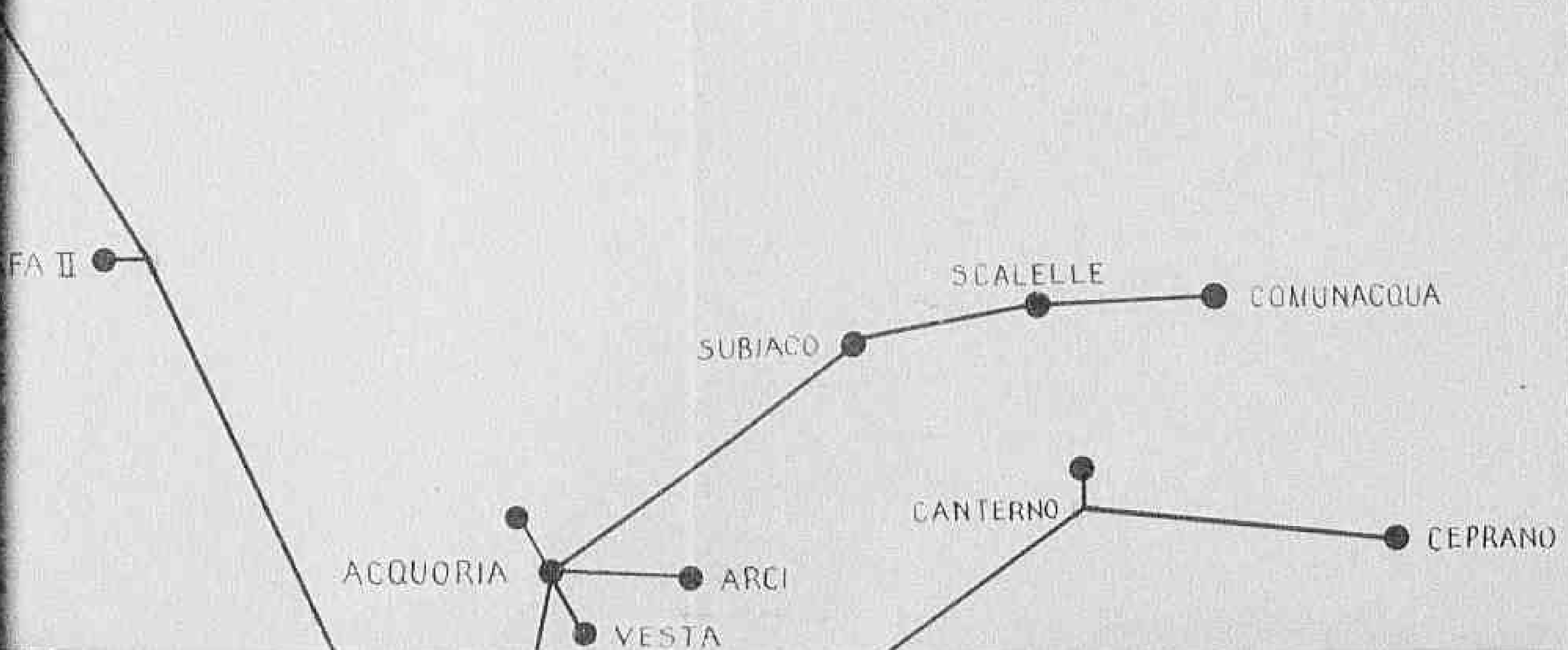


CENTRAL ITALY ELECTRICITY SCHEME
SCHEMATIC DIAGRAM OF GRID
OPERATION PROGRAMME FOR FEBRUARY 1945



ELECTRICITY SCHEME
MAP OF GRID
FOR FEBRUARY 1945

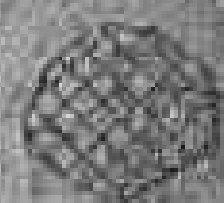
IRON STEEL
IRON JUTE
CERVARA



02981

Declassified E.O. 12356 Section 3.3/NND No. 785615

FIRENZE



NERA MONTORO

LAKE
BOLSENA

S. SAVINO

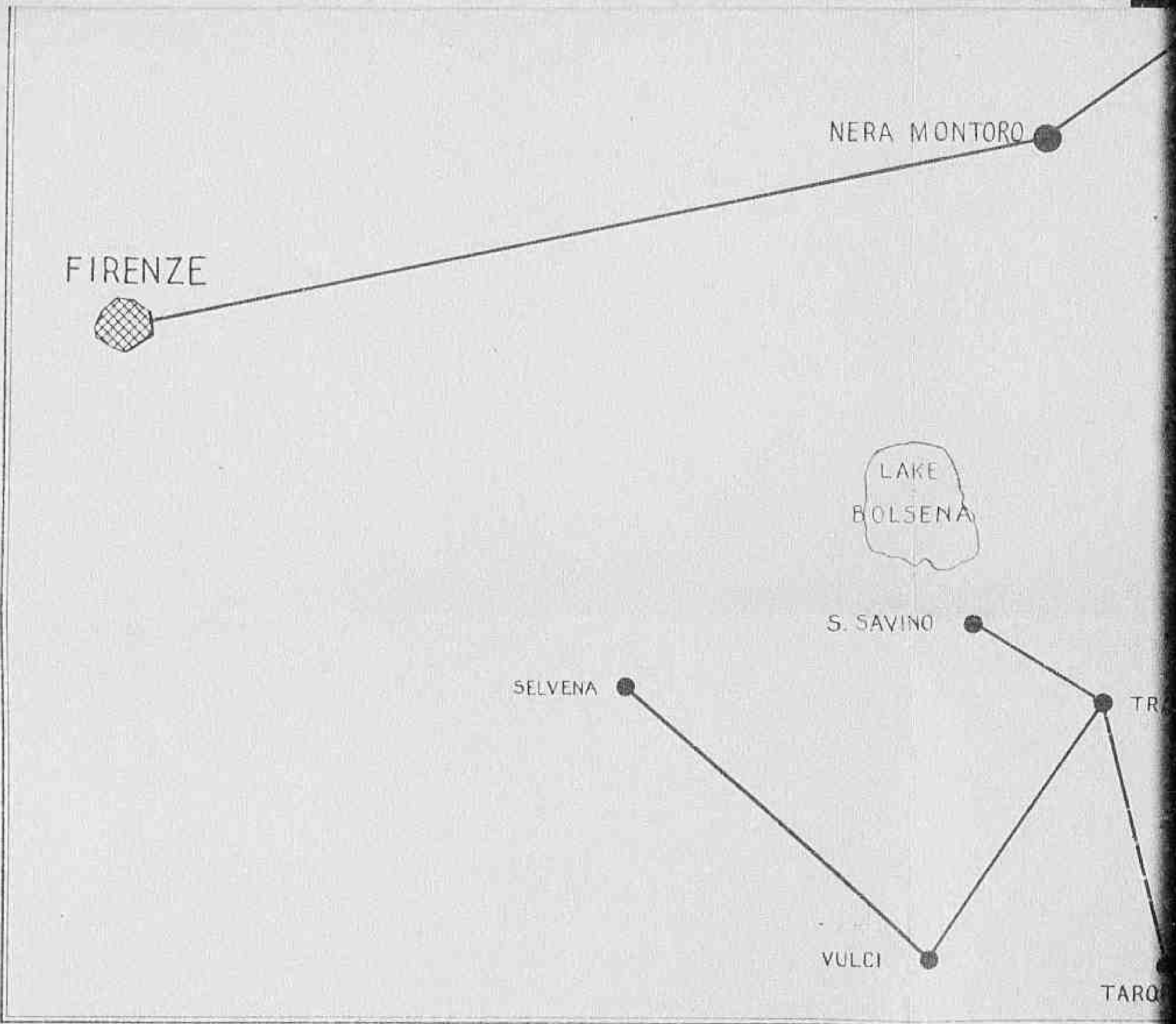
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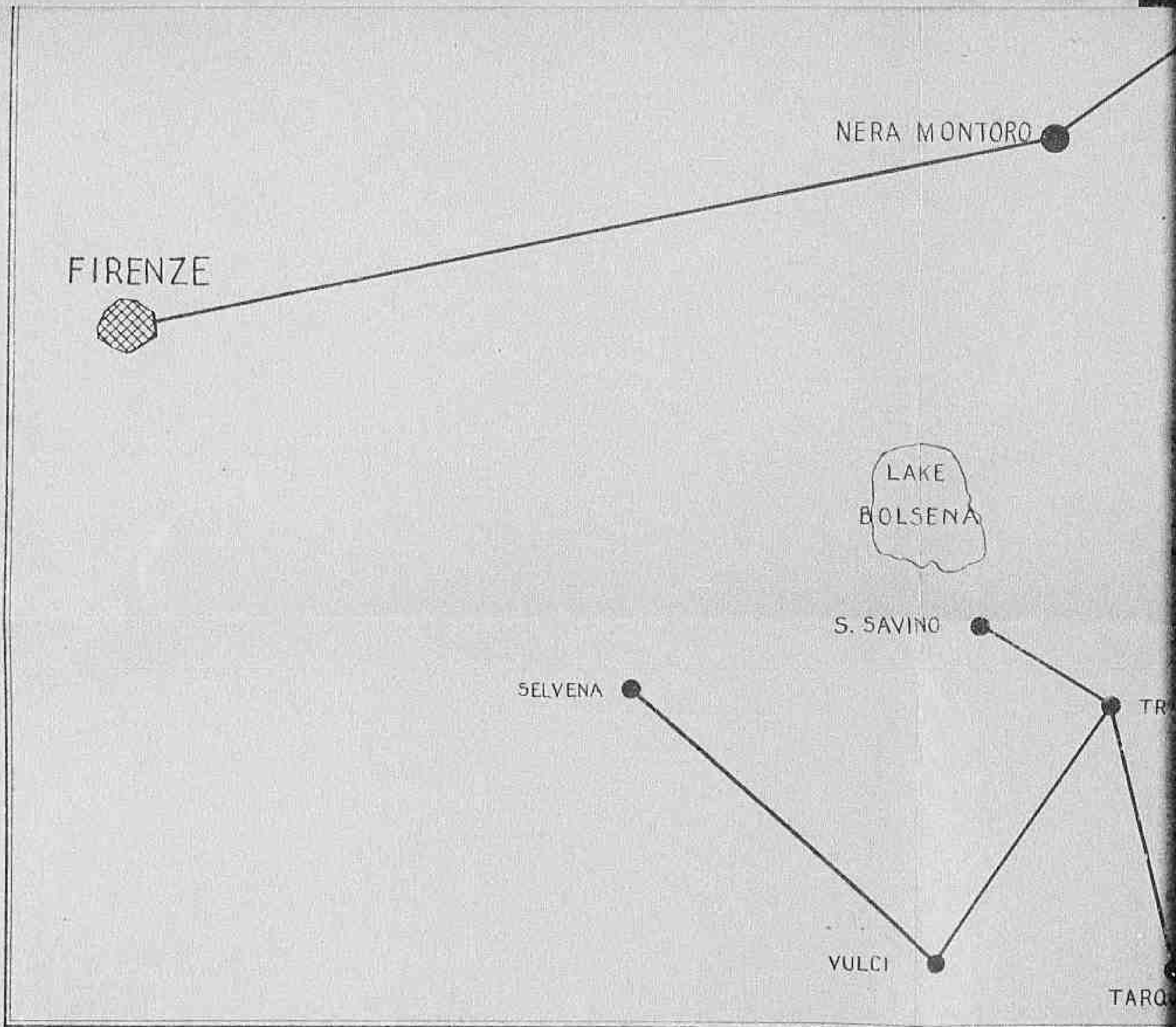
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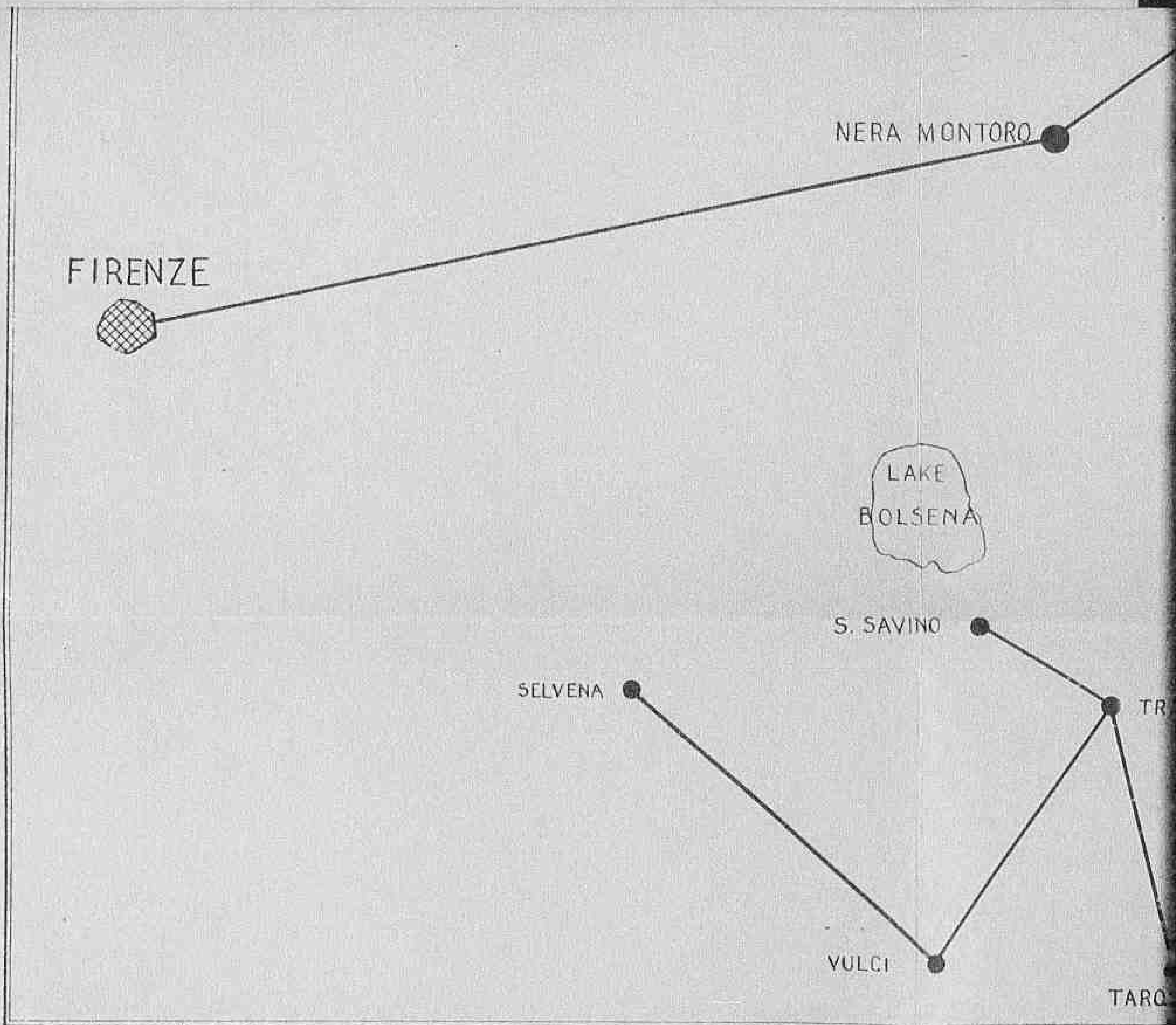
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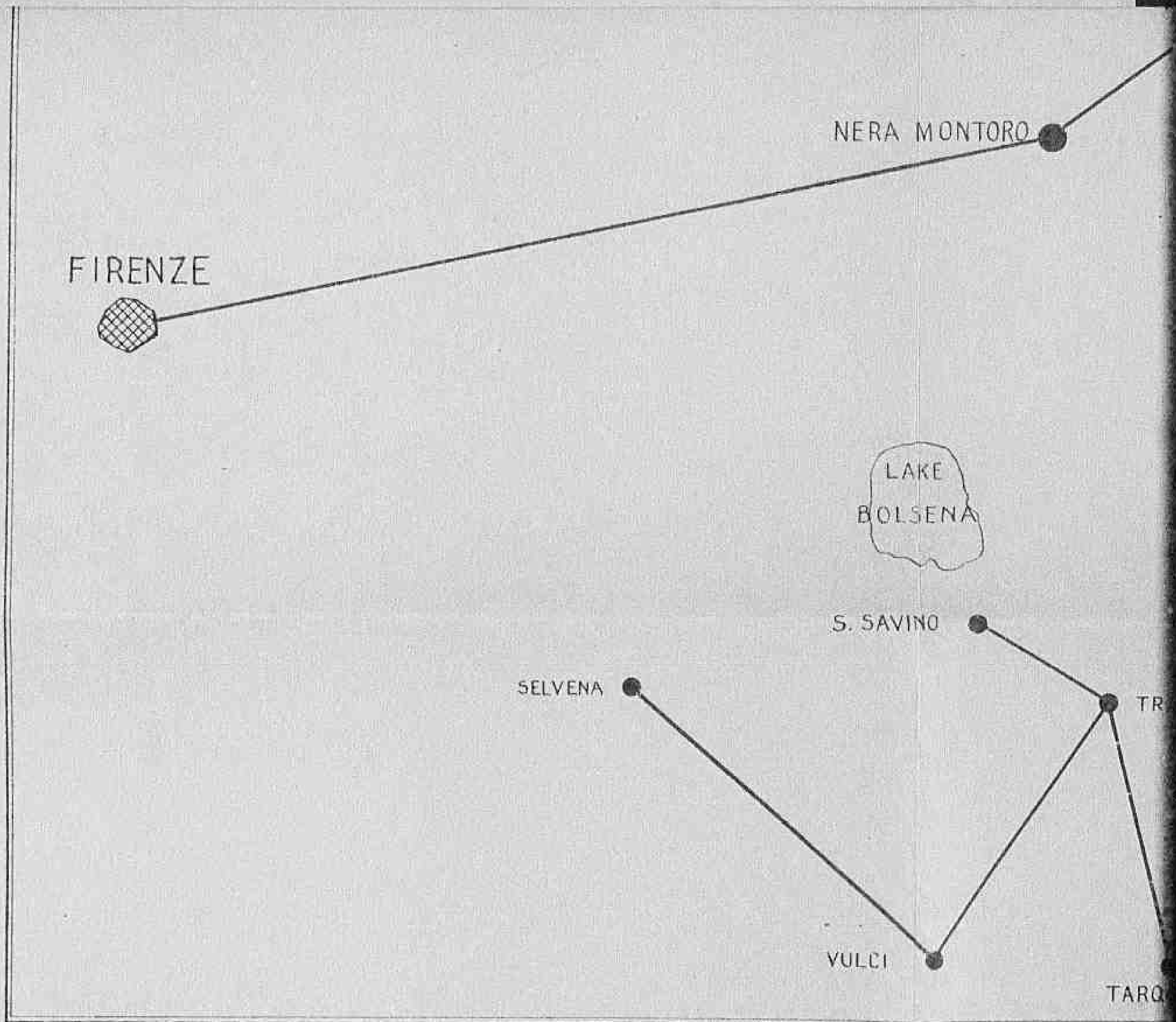
TARO

0299

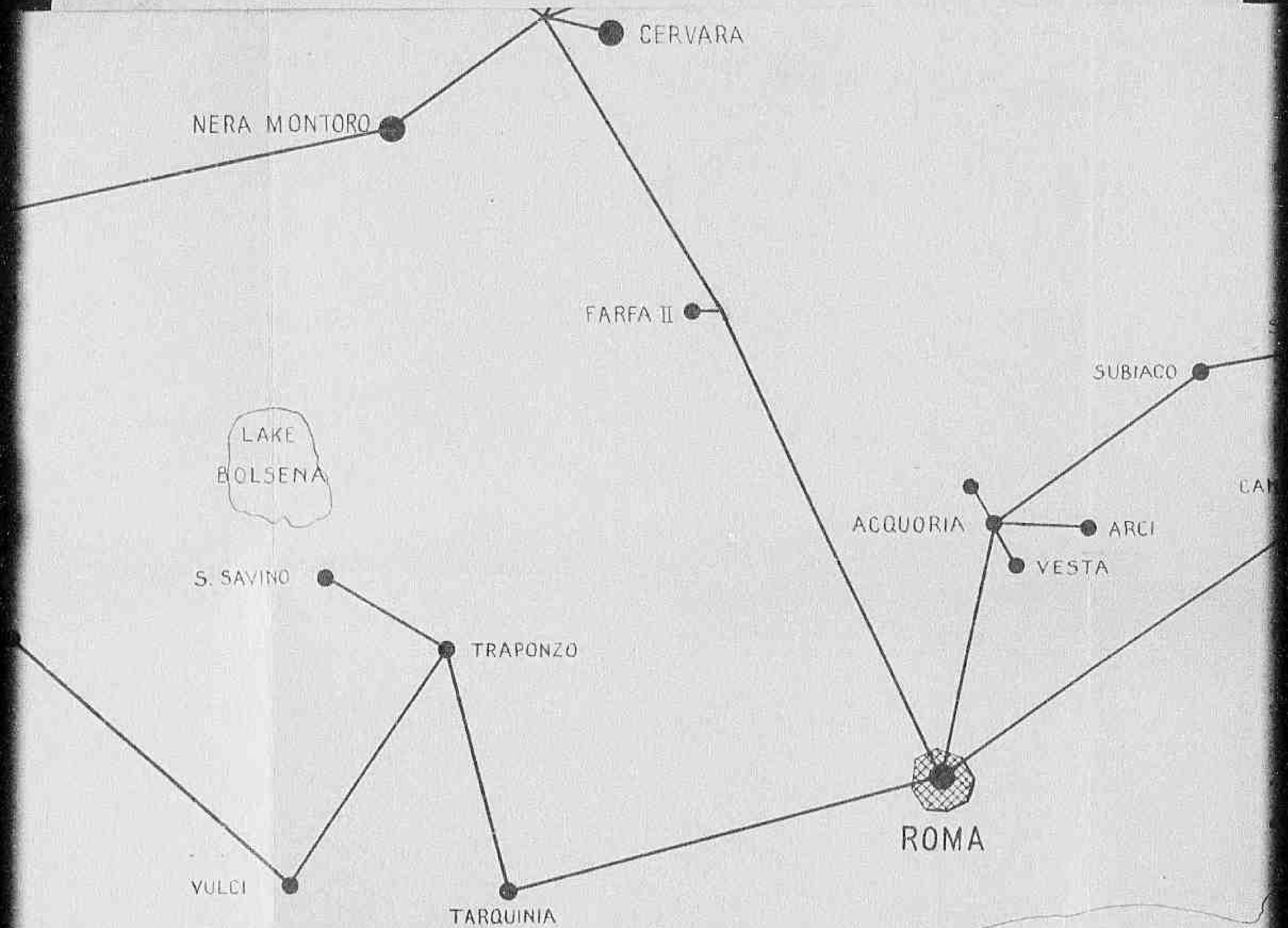






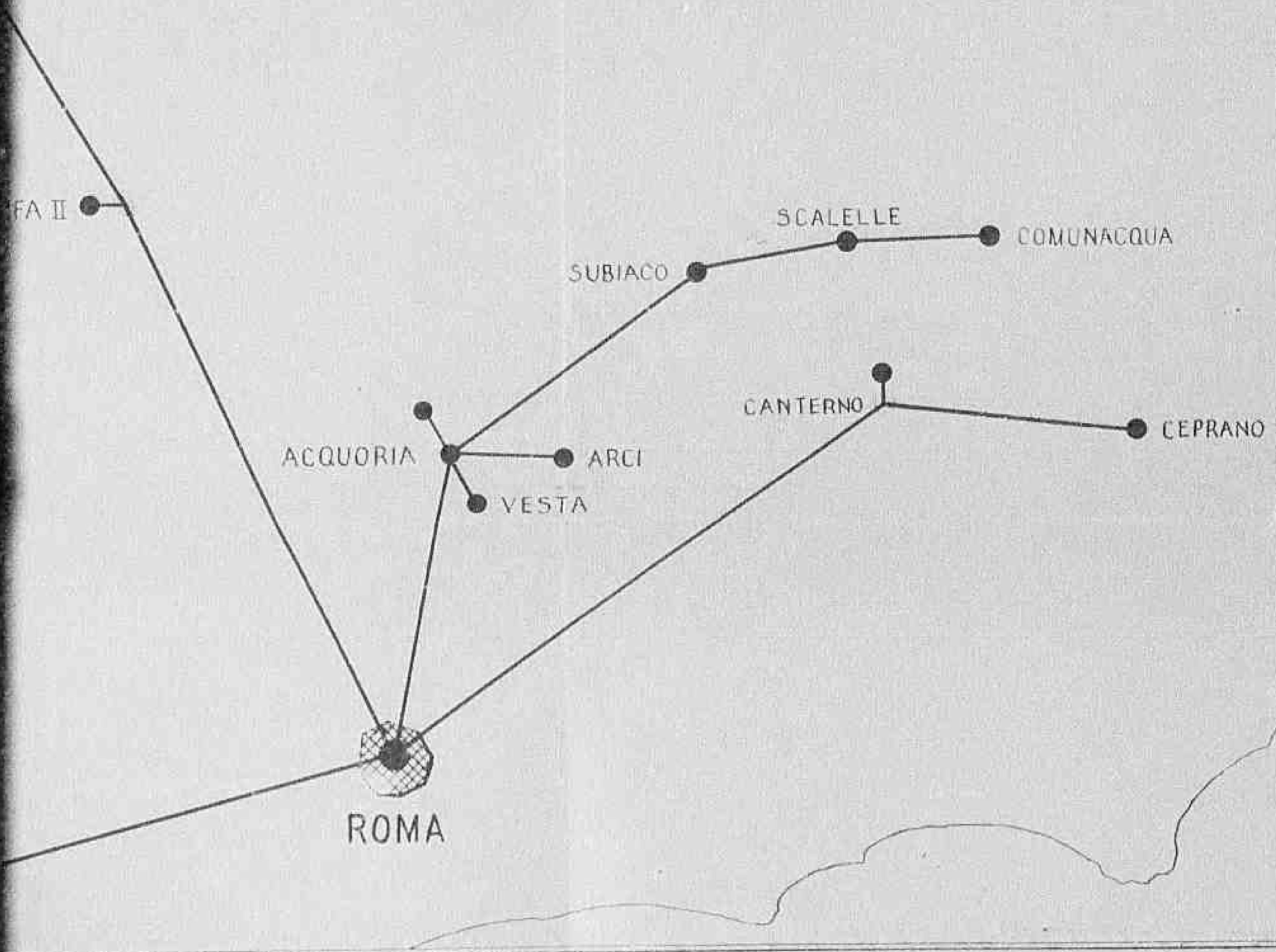


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CERVERA



CENTRAL ITALY ELECTRICITY SCHEME

WIL/ac

MASTER CONTROL CENTRE - ROMEOperation Memorandum No 1

15th Jan. 45

General Instructions

1) - The electrical systems of Società Romana di Elettricità, Azienda Comunale Elettricità ed Acque and "Terni" Società per l'Industria e l'Elettricità will be interconnected and operated under one control as from Saturday 20th January 1945. The electrical systems of the other operating companies in Central Italy will be brought into this pooling scheme at an early date.

2) - The Central Italy electricity scheme will be operated at 45 cycles.

3) - A Master Control Centre situated at the offices of the Società Romana di Elettricità, Via Poli N. 14 - Rome, will be put into operation on Saturday 20th January 1945.

4) - The functions of this control will be to issue instructions on all matters in connection with the operation of the interconnected generating stations and associated transmission systems.

5) - The Master Control is responsible for and will give instructions as follows:

(a) - The load carried by each generating station connected to the Central Italy Electricity Grid System.

3516

1) - The electrical systems of Società Romana di Eletticità, Azienda Comunale Eletticità ed Acque and "Terni" Società per l'Industria e l'Eletticità will be interconnected and operated under one control as from Saturday 20th January 1945. The electrical systems of the other operating companies in Central Italy will be brought into this pooling scheme at an early date.

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4) - The functions of this control will be to issue instructions on all matters in connection with the operation of the interconnected generating stations and associated transmission systems.

5) - The Master Control is responsible for and will give instructions as follows :

- (a) - The load carried by each generating station connected to the Central Italy Electricity Grid System.
- (b) - The number of units of electricity to be generated by each station.
- (c) - The hours of operation of each station.

./.

- 2 -

- (d) - The amount of reserve capacity to be carried at each generating station whether in operation or standing by.
 - (e) - The opening and closing of all switches associated with the generating plant and high voltage grid system.
 - (f) - The issuing of instructions to meet emergency conditions.
 - (g) - The collection and tabulation of all data of maximum loads, units generated, switching instructions and abnormal occurrences.
- 6) - The Master Control will make the necessary arrangements for the taking out of service any generating plant, switch gear or transmission lines, for repairs. After satisfying himself that the plant or line is "isolated" and "earthed" he will then arrange for a "PERMIT TO WORK CARD" to be issued to the person responsible for carrying out the repair work.
- 7) - Procedure to be adopted under emergency conditions is dealt with in operation memorandum No 2. It should however be noted here that the Master Control will have no visual indications of what is happening on the system, except for frequency and voltage. The Master Control is dependent upon carrier current or telephone circuits for all information.
- 8) - If a breakdown of communications with the Master Control occurs the following arrangements must be put into effect :
- (a) - If frequency is normal - The load on the station

3513

system.

(f) - The issuing of instructions to meet emergency conditions.

(g) - The collection and tabulation of all data of maximum loads, units generated, switching instructions and abnormal occurrences.

6) - The Master Control will make the necessary arrangements for the taking out of service any generating plant, switch gear or transmission lines, for repairs. After satisfying himself that the plant or line is "isolated" and "earthed" he will then arrange for a "PERMIT TO WORK CARD" to be issued to the person responsible for carrying out the repair work.

7) - Procedure to be adopted under emergency conditions is dealt with in operation memorandum No 2. It should however be noted here that the Master Control will have no visual indications of what is happening on the system, except for frequency and voltage. The Master Control is dependent upon carrier current or telephone circuits for all information.

8) - If a breakdown of communications with the Master Control occurs the following arrangements must be put into effect :

(a) - If frequency is normal - The load on the station must be kept, hour by hour, similar to that generated on the preceeding day, and continue thus until contact with the Master Control is again established.

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- 3 -

- (b) - If frequency is falling - The station should at once increase output to the maximum possible extent. If frequency continues to fall the station must prepare to cut off supplies as follows :
- If frequency falls below 43 cycles open all switches marked with a Red Label "First line emergency switches".
- If frequency continues to fall open all switches marked with a Green Label "Second line emergency switches".
- As conditions become normal replace switches, the Green ones first, and notify the Master Control as soon as communication is established.
- (c) - Urgent repair to plant or lines may be put in hand by permission of the Local Control, the necessary safety precautions being made, but the Master Control must be notified as soon as possible.

W. M. Lapper
W. M. LAPPER
Lt-Colonel
Chief Elec. Div.

3514

WNL/ac

CENTRAL ITALY ELECTRICITY SCHEME

MASTER CONTROL CENTRE - ROME

Operation Memorandum No 2

15th Jan. 45

Procedure to be adopted in case of emergency

1) - When operating with the interconnected system and in telephone communication with the Master Control

(a) - If frequency falls below 43 cycles

Increase output to the maximum possible extent and standby for instructions from the Master Control.

(b) - The Master Control will give instructions for the switches marked with a Red Label "first line emergency switches", to be opened.

(c) - If frequency continues to fall the Master Control will, at 40 cycles, give instructions for the switches marked with a Green Label "second line emergency switches", to be opened.

(d) - After the emergency has passed the Master Control will give instructions for the Green Switches and later the Red Switches to be closed.

2) - When operating with the interconnected system, with loss of telephone communication with the Master Control

(a) - If frequency is normal

The load on the station must be kept, hour by hour, similar to that generated on the preceding day, and must be kept in contact with the Master Control.

1513

Procedure to be adopted in case of emergency

- 1) - When operating with the interconnected system and in telephone communication with the Master Control
 - (a) - If frequency falls below 43 cycles
Increase output to the maximum possible extent and standby for instructions from the Master Control.
 - (b) - The Master Control will give instructions for the switches marked with a Red Label "first line emergency switches", to be opened.
 - (c) - If frequency continues to fall the Master Control will, at 44 cycles, give instructions for the switches marked with a Green Label "second line emergency switches", to be opened.
 - (d) - After the emergency has passed the Master Control will give instructions for the Green Switches and later the Red Switches to be closed.
- 2) - When operating with the interconnected system, with loss of telephone communication with the Master Control
 - (a) - If frequency is normal
The load on the station must be kept, hour by hour, similar to that generated on the preceding day, and continue thus until contact with the Master Control is again established.
 - (b) - If frequency is falling
The station should at once increase output to the maximum possible extent. If frequency continues to fall the station must prepare to cut off supplies as follows :

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- 2 -

If frequency falls below 43 cycles open all switches marked with a Red Label "first line emergency switches".

If frequency continues to fall open all switches marked with a Green Label "second line emergency switches". As conditions become normal replace switches, the Green ones first, and notify the Master Control as soon as communication is established.

(c) - Urgent repair to plant or lines may be put in hand by permission of the Local Control, the necessary safety precautions being made, but the Master Control must be notified as soon as possible.

3) - When operating is lifted from the interconnected system due to breakdown of transmission line

(a) - Immediately adjust the station conditions with regard to frequency and voltage by increasing (or decreasing) generation. If it is not possible to increase generation the supplies must be cut off by opening the "Red" and "Green" Switches.

(b) - Communicate the position to the Master Control as quickly as possible.

4) - When operating is lifted from the interconnected system due to breakdown of transmission line and telephone communication with the Master Control

(a) - Immediately adjust the station conditions with regard to frequency and voltage by increasing (or decreasing) generation. If it is not possible to increase generation the supplies must be cut off by opening the "Red" and "Green" Switches.

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Green ones first, and notify the Master Control as soon as communication is established.

- (c) - Urgent repair to plant or lines may be put in hand by permission of the Local Control, the necessary safety precautions being made, but the Master Control must be notified as soon as possible.

3) - When operating isolated from the interconnected system due to breakdown of transmission line

- (a) - Immediately adjust the station conditions with regard to frequency and voltage by increasing (or decreasing) generation. If it is not possible to increase generation the supplies must be cut off by opening the "Red" and "Green" Switches.

- (b) - Communicate the position to the Master Control as quickly as possible.

4) - When operating isolated from the interconnected system due to breakdown of transmission line and telephone communication with the Master Control

- (a) - Immediately adjust the station conditions with regard to frequency and voltage by increasing (or decreasing) generation. If it is not possible to increase generation the supplies must be cut off by opening the "Red" and "Green" Switches.

- (b) - Continue to operate as an isolated station giving the maximum possible output.

- (c) - Make every effort to let the Master Control aware of the conditions by use of any other means of communication.

W. M. Lapper
W. M. LAPPER
Lt-Colonel
Chief Elec. Div.

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